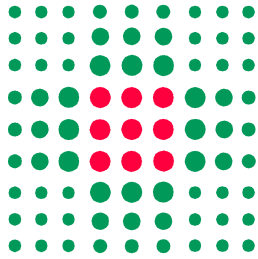


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EMILIA-ROMAGNA
Azienda Unità Sanitaria Locale di Parma

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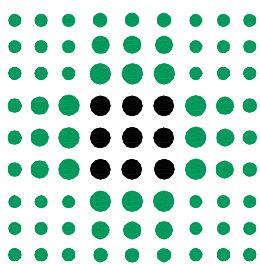
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GRUPPO DI LAVORO:

ELABORATO

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GRUPPO DI LAVORO:

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geom. Lara Biavardi
per. ind. Giuseppe Carlassare
ing. Federica Ceresa
per. ind. Paolo Crovini
ing. Elisa Degiovanni
ing. jr. Roberto Degiovanni
geom. Laura Del Bono
ing. Vincenzo Facchino
geom. Roberto Gallarotti
arch. Andrea Mambriani
per. ind. Paolo Mazzina
geom. Roberto Mellini
per. ind. Paolo Robuschi
ing. Renato Maria Saviano
geom. Pier Paolo Taddei
geom. Michele Tagliavini
geom. Roberta Tagliavini

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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ILLUSTRAZIONE SINTETICA DEGLI ELEMENTI
ESSENZIALI DEL PROGETTO STRUTTURALE**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
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dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

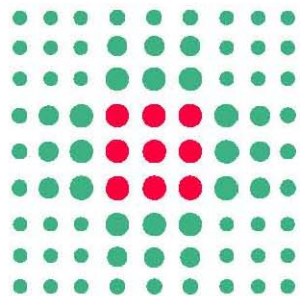
IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

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0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
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SERVIZIO ATTIVITA' TECNICHE

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OGGETTO: **OSPEDALE DI FIDENZA-SAN SECONDO**
Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

INTERVENTO: **REALIZZAZIONE NUOVO CORPO DI AMPLIAMENTO**

PROGETTO DEFINITIVO STRUTTURE

**ILLUSTRAZIONE SINTETICA DEGLI ELEMENTI
ESSENZIALI DEL PROGETTO STRUTTURALE**

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dott. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
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per. ind. Paolo Crovini
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ing. jr. Roberto Degiovanni
geom. Laura Del Bono
ing. Vincenzo Facchino
geom. Roberto Gallarotti
arch. Andrea Mambriani
per. ind. Paolo Mazzina
geom. Roberto Mellini
per. ind. Giuseppe Patanè
arch. Antonio Pellegrini
per. ind. Paolo Robuschi
ing. Renato Maria Saviano
geom. Pier Paolo Taddei
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geom. Roberta Tagliavini

IL RESPONSABILE DEL SERVIZIO
ATTIVITA' TECNICHE
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IL PROGETTISTA
arch. ANTONIO PELLEGRINI

IL COORDINATORE DELLA SICUREZZA
IN FASE DI PROGETTAZIONE
arch. ANTONIO PELLEGRINI

N. ELABORATO

RS.01

SCALA

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REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	03.02.2012	ing. Benassi A.	ing. Benassi A.	ing. Ferrari M.
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

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1 DESCRIZIONE DEL CONTESTO EDILIZIO E DELLE CARATTERISTICHE GEOLOGICHE, MORFOLOGICHE E IDROGEOLOGICHE DEL SITO

1.1 CONTESTO EDILIZIO

L'area in studio si trova a sud di Fidenza ad una altitudine di circa 93 m s.l.m. in località Vaio nei pressi dell'attuale insediamento ospedaliero

La struttura oggetto del presente documento è destinata ad ospitare un ampliamento dell'ospedale "Vaio" di Fidenza (PR). Trattasi di edificio di nuova realizzazione destinato a sorgere alle spalle dell'esistente complesso ospedaliero, collegato ad esso attraverso appositi tunnel. L'edificio in progetto ha una pianta rettangolare di 66 x 19 metri (più un tunnel di 17 x 4,5 m), ed è composto da un piano interrato più 20 metri di elevazione. La tipologia strutturale rispecchia sostanzialmente quella dei fabbricati contigui appartenenti al polo ospedaliero.

La fotografia aerea e la cartografia topografica seguenti individuano il sito d'insediamento:



1.2 CARATTERISTICHE GEOLOGICHE

Geologicamente l'area è caratterizzata superficialmente dalla presenza di depositi costituiti da limi argillosi e argille limose alternati a più rare sabbie e ghiaie che si riscontrano a profondità di almeno 4 m. Si tratta di depositi sedimentari intravallivi terrazzati del Subsistema di Ravenna. Il subsistema di Ravenna consiste di ghiaie sabbiose, sabbie e limi stratificati con copertura discontinua di limi argillosi.

Lo spessore massimo dell'unità è di 20 m. La geometria di tali corpi sedimentari del margine appenninico padano risulta spesso lenticolare con eteropie di facies laterali molto marcate. Questo fattore pregiudica spesso l'omogeneità stratigrafica del sottosuolo restituendo materiali differenti alle stesse profondità.

La geolitologia è stata valutata mediante i cinque sondaggi a carotaggio effettuati nei pressi dell'area d'intervento. Le litofacies riscontrate al di sotto del terreno di riporto, che solitamente interessa il primo metro di spessore superficiale, sono principalmente 3.

- 1) Litofacies A limo argillosa prevalente (da 1 a circa 4 – 4,7 m da p.c.)
- 2) Litofacies B ghiaiosa (da 4 - 4,7 m fino a 6,9 - 7,5 m da p.c.)
- 3) Litofacies C argilloso limosa in prevalenza (da 6,9 - 7,5 m fino alla profondità massima dell'indagine pari a circa 10 m da p.c.)

La litofacies A presenta caratteristiche fisico meccaniche varie. Escludendo il primo metro di terreno non interessante, lo spessore di materiale fino al tetto delle ghiaie (litofacies B) presenta caratteristiche prevalentemente coesive, con intercalazioni più rare di limi sabbiosi.

Alla profondità compresa tra 3,5 3 4,5 m circa si riscontra la presenza di un limo debolmente argilloso debolmente sabbioso grigio molto molle e con qualità geotecniche scadenti. Si esclude di conseguenza di posizionare la fondazione all'interno di tale litofacies A, sia per una problematica di quote in presenza del vano interrato sia soprattutto per la disomogeneità e scadenza dei materiali presenti.

La fondazione poggerà quindi all'interno della litofacies ghiaiosa B, che presenta parametri geotecnici indubbiamente superiori rispetto alla Litofacies A, più adatta come piano di posa di eventuali fondazioni lineari di tipo travi rovesce.

Solitamente la ghiaia si presenta poco alterata e con spessori di entità variabile di circa 3 m. Tale litofacies B ha caratteristiche geotecniche buone per sopportare i carichi delle strutture con classiche fondazioni in cls armato (lineari, quadrate, platea etc).

La falda staziona all'interno delle ghiaie della litofacies B , ma presenta gradienti differenti anche per distanze poco rilevanti quali quelle che interessano l'intervento in progetto. La differenza di soggiacenza della falda di quasi 2 m è imputabile alla diversa permeabilità e quindi anche alla trasmissività che si riscontrano all'interno dei corpi sedimentari ghiaiosi.

La litofacies C presenta caratteristiche fisico meccaniche elevate per un materiale considerabile coesivo. Le caratteristiche di tali terreni sono prevalentemente coesive (argille limose talora sovraconsolidate), e la consistenza varia da compatta a molto compatta.

Va inoltre notato che lo sgravio operato con lo scavo dei sotterranei rappresenta un'aliquota sostanziale dei pesi relativi a costruzioni di quella taglia, dunque modesto è l'impegno tensionale richiesto al substrato rispetto all'assetto geostatico naturale. Ciò contribuisce a contenere le deformazioni assolute e soprattutto quelle differenziali.

1.3 CARATTERISTICHE MORFOLOGICHE

L'area in oggetto è pianeggiante e non ha nelle vicinanze rilievi morfologici di alcun tipo che possano determinare problematiche di instabilità geomorfologica gravitativa.

1.4 CARATTERISTICHE IDROGEOLOGICHE

Idrogeologicamente si ha la presenza di una falda superficiale che risiede all'interno delle ghiaie e che staziona al di sotto del piano campagna attuale ad una profondità variabile dai 3,5 ai 5,5 m spostandosi da sud ovest verso nord est nell'area di intervento.

Trattandosi di una prima falda superficiale e di modeste dimensioni visto lo spessore del mezzo che le contiene, è possibile che durante i mesi siccitosi il livello dell'acqua nei piezometri si approfondisca maggiormente. Ciononostante, con queste quote di stazionamento della falda esiste la problematica di poter trovarsi nella condizione di dover scavare in acqua. Inoltre il piano interrato a -3,5 m circa potrebbe subire l'interferenza della falda con gravi disagi per le zone che potrebbero allagarsi. Si dovrà quindi predisporre un idoneo sistema di allontanamento delle acque in modo tale che i piani interrati non possano essere raggiunti da acque di nessun tipo.

L'idrografia superficiale interessa due corsi d'acqua di dimensioni limitate: Rio Venzola e rio dei Moiastrì. Il buon funzionamento dell'idrografia superficiale è subordinato al regolare deflusso dei suddetti corsi d'acqua circostanti.

Nell'area in esame non è stata rilevata presenza di ristagni superficiali di acqua.

2 DESCRIZIONE GENERALE DELLA STRUTTURA

L'edificio principale, progettato secondo le Norme Tecniche delle Costruzioni D.M. 14/01/2008, è composto da un piano interrato, 4 piani di elevazione più una copertura, realizzata con una struttura metallica: lo sviluppo in pianta è approssimativamente inscritto in un rettangolo di 66 x 19 metri. Il tunnel di collegamento con i preesistenti edifici risulta invece composto di un piano interrato più 5 piani di elevazione, e il suo sviluppo in pianta è inscritto in un rettangolo di 17 x 4,5 metri.

La struttura resistente dell'edificio principale è mista telaio-pareti, costituita da un telaio spaziale formato da travi e pilastri in c.a. con maglia strutturale di 4,05 x 6,9 metri e due nuclei di controventamento in c.a. posizionati alle due estremità della struttura (che fungono da vani scala e ascensori). L'edificio presenta un giunto strutturale lungo l'asse più corto, che serve a separare strutturalmente e rendere indipendenti le due unità.

La struttura resistente del tunnel è invece costituita da un telaio spaziale formato da travi e pilastri in c.a. con maglia strutturale di 3,95 x 5,15 metri, ed è giuntato sia rispetto all'edificio principale di nuova costruzione sia rispetto a quelli esistenti.

L'interpiano medio è pari a circa 4,05 metri, e i solai sono realizzati con lastre tralicciate tipo predalle di spessore 24 cm.

Le travi sono previste essere semi-prefabbricate e puntellate al montaggio, con altezza pari a 34 cm e larghezza variabile: di conseguenza, sono tutte ribassate 10 cm rispetto alle lastre predalles.

I pilastri sono prefabbricati con nodo a secco, da gettarsi in opera dopo il posizionamento di armature integrative per solidarizzare l'unione trave-pilastro e garantire necessariamente l'iperstaticità della costruzione.

La fondazione è costituita da travi rovesce ordite nella direzione dei telai di elevazione, con un'anima larga 75 cm ed alta 80 cm posta sopra un'ala larga 175 cm ed alta 40 cm (altezza totale della fondazione pari a 120 cm), collegate tra loro da cordoli di larghezza 30 cm ed altezza 50 cm. In corrispondenza dei setti dei vani scala è invece prevista una ciabatta di larghezza variabile e altezza pari a 40 cm.

Come già accennato, vista la lunghezza della costruzione, superiore ai 60 metri, si è reso necessario posizionare un giunto strutturale trasversale in corrispondenza della mezzeria dell'edificio, presente a tutti i solai. Il tunnel è stato a sua volta giuntato rispetto all'edificio principale al fine di conseguire una maggiore regolarità in pianta della struttura.

Al piano interrato è presente un muro perimetrale controterra, che è stato giuntato sismicamente rispetto al corpo principale dell'edificio al fine di renderne indipendenti i comportamenti sismici, e verrà quindi analizzato separatamente.

Le destinazioni d'uso dei vari piani sono le seguenti:

- piano interrato: spogliatoi personale
- piano terra: reparto radiologia, day hospital residenza psichiatrica
- primo piano: attività sanitarie
- secondo piano: attività sanitarie
- terzo piano: attività sanitarie
- quarto piano: attività sanitarie
- quinto piano: vano tecnico copertura

3 NORMATIVA TECNICA E RIFERIMENTI TECNICI UTILIZZATI

3.1 NORMATIVA TECNICA COGENTE

- Legge n. 1086 del 5 Novembre 1971. *"Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso, ed a struttura metallica"*.
- Legge n. 64 del 2 febbraio 1974. *"Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche"*.
- D.M. del 14 Gennaio 2008: *"Norme tecniche per le costruzioni"*.
- D.M. del 16 Febbraio 2007: *"Classificazione di resistenza al fuoco di prodotti ed elementi costruttivi di opere da costruzione"*.

3.2 RIFERIMENTI TECNICI INTEGRATIVI

- Circolare 2 Febbraio 2009, n. 617 del Ministero delle Infrastrutture e dei Trasporti approvata dal Consiglio Superiore dei Lavori Pubblici – *"Istruzioni per l'applicazione delle nuove Norme Tecniche per le Costruzioni"*
- UNI EN 1992-1-1 Novembre 2005 *"Eurocodice 2 - Progettazione delle strutture in calcestruzzo / Parte 1-1: Regole generali e regole per gli edifici"*.
- UNI EN 1998-1: 2005 *"Eurocodice 8 - Progettazione delle strutture per la resistenza sismica / Parte 1: Regole generali, azioni sismiche e regole per gli edifici"*.
- UNI EN 206-1: 2006 *"Calcestruzzo – Parte 1: Specificazione, prestazione, produzione e conformità"*

4 DEFINIZIONE DELLE AZIONI CONSIDERATE SULLA COSTRUZIONE

4.1 PARAMETRI DI PROGETTO CHE CONCORRONO ALLA DEFINIZIONE DELL'AZIONE SISMICA DI BASE DEL SITO

La destinazione d'uso della struttura, facendo parte di un complesso ospedaliero, ricade all'interno della definizione normativa di "*costruzioni con funzioni pubbliche o strategiche importanti, anche con riferimento alla gestione della protezione civile in caso di calamità*", per cui l'edificio è classificato in "**Classe d'Uso IV**" per la valutazione delle azioni sismiche, come indicato al § 2.4.2 delle NTC 2008.

Per quanto riguarda la vita nominale della struttura, il tipo di costruzione ricade all'interno della definizione normativa di "*opere ordinarie, ponti, opere infrastrutturali e dighe di dimensioni contenute o di importanza strategica*", per cui la vita nominale, in accordo con la committenza, è stata posta pari a **50 anni**, come indicato dalla Tabella 2.4.I delle NTC 2008.

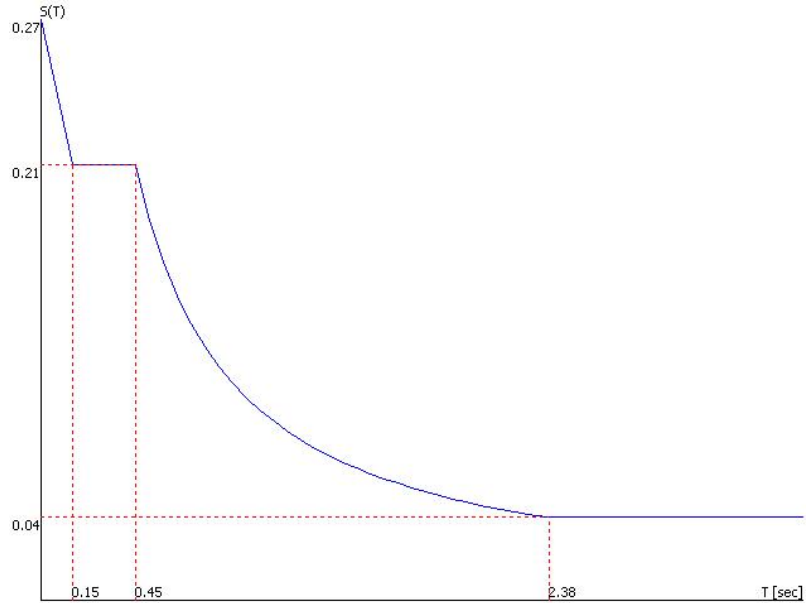
Sinteticamente si indicano i principali criteri di progettazione e i livelli di sicurezza adottati per l'intervento in oggetto, in ottemperanza ai livelli di sicurezza richiesti dal D.M. 14/01/2008:

- Vita Nominale: $V_N = 50$ anni
- Classe d'uso: IV ($C_U = 2.0$)
- Periodo di riferimento: $V_R = V_N \times C_U = 100$ anni
- Categoria del sottosuolo: "C"
- Categoria topografica: T1
- Amplificazione topografica: $S_T = 1,0$
- Zona sismica del sito: Zona 3
- Longitudine: 10.0413
- Latitudine: 44.8471

SPETTRO DI RISPOSTA NTC 2008 SLV H

Probabilità di superamento (P_{VR}) 10.0 e periodo di ritorno (T_R) 949 anni.

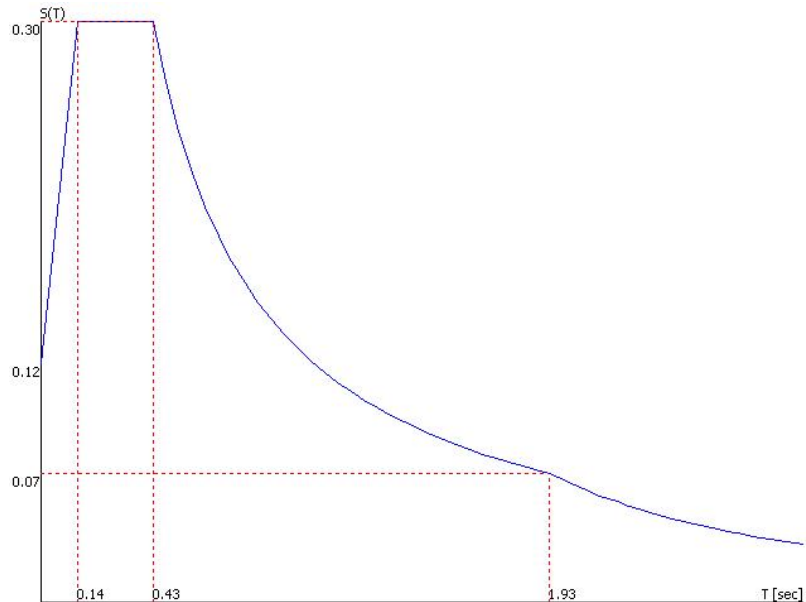
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- F_o 2.4686
- T_C^* 0.2799



SPETTRO DI RISPOSTA NTC 2008 SLD H

Probabilità di superamento (P_{VR}) 63.0 e periodo di ritorno (T_R) 101 anni

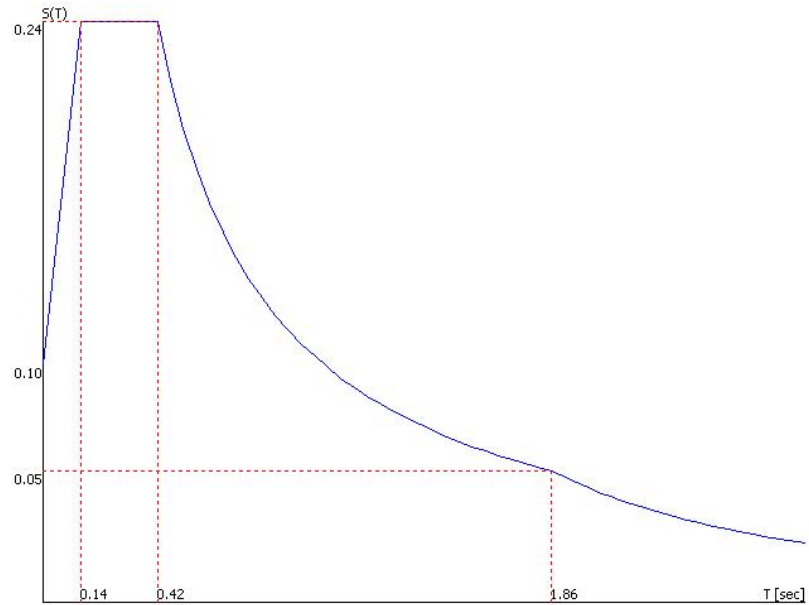
- S_s 1.5
- T_B 0.14 [sec]
- T_C 0.43 [sec]
- T_D 1.93 [sec]
- a_g/g 0.0822
- F_o 2.4407
- T_C^* 0.2600



SPETTRO DI RISPOSTA NTC 2008 SLO H

Probabilità di superamento (P_{VR}) 81.0 e periodo di ritorno (T_R) 60 anni

- S_s 1.5
- T_B 0.14 [sec]
- T_C 0.42 [sec]
- T_D 1.86 [sec]
- a_g/g 0.0652
- F_o 2.4514
- T_C^* 0.2550



4.2 AZIONI CONSIDERATE SULLA COSTRUZIONE

4.2.1 AZIONI ANTROPICHE SUI SOLAI

Nel seguito si riporta la tabella riassuntiva dei sovraccarichi verticali (pesi propri, permanenti e variabili) utilizzati per il calcolo strutturale. A questi carichi vanno aggiunti i pesi propri delle strutture portanti in c.a. (travi, pilastri, setti), mentre i pesi propri dei solai sono indicati.

I solai in progetto sono della tipologia predalles di spessore 24 cm.

La lastra di predalles ha larghezza di 1,20 metri, soletta piena inferiore di 5 cm , soletta piena superiore di 5 cm e presenta 3 tralicci di larghezza 12 cm (il peso dei pacchetti di polistirolo è cautelativamente ritenuto pari a 20 kg/m²). Il carico a m² della lastra è pari a:

$$G_1 = \frac{2500 \cdot (1,2 \cdot 0,1 + 3 \cdot 0,12 \cdot 0,14)}{1,2} + 20 = 375 \text{ kg/m}^2$$

Di seguito sono riportati i diversi valori di carichi propri, permanenti e variabili considerati per ciascun solaio. Si specifica che i permanenti portati sono stati divisi in due differenti aliquote (2/3 ed 1/3), valutati nelle combinazioni SLU con due diversi coefficienti parziali (1,3 e 1,5) in quanto considerati rispettivamente “compiutamente definiti” e “non compiutamente definiti”, come da nota (1) alla Tabella 2.6.I delle NTC 2008.

Per quanto riguarda i sovraccarichi variabili, essi sono stati classificati in base alla Tabella 3.1.II delle NTC 2008.

Le zone di laboratorio e degenza ospedaliera sono classificate in categoria C1, con un carico minimo uniformemente distribuito pari a 300 kg/m². Per le zone del reparto radiologia si è adottato un carico minimo uniformemente distribuito pari a 1200 kg/m², che tiene conto della possibile dislocazione di apparecchiature pesanti e schermature magnetiche.

Per quanto riguarda il locale risonanza magnetica al 1° solaio, destinato ad accogliere il magnete della TAC, a causa dell'elevato sovraccarico concentrato, il solaio predalles è sostituito da una soletta piena in c.a. di spessore pari a 24 cm, sulla quale si sono considerati un sovraccarico permanente pari a 1235 kg/m² e uno variabile pari a 950 kg/m², che corrispondono al peso stimato del magnete (esso varia a seconda della tipologia, non ancora determinata univocamente) spalmato sull'area della stanza più le necessarie schermature magnetiche.

- **1° SOLAIO:**

DEGENZE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

<i>P.P SOLAIO H=24 cm</i>	<i>G1</i>	<i>375 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Tramezzature = 100 kg/mq</i> <i>Pavimento = 50 kg/mq</i> <i>Caldana = 120 kg/mq</i> <i>Sottofondo allegg. = 30 kg/mq</i>	<i>G2</i>	<i>300 Kg/mq</i>
<i>VARIABILI (Cat. C1)</i>	<i>Q</i>	<i>300 Kg/mq</i>

REPARTO RADIOLOGIA

<i>P.P SOLAIO H=24 cm</i>	<i>G1</i>	<i>375 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Tramezzature = 100 kg/mq</i> <i>Pavimento in gres = 60 kg/mq</i> <i>Caldana (5 cm) = 120 kg/mq</i> <i>Sottofondo allegg. (6 cm) = 30 kg/mq</i>	<i>G2</i>	<i>300 Kg/mq</i>
<i>VARIABILI (Cat. C1)</i>	<i>Q</i>	<i>1200 Kg/mq</i>

LOCALE RISONANZA MAGNETICA

<i>P.P SOLETTA H=24 cm</i>	<i>G1</i>	<i>600 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Battuto cemento = 250 kg/mq</i> <i>Guaine = 50 kg/mq</i> <i>Magnete = 935 kg/mq</i>	<i>G2</i>	<i>1235 Kg/mq</i>
<i>VARIABILI (Cat. C1)</i>	<i>Q</i>	<i>950 Kg/mq</i>

RAMPE SCALA

<i>P.P RAMPA</i>	<i>G1</i>	<i>500 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Pavimento pietra = 100 kg/mq</i> <i>Caldana = 75 kg/mq</i> <i>Sottofondo allegg. = 75 kg/mq</i>	<i>G2</i>	<i>250 Kg/mq</i>

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

<i>VARIABILI (Cat. C2)</i>	<i>Q</i>	<i>500 Kg/mq</i>
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○ **2° SOLAIO:**

DEGENZE

<i>P.P SOLAIO H=24 cm</i>	<i>G1</i>	<i>375 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Tramezzature = 100 kg/mq</i> <i>Pavimento = 50 kg/mq</i> <i>Caldana = 120 kg/mq</i> <i>Sottofondo allegg. = 30 kg/mq</i>	<i>G2</i>	<i>300 Kg/mq</i>
<i>VARIABILI (Cat. C1)</i>	<i>Q</i>	<i>300 Kg/mq</i>

RAMPE SCALA

<i>P.P RAMPA</i>	<i>G1</i>	<i>500 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Pavimento pietra = 100 kg/mq</i> <i>Caldana = 75 kg/mq</i> <i>Sottofondo allegg. = 75 kg/mq</i>	<i>G2</i>	<i>250 Kg/mq</i>
<i>VARIABILI (Cat. C2)</i>	<i>Q</i>	<i>500 Kg/mq</i>

○ **3° SOLAIO:**

DEGENZE

<i>P.P SOLAIO H=24 cm</i>	<i>G1</i>	<i>375 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Tramezzature = 100 kg/mq</i> <i>Pavimento = 50 kg/mq</i> <i>Caldana = 120 kg/mq</i> <i>Sottofondo allegg. = 30 kg/mq</i>	<i>G2</i>	<i>300 Kg/mq</i>
<i>VARIABILI (Cat. C1)</i>	<i>Q</i>	<i>300 Kg/mq</i>

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

RAMPE SCALA

<i>P.P RAMPA</i>	<i>G1</i>	<i>500 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Pavimento pietra = 100 kg/mq</i> <i>Caldana = 75 kg/mq</i> <i>Sottofondo allegg. = 75 kg/mq</i>	<i>G2</i>	<i>250 Kg/mq</i>
<i>VARIABILI (Cat. C2)</i>	<i>Q</i>	<i>500 Kg/mq</i>

○ **4° SOLAIO:**

DEGENZE

<i>P.P SOLAIO H=24 cm</i>	<i>G1</i>	<i>375 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Tramezzature = 100 kg/mq</i> <i>Pavimento = 50 kg/mq</i> <i>Caldana = 120 kg/mq</i> <i>Sottofondo allegg. = 30 kg/mq</i>	<i>G2</i>	<i>300 Kg/mq</i>
<i>VARIABILI (Cat. C1)</i>	<i>Q</i>	<i>300 Kg/mq</i>

RAMPE SCALA

<i>P.P RAMPA</i>	<i>G1</i>	<i>500 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Pavimento pietra = 100 kg/mq</i> <i>Caldana = 75 kg/mq</i> <i>Sottofondo allegg. = 75 kg/mq</i>	<i>G2</i>	<i>250 Kg/mq</i>
<i>VARIABILI (Cat. C2)</i>	<i>Q</i>	<i>500 Kg/mq</i>

○ **5° SOLAIO:**

DEGENZE

<i>P.P SOLAIO H=24 cm</i>	<i>G1</i>	<i>375 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Tramezzature = 100 kg/mq</i>	<i>G2</i>	<i>300 Kg/mq</i>

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

<i>Pavimento = 50 kg/mq</i> <i>Caldana = 120 kg/mq</i> <i>Sottofondo allegg. = 30 kg/mq</i>		
<i>VARIABILI (Cat. C1)</i>	<i>Q</i>	<i>300 Kg/mq</i>

RAMPE SCALA

<i>P.P RAMPA</i>	<i>G1</i>	<i>500 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Pavimento pietra = 100 kg/mq</i> <i>Caldana = 75 kg/mq</i> <i>Sottofondo allegg. = 75 kg/mq</i>	<i>G2</i>	<i>250 Kg/mq</i>
<i>VARIABILI (Cat. C2)</i>	<i>Q</i>	<i>500 Kg/mq</i>

o **6° SOLAIO / COPERTURA:**

COPERTURA C.A.

<i>P.P SOLAIO H=24 cm</i>	<i>G1</i>	<i>375 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Pavimento c.a. = 200 kg/mq</i> <i>Isolamento/Impermeab. = 5 kg/mq</i> <i>Soletta pendenze = 95 kg/mq</i>	<i>G2</i>	<i>300 Kg/mq</i>
<i>VARIABILI (Cat. Neve)</i>	<i>Q</i>	<i>120 Kg/mq</i>

COPERTURA METALLICA

<i>P.P TELAI METALLICI</i>	<i>G1</i>	<i>50 Kg/mq</i>
<i>PERMANENTI PORTATI</i> <i>Baraccatura = 50 kg/mq</i>	<i>G2</i>	<i>50 Kg/mq</i>
<i>VARIABILI (Cat. Neve)</i>	<i>Q</i>	<i>120 Kg/mq</i>

4.2.2 AZIONE DEI TAMPONAMENTI

I tamponamenti perimetrali previsti in sede di progetto sono costituiti dalla seguente tipologia:

- pannello sopra alla finestra (h=100 cm):
 - pannello = *250 kg/mq*
 - blocco Poroton = *175 kg/mq*
 - cartongesso = *40 kg/mq*
 - finestra (h=160 cm): *60 kg/mq*
 - pannello sotto alla finestra (h=111 cm):
 - pannello = *250 kg/mq*
 - cartongesso = *40 kg/mq*
- media totale: *240 mg/mq*

Questi carichi sono stati assegnati direttamente alle travi di bordo come carichi lineari.

Non possedendo adeguati requisiti di rigidezza e resistenza, essi vengono considerati esclusivamente al fine di considerarne i carichi verticali e le masse sismiche, ma vengono totalmente ignorati dal punto di vista strutturale.

4.2.3 AZIONE DELLA NEVE

L'azione della neve in copertura è stata determinata con riferimento al § 3.4 delle NTC 2008.

- comune: *Fidenza (PR)*
- zona: *I - Mediterranea*
- altitudine: $a_s = 93 \text{ m}$
- valore caratteristico del carico di neve al suolo: $q_{sk} = 150 \text{ kg/mq}$
- coeff. esposizione: $c_E = 1$
- coeff. termico: $c_t = 1$
- coeff. di forma: $\mu_i = 0,8$

Carico di neve in copertura:

$$q_s = q_{sk} \cdot \mu_i \cdot c_E \cdot c_t = 120 \text{ kg/m}^2$$

Il carico neve è stato considerato già compreso nel sovraccarico variabile di copertura.

4.2.4 AZIONE DEL VENTO

L'azione del vento sulla struttura in elevazione è stata determinata con riferimento al § 3.3 delle NTC 2008.

- altitudine: $a_s = 93 \text{ m}$
- zona: $2 - Emilia Romagna$
- $v_{b,0} = v_b = 25 \text{ m/s}$
- $a_0 = 750 \text{ m}$
- $k_a = 0,015 \text{ s}^{-1}$
- pressione cinetica di riferimento: $q_b = \frac{1}{2} \rho \cdot v_b^2 = 39 \text{ kg/m}^2$
- classe di rugosità: B
- categoria di esposizione del sito: IV
- $k_r = 0,22$
- $z_0 = 0,30 \text{ m}$
- $z_{min} = 8 \text{ m}$
- $c_t = 1$
- $c_d = 1$

Dato che l'espressione di $c_e(z)$ cresce proporzionalmente con l'altezza z dell'edificio, questa è stata posta pari all'altezza massima fuori terra della struttura (a favore di sicurezza).

- altezza dell'edificio: $z = 20 \text{ m}$

$$c_e(z) = k_r^2 \cdot c_t \cdot \ln\left(\frac{z}{z_0}\right) \left[7 + c_t \cdot \ln\left(\frac{z}{z_0}\right)\right] = 2,28$$

Si valutano due differenti pressioni del vento, rispettivamente per il caso di parete sopravvento ($c_p=0,8$) e parete sottovento ($c_p=0,4$):

$$p^+ = q_b \cdot c_E \cdot c_t \cdot c_p = 71 \text{ kg/m}^2$$

$$p^- = q_b \cdot c_E \cdot c_t \cdot c_p = 36 \text{ kg/m}^2$$

4.2.5 AZIONE TERMICA

Al fine di limitare gli effetti dell'azione termica sulle strutture è stato inserito un giunto strutturale di dilatazione, in modo da permettere dilatazioni reciproche delle due parti strutturali separate limitando gli effetti di eventuali coazioni.

In questo modo, la porzione maggiore delle due in cui è divisa la struttura presenta una distanza massima di circa 37 metri dal nucleo di controventamento alla pilastrata più lontana (quella in corrispondenza del giunto). Questo risulta essere in accordo con quanto consolidato in letteratura (cfr. Pozzati-Ceccoli, "Teoria e Tecnica delle Strutture"), ovvero che gli effetti della temperatura sui telai possono essere ritenuti trascurabili per strutture intelaiate fino ai 50 metri.

Nel caso dell'edificio in esame, la struttura intelaiata in c.a. è completamente protetta dall'irraggiamento solare, per cui la massima variazione di temperatura da considerarsi, secondo la Tabella 3.5.II delle NTC 2008, è:

- $\Delta T_u = \pm 10 \text{ }^\circ\text{C}$

Questa variazione di temperatura può dare origine a una dilatazione termica massima pari a:

$$\Delta L = \alpha \cdot L \cdot \Delta T_u = 10^{-5} \cdot 3700 \cdot 10 = 0,37 \text{ cm}$$

5 MATERIALI

5.1 DESCRIZIONE DEI MATERIALI

- **Calcestruzzo strutture di fondazione:**

Norma UNI EN 206-1 : 2006	
<i>Classe di resistenza</i>	<i>C25/30</i>
<i>Classe di esposizione</i>	<i>XC2 (I)</i>
<i>Contenuto max di cloruri</i>	<i>Cl 0.20</i>
<i>Dimensione nominale max degli inerti</i>	<i>D_{MAX} 22</i>
<i>Classe di consistenza</i>	<i>S4</i>

- **Calcestruzzo setti in c.a. da realizzare in opera e getti integrativi travi:**

Norma UNI EN 206-1 : 2006	
<i>Classe di resistenza</i>	<i>C28/35</i>
<i>Classe di esposizione</i>	<i>XC3 (I)</i>
<i>Contenuto max di cloruri</i>	<i>Cl 0.20</i>
<i>Dimensione nominale max degli inerti</i>	<i>D_{MAX} 18</i>
<i>Classe di consistenza</i>	<i>S4</i>

- **Calcestruzzo pilastri e travi prefabbricate:**

Norma UNI EN 206-1 : 2006	
<i>Classe di resistenza</i>	<i>C35/45</i>
<i>Classe di esposizione</i>	<i>XC3 (I)</i>
<i>Contenuto max di cloruri</i>	<i>Cl 0.20</i>
<i>Dimensione nominale max degli inerti</i>	<i>D_{MAX} 15</i>
<i>Classe di consistenza</i>	<i>S4</i>

- **Acciaio per calcestruzzo armato:** **B450C (saldabile)**
- **Malte antiritiro per inghisaggi:** **“TIPO” EMACO S55**

NOTE DI POSA: il getto in opera di malte antiritiro ad alta resistenza - “tipo” EMACO - non può avvenire per temperature ambientali $T^{\circ} \leq +5^{\circ}C$.

5.2 REQUISITI DI RESISTENZA MECCANICA

- **Calcestruzzo strutture di fondazione (C25/30):**

C25/30	N/mm^2	CLASSE DI RESISTENZA
$R_{ck} = 300$	kg/cm^2	resistenza cubica alla compressione – valore caratteristico
$f_{ck} = 249.0$	kg/cm^2	resistenza cilindrica alla compressione – valore caratteristico
$f_{cd} = 141.1$	kg/cm^2	resistenza di calcolo alla compressione (SLU)
$f_{ctm} = 25.6$	kg/cm^2	resistenza media a trazione semplice
$f_{ctm} = 30.7$	kg/cm^2	resistenza media a trazione per flessione
$f_{ctd} = 11.9$	kg/cm^2	resistenza di calcolo a trazione (SLU)
$\sigma_c = 149.4$	kg/cm^2	tensione massima di compressione per combinazioni rare (SLE)
$\sigma_c = 112.1$	kg/cm^2	tensione massima di compress. per combinazione quasi perm. (SLE)
$E_c = 314472$	kg/cm^2	modulo elastico

- **Calcestruzzo setti in c.a. e getti integrativi travi (C28/35):**

C28/35	N/mm^2	CLASSE DI RESISTENZA
$R_{ck} = 350$	kg/cm^2	resistenza cubica alla compressione – valore caratteristico
$f_{ck} = 290.5$	kg/cm^2	resistenza cilindrica alla compressione – valore caratteristico
$f_{cd} = 164.6$	kg/cm^2	resistenza di calcolo alla compressione (SLU)
$f_{ctm} = 27.1$	kg/cm^2	resistenza media a trazione semplice

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

$f_{cfm} = 32.6$	kg/cm^2	<i>resistenza media a trazione per flessione</i>
$f_{ctd} = 12.9$	kg/cm^2	<i>resistenza di calcolo a trazione (SLU)</i>
$\sigma_c = 174.3$	kg/cm^2	<i>tensione massima di compressione per combinazioni rare (SLE)</i>
$\sigma_c = 130.7$	kg/cm^2	<i>tensione massima di compress. per combinazione quasi perm. (SLE)</i>
$E_c = 325881$	kg/cm^2	<i>modulo elastico</i>

• **Calcestruzzo pilastri e travi prefabbricate (C35/45):**

C35/45	N/mm^2	CLASSE DI RESISTENZA
$R_{ck} = 450$	kg/cm^2	<i>resistenza cubica alla compressione – valore caratteristico</i>
$f_{ck} = 373.5$	kg/cm^2	<i>resistenza cilindrica alla compressione – valore caratteristico</i>
$f_{cd} = 211.7$	kg/cm^2	<i>resistenza di calcolo alla compressione (SLU)</i>
$f_{ctm} = 33.5$	kg/cm^2	<i>resistenza media a trazione semplice</i>
$f_{cfm} = 40.2$	kg/cm^2	<i>resistenza media a trazione per flessione</i>
$f_{ctd} = 15.6$	kg/cm^2	<i>resistenza di calcolo a trazione (SLU)</i>
$\sigma_c = 224.1$	kg/cm^2	<i>tensione massima di compressione per combinazioni rare (SLE)</i>
$\sigma_c = 168.1$	kg/cm^2	<i>tensione massima di compress. per combinazione quasi perm. (SLE)</i>
$E_c = 346255$	kg/cm^2	<i>modulo elastico</i>

• **Acciaio per calcestruzzo armato (B450C):**

B450C		
$f_{yk} = 4500$	kg/cm^2	<i>tensione caratteristica di snervamento</i>
$f_{yd} = 3913$	kg/cm^2	<i>resistenza di calcolo (SLU)</i>
$\sigma_s = 3600$	kg/cm^2	<i>tensione massima in condizioni di esercizio (SLE)</i>
$E_s = 2100000$	kg/cm^2	<i>modulo elastico</i>

5.3 REQUISITI DI DURABILITA'

La durabilità è garantita dal rispetto delle apposite direttive previste dall'Eurocodice 2 (UNI ENV 1992-1-1:2005).

Secondo il Prospetto 4.4N dell' EC2 il ricoprimento minimo per garantire la durabilità è legato alla Classe di Esposizione (Prospetto 4.1 dell' EC2) e alla Classe Strutturale (che dipende da Vita Utile di Progetto, classe di resistenza del calcestruzzo e forma dell'elemento secondo il prospetto 4.3N).

Le zone a contatto col terreno sono state classificate come XC2 (Bagnato, raramente asciutto), mentre quelle interne dell'interrato ed in elevazione su tutta la restante parte di edificio, sono state classificate come XC3 (Umidità moderata).

Secondo il prospetto 4.3N, per classe di esposizione XC2/XC3:

- la Vita Utile di Progetto è 50 anni, per cui non occorre aumentare di classe
- la Classe di Resistenza è C25/30 per fondazioni e C28/35 per setti (per cui non si possono ridurre classi) mentre è C35/45 per travi e pilastri prefabbricati (per cui si può ridurre di 1 classe)
- la forma dell'elemento è simile ad una soletta per platea di fondazione e setti, per cui si può ridurre di 1 classe
- è assicurato un controllo di qualità speciale della produzione del calcestruzzo per le travi e i pilastri prefabbricati, per cui si può ridurre di 1 classe

Riassumendo, per la fondazione e i setti si può ridurre di 1 la Classe Strutturale, mentre si può ridurre di 2 per travi e pilastri prefabbricati.

Decidendo di adottare una Classe Strutturale S4 (che diventa quindi S3 per fondazione e setti e S2 per travi e pilastri prefabbricati), per una Classe di Esposizione XC2/XC3 il prospetto 4.4N restituisce un valore di copriferro minimo $c_{min,dur}$ per garantire la durabilità pari a **15 mm (20 mm** per fondazione e setti).

6 CRITERI DI PROGETTAZIONE E DI MODELLAZIONE

6.1 CLASSE DI DUTTILITA'

La struttura è progettata in Classe di Duttività Bassa: CD "B".

6.2 REGOLARITA' IN PIANTA E IN ALZATO

La struttura soddisfa tutti i requisiti di regolarità in altezza previsti dalle NTC 2008, mentre solamente il tunnel rispetta anche quelli di regolarità in pianta, in quanto le due parti dell'edificio principale non la soddisfano a causa dell'assenza di simmetria della rigidità dovuta all'eccentricità dei nuclei vani scala.

Per quanto riguarda la regolarità in pianta (soddisfatta solo dal tunnel), i requisiti da normativa sono i seguenti:

- la configurazione in pianta è compatta e approssimativamente simmetrica rispetto a due direzioni ortogonali, in relazione alla distribuzione di masse e rigidità;
- il rapporto tra i lati di un rettangolo in cui la costruzione risulta inscritta è inferiore a 4;
- nessuna dimensione di eventuali rientri o sporgenze supera il 25 % della dimensione totale della costruzione nella corrispondente direzione;
- gli orizzontamenti possono essere considerati infinitamente rigidi nel loro piano rispetto agli elementi verticali e sufficientemente resistenti;

Per quanto riguarda la regolarità in altezza (soddisfatta da tutte le tre parti della struttura), i requisiti da normativa sono i seguenti:

- tutti i sistemi resistenti verticali (quali telai e pareti) si estendono per tutta l'altezza della costruzione;
- massa e rigidità rimangono costanti o variano gradualmente, senza bruschi cambiamenti, dalla base alla sommità della costruzione (le variazioni di massa da un orizzontamento all'altro non superano il 25 %, la rigidità non si riduce da un orizzontamento a quello sovrastante più del 30% e non aumenta più del 10%); ai fini della rigidità si possono considerare regolari in altezza strutture dotate di pareti o nuclei in c.a. o pareti e nuclei in muratura di sezione costante sull'altezza o di telai controventati in acciaio, ai quali sia affidato almeno il 50% dell'azione sismica alla base;

- nelle strutture intelaiate progettate in CD "B" il rapporto tra resistenza effettiva e resistenza richiesta dal calcolo non è significativamente diverso per orizzontamenti diversi (il rapporto fra la resistenza effettiva e quella richiesta, calcolata ad un generico orizzontamento, non deve differire più del 20% dall' analogo rapporto determinato per un altro orizzontamento); può fare eccezione l'ultimo orizzontamento di strutture intelaiate di almeno tre orizzontamenti;
- eventuali restringimenti della sezione orizzontale della costruzione avvengono in modo graduale da un orizzontamento al successivo, rispettando i seguenti limiti: ad ogni orizzontamento il rientro non supera il 30% della dimensione corrispondente al primo orizzontamento, né il 20% della dimensione corrispondente all' orizzontamento immediatamente sottostante. Fa eccezione l'ultimo orizzontamento di costruzioni di almeno quattro piani per il quale non sono previste limitazioni di restringimento

La seguente tabella riassume i valori delle masse per i solai, confermando che la variazione delle masse da un solaio al successivo non supera mai il 25%.

Va specificato che i solai numerati da 1 a 5 sono quelli della parte strutturale dell'edificio principale a sinistra del giunto (quella con estensione planimetrica minore), quelli da 7 a 11 sono quelli della parte strutturale dell'edificio principale a destra del giunto (quella con estensione planimetrica maggiore), ed infine quelli numerati da 13 a 18 sono quelli del tunnel. I solai 6 e 12 non sono considerati in quanto costituiscono la copertura dei nuclei vani scala, e possono quindi esser considerati come vani tecnici.

Solaio	Massa [UTM]	Variazione Massa %	Jp [UTM m ²]	Is [m]	X _g [m]	Y _g [m]	Z _g [m]	Dx [m]	Dy [m]
1	69250.0	0.0	6303934.5	9.54	19.95	25.19	3.25	-9.98	3.35
2	60568.9	-12,54	5436105.0	9.47	19.05	26.02	7.32	-9.15	2.24
3	60719.2	0,25	5458554.0	9.48	19.02	26.01	11.37	-9.17	2.28
4	60719.2	0,00	5458567.0	9.48	19.02	26.01	15.42	-9.17	2.64
5	57137.8	-5,90	5014514.0	9.37	19.48	25.99	19.47	-9.72	3.40

Solaio	Massa [UTM]	Variazione Massa %	Jp [UTM m ²]	Is [m]	X _g [m]	Y _g [m]	Z _g [m]	Dx [m]	Dy [m]
7	96233.8	0.0	18028976.0	13.69	54.59	25.84	3.25	16.53	-1.77
8	97401.7	1,21	18295466.0	13.71	54.62	25.82	7.32	16.55	-2.69
9	97352.4	-0,05	18282236.0	13.70	54.62	25.82	11.37	16.52	-3.20
10	97352.4	0,00	18282314.0	13.70	54.62	25.82	15.42	16.51	-3.61
11	92259.8	-5,23	16714999.0	13.46	53.95	25.90	19.47	17.39	-4.68

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Solaio	Massa [UTM]	Variazione Massa %	Jp [UTM m²]	Is [m]	X_g [m]	Y_g [m]	Z_g [m]	Dx [m]	Dy [m]
13	14216.2	0.0	394930.3	5.27	9.94	8.35	3.25	-0.00	0.41
14	14403.9	1,32	402187.1	5.28	9.94	8.36	7.32	-0.00	0.40
15	14398.8	-0,03	401995.5	5.28	9.93	8.36	11.37	0.00	0.40
16	14398.8	0,00	401995.9	5.28	9.93	8.36	15.42	0.00	0.40
17	14398.8	0,00	401996.3	5.28	9.93	8.36	19.47	0.00	0.40
18	8840.5	1,32	244428.0	5.26	9.93	8.37	23.52	0.00	0.39

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6.3 TIPOLOGIA STRUTTURALE

La tipologia strutturale è mista telaio-pareti equivalente a pareti, in quanto più del 50% dell'azione orizzontale è affidata ai setti, come mostrato dalla seguente tabella:

Comb	Ass. pilastri		Ass. setti					Totali			% N			% V				
	Fx	Fy	Fz	Fx	Fy	Fz	Mz	Fx	Fy	Fz	Mz	Pilastri	Setti	Pilastri	Setti	Pilastri	Setti	
	[kg]	[kg]	[kg]	[kg]	[kg]	[kg]	[kgm]	[kg]	[kg]	[kg]	[kgm]	[kg]	[kg]	[kg]	[kg]	[kgm]	[kg]	[kg]
4	-119257.8	-36501.8	6758017.0	-16995.5	-876796.9	-294545.3	2645258.8	-5969.1	-996054.6	-331047.0	9403275.8	-22964.6	71.9	28.1	11.9	88.1	28.1	11.9
5	-118857.3	-34559.9	6757549.0	-16950.3	-895061.7	-293184.8	2637749.0	-5854.2	-1013919.0	-327744.7	9395298.0	-22804.4	71.9	28.1	11.6	88.4	28.1	11.6
6	-115279.0	66509.6	6761052.0	-18882.7	-937852.3	337160.8	2704461.0	-6207.0	-1053131.2	403670.4	9465513.0	-25089.8	71.4	28.6	11.8	88.2	71.4	11.8
7	-114878.6	68451.5	6760582.5	-18837.5	-956117.1	338521.3	2696951.3	-6092.1	-1070995.6	406972.8	9457533.8	-24929.5	71.5	28.5	11.6	88.4	71.5	11.6
8	-113994.4	-34776.2	6747044.5	-14494.5	-855376.5	-269033.8	2631978.8	-5617.6	-969370.9	-303809.9	9379023.3	-20112.1	71.9	28.1	11.7	88.3	71.9	11.7
9	-113594.1	-32834.3	6746574.0	-14449.2	-873641.5	-267673.2	2624469.5	-5502.6	-987235.6	-300507.5	9371043.5	-19951.8	72.0	28.0	11.5	88.5	72.0	11.5
10	-110015.7	68235.2	6750075.5	-16381.7	-916431.9	362672.3	2691181.5	-5855.5	-1026447.6	430907.6	9441257.0	-22237.2	71.5	28.5	11.6	88.4	71.5	11.6
11	-109615.3	70177.1	6749607.5	-16336.5	-934696.8	364032.7	2683671.3	-5740.5	-1044312.1	434209.8	9433278.8	-22077.0	71.6	28.4	11.5	88.5	71.6	11.5
12	-41627.8	-170579.3	6739630.0	-2279.3	-143527.9	-1048064.6	2465895.5	-1576.2	-185155.7	-1218643.9	9205525.5	-3855.5	73.2	26.8	14.2	85.8	73.2	14.2
13	-40048.8	-170061.7	6736339.5	-1529.0	-137101.8	-1040411.0	2461911.3	-1470.7	-177150.5	-1210472.7	9198250.8	-2999.7	73.2	26.8	14.3	85.7	73.2	14.3
14	27712.4	-181067.4	6729726.0	7742.2	399241.9	-1068525.3	2367831.8	1960.8	426954.3	-1249592.6	9097557.8	9703.0	74.0	26.0	13.8	86.2	74.0	13.8
15	29291.4	-180549.7	6726434.0	8492.5	405668.0	-1060872.1	2363849.0	2066.3	434959.4	-1241421.8	9090283.0	10558.8	74.0	26.0	13.9	86.1	74.0	13.9
16	-40293.1	-164106.5	6738063.5	-2128.5	-204410.7	-1043529.6	2440863.3	-1193.0	-244703.8	-1207636.1	9178926.8	-3321.5	73.4	26.6	13.7	86.3	73.4	13.7
17	-38714.1	-163588.8	6734771.0	-1378.2	-197984.9	-1035876.4	2436879.5	-1087.5	-236698.9	-1199465.2	9171650.5	-2465.7	73.4	26.6	13.7	86.3	73.4	13.7
18	29047.1	-174594.5	6728159.5	7893.0	338359.1	-1063990.3	2342799.5	2344.0	367406.2	-1238584.8	9070959.0	10237.1	74.2	25.8	13.7	86.3	74.2	13.7
19	30626.1	-174076.8	6724867.0	8643.3	344785.0	-1056337.1	2338816.5	2449.5	375411.1	-1230414.0	9063683.5	11092.8	74.2	25.8	13.7	86.3	74.2	13.7
20	111876.2	-71461.9	6725004.5	16409.7	932435.9	-362747.9	2318381.3	5820.9	1044312.2	-434209.8	9043385.8	22230.5	74.4	25.6	11.7	88.3	74.4	11.7
21	112276.6	-69520.1	6724533.5	16454.9	914171.2	-361387.5	2310872.0	5935.8	1026447.8	-430907.6	9035405.5	22390.7	74.4	25.6	11.8	88.2	74.4	11.8
22	115855.0	31549.4	6728036.0	14522.4	871380.4	268958.1	2377583.8	5583.0	987235.4	300507.5	9105619.8	20105.4	73.9	26.1	11.6	88.4	73.9	11.6
23	116255.4	33491.3	6727567.5	14567.7	853115.9	270318.5	2370074.3	5697.9	969371.3	303809.8	9097641.8	20265.6	73.9	26.1	11.9	88.1	73.9	11.9
24	117139.5	-69736.4	6714028.5	18910.7	953856.1	-337236.4	2305102.5	6172.4	1070995.5	-406972.8	9019131.0	25083.1	74.4	25.6	11.9	88.1	74.4	11.9

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25	117539.9	-67794.5	6713560.0	18956.0	935591.3	-335875.9	2297592.5	6287.4	1053131.1	-403670.4	9011152.5	25243.3	74.5 %	25.5 %	12.0 %	88.0 %
26	121118.3	33275.0	6717063.5	17023.5	892800.6	294469.6	2364304.5	5934.5	1013918.8	327744.6	9081368.0	22958.0	74.0 %	26.0 %	11.8 %	88.2 %
27	121518.6	35216.9	6716592.5	17068.7	874535.8	295830.0	2356795.0	6049.5	996054.5	331046.9	9073387.5	23118.2	74.0 %	26.0 %	12.1 %	87.9 %
28	-28365.1	172792.0	6749744.5	-8570.1	-347045.5	1057621.8	2663237.5	-2369.1	-375410.6	1230413.7	9412982.0	-10939.3	71.7 %	28.3 %	13.6 %	86.4 %
29	-26786.2	173309.7	6746450.0	-7819.8	-340619.8	1065275.5	2659253.3	-2263.7	-367406.0	1238585.2	9405703.3	-10083.5	71.7 %	28.3 %	13.6 %	86.4 %
30	40975.0	162303.9	6739840.5	1451.4	195724.2	1037161.3	2565174.0	1167.9	236699.2	1199465.2	9305014.5	2619.3	72.4 %	27.6 %	13.7 %	86.3 %
31	42554.0	162821.5	6736547.0	2201.7	202150.3	1044814.6	2561189.8	1273.3	244704.3	1207636.1	9297736.8	3475.1	72.5 %	27.5 %	13.7 %	86.3 %
32	-27030.5	179264.8	6748177.5	-8419.3	-407928.6	1062156.9	2638204.5	-1985.9	-434959.1	1241421.7	9386382.0	-10405.2	71.9 %	28.1 %	13.7 %	86.3 %
33	-25451.5	179782.5	6744885.0	-7669.0	-401502.4	1069810.0	2634221.5	-1880.4	-426954.0	1249592.5	9379106.5	-9549.4	71.9 %	28.1 %	13.7 %	86.3 %
34	42309.7	168776.8	6738274.0	1602.2	134841.2	1041695.9	2540141.8	1551.1	177150.8	1210472.6	9278415.8	3153.3	72.6 %	27.4 %	14.2 %	85.8 %
35	43888.7	169294.4	6734981.0	2352.5	141267.4	1049349.5	2536157.8	1656.6	185156.1	1218643.9	9271138.8	4009.1	72.6 %	27.4 %	14.2 %	85.8 %

6.4 FATTORE DI STRUTTURA

Come fattore di struttura (q) si è optato per la scelta di due diversi valori per quanto riguarda rispettivamente le due parti dell'edificio principale e il tunnel, in quanto solo quest'ultimo soddisfa i requisiti di regolarità in pianta.

In particolare, si è optato per la scelta di un fattore di struttura $q = 3,3$ per quanto riguarda le due parti dell'edificio principale, in quanto si considerano entrambe come “*struttura mista equivalente a pareti*”, dal momento che più del 50% dell'azione orizzontale è affidata ai setti, regolare in altezza ma non in pianta e non deformabile torsionalmente.

Per quanto riguarda il tunnel si è invece optato per la scelta di un fattore di struttura $q = 3,6$, in quanto lo si considera come “*struttura a telaio con più piani ed una sola campata*”, regolare sia in altezza sia in pianta e non deformabile torsionalmente.

Si riporta qui sotto la tabella che mostra che il rapporto r_{\min}/l_s è superiore a 0,8 per ogni solaio, e di conseguenza la struttura non è deformabile torsionalmente:

Solaio	U_x	U_y	R_z	r_1 [m]	r_2 [m]	r_{\min} /l _s
1	3.0628658322e+009	-1.7918364567e+006	-7.5543798829e+010	17.82	11.34	1.188
	-1.7918364567e+006	7.5711035521e+009	-1.0256586135e+010			
	-7.5543798829e+010	-1.0256586135e+010	9.7298462683e+011			
2	1.7592473149e+009	5.7318719913e+005	-5.2905887844e+010	18.57	10.24	1.081
	5.7318719913e+005	5.7801007642e+009	-3.9538013990e+009			
	-5.2905887844e+010	-3.9538013990e+009	6.0653339587e+011			
3	1.4200323861e+009	6.7044807818e+004	-5.2295548610e+010	20.30	10.13	1.068
	6.7044807818e+004	5.7048290584e+009	-3.2329238460e+009			
	-5.2295548610e+010	-3.2329238460e+009	5.8537698229e+011			
4	1.0684947947e+009	6.1516903595e+005	-4.8695714118e+010	22.41	10.05	1.060
	6.1516903595e+005	5.3078496557e+009	-2.8225215646e+009			
	-4.8695714118e+010	-2.8225215646e+009	5.3653111508e+011			
5	5.2944166445e+008	3.1257044065e+006	-4.2530477235e+010	29.72	10.34	1.104
	3.1257044065e+006	4.3758912112e+009	-1.8313620564e+009			
	-4.2530477235e+010	-1.8313620564e+009	4.6771445113e+011			
7	5.2441426830e+009	5.1872468424e+006	1.5984821663e+011	24.24	17.85	1.304
	5.1872468424e+006	9.6709868133e+009	9.3603829295e+009			
	1.5984821663e+011	9.3603829295e+009	3.0816001661e+012			
8	3.4530831207e+009	-3.3121129324e+007	1.1878173254e+011	25.56	17.72	1.293
	-3.3121129324e+007	7.1839500698e+009	8.7345623774e+009			
	1.1878173254e+011	8.7345623774e+009	2.2564083509e+012			
9	3.1195162940e+009	-2.5785283130e+007	1.1265430297e+011	26.15	17.68	1.290
	-2.5785283130e+007	6.8258632141e+009	9.5685520136e+009			
	1.1265430297e+011	9.5685520136e+009	2.1329083043e+012			

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10	2.6476724073e+009	-3.0305202049e+007	1.0348287892e+011	27.17	17.65	1.288
	-3.0305202049e+007	6.2733036121e+009	9.0671155298e+009			
	1.0348287892e+011	9.0671155298e+009	1.9543314685e+012			
11	1.7158704252e+009	-1.9517996105e+007	8.7567670278e+010	31.30	18.26	1.357
	-1.9517996105e+007	5.0401528236e+009	7.6943518991e+009			
	8.7567670278e+010	7.6943518991e+009	1.6810952296e+012			
13	6.4096883468e+007	3.0999047729e-002	-1.2295592688e+002	6.24	6.21	1.179
	3.0999047729e-002	6.4594345789e+007	-2.6208139720e+007			
	-1.2295592688e+002	-2.6208139720e+007	2.4927724199e+009			
14	3.8912956188e+007	3.4667246899e-002	-7.5188071471e+001	6.29	6.24	1.180
	3.4667246899e-002	3.9567337612e+007	-1.5680956365e+007			
	-7.5188071471e+001	-1.5680956365e+007	1.5384431879e+009			
15	3.8709841079e+007	3.8617749619e-002	3.7893249853e+001	6.29	6.24	1.180
	3.8617749619e-002	3.9407277426e+007	-1.5604606584e+007			
	3.7893249853e+001	-1.5604606584e+007	1.5324633959e+009			
16	3.8668637819e+007	3.9741092744e-002	3.7852275063e+001	6.29	6.24	1.180
	3.9741092744e-002	3.9355571367e+007	-1.5588033714e+007			
	3.7852275063e+001	-1.5588033714e+007	1.5310474824e+009			
17	3.6317199382e+007	5.9242899595e-002	7.1558119781e+001	6.32	6.24	1.181
	5.9242899595e-002	3.7269863945e+007	-1.4640125960e+007			
	7.1558119781e+001	-1.4640125960e+007	1.4514661882e+009			
18	1.2538918237e+007	3.8920793579e-002	4.0161841566e+001	6.51	6.18	1.175
	3.8920793579e-002	1.3924296948e+007	-4.9345721726e+006			
	4.0161841566e+001	-4.9345721726e+006	5.3173993037e+008			

6.5 STATI LIMITE INDAGATI

Gli stati limite indagati per la struttura sono stati i seguenti:

- SLU: stati limite ultimi in condizioni statiche, per le verifiche statiche di resistenza della struttura
- SLV: stato limite di salvaguardia della vita, per le verifiche sismiche di resistenza della struttura
- SLE: stati limite di esercizio in condizioni statiche, per le verifiche statiche di danneggiamenti locali, spostamenti e deformazioni
- SLD: stato limite di danno, per le verifiche sismiche di spostamenti, deformazioni e danneggiamenti strutturali
- SLO: stato limite di operatività, per le verifiche di elementi strutturali in termini di contenimento del danno

6.6 GIUNTI DI SEPARAZIONE TRA STRUTTURE CONTIGUE

I giunti sismici sono stati dimensionati in modo tale da rispettare il valore richiesto da normativa per soddisfare la distanza minima tra edifici contigui, ovvero 1/100 della quota dei punti considerati misurata dal piano di fondazione, moltiplicata per $\frac{a_g \cdot S}{0,5 \cdot g} \leq 1$ (calcolata per lo SLV). Nel caso in esame $\frac{a_g \cdot S}{0,5 \cdot g} = \frac{0,1945g \cdot 1,4}{0,5 \cdot g} = 0,5446$, quindi la distanza minima è pari a 1/183 della quota dei punti considerati misurata dal piano di fondazione.

Di conseguenza, il giunto sismico che separa le strutture principali dai muri controterra è stato fissato in **3 cm**, mentre i giunti sismici tra le due parti dell'edificio principale, il tunnel e gli edifici esistenti sono riassunti nel seguito, divisi per piano:

- 1° piano: **3 cm**
- 2° piano: **7 cm**
- 3° piano: **11 cm**
- 4° piano: **15 cm**
- 5° piano: **19 cm**
- 6° piano: **19 cm**

6.7 CRITERI PER LA VALUTAZIONE DEGLI ELEMENTI NON STRUTTURALI E IMPIANTI

Gli elementi non strutturali (quali tamponature e tramezzi) sono stati rappresentati unicamente in termini di massa, trascurando il loro contributo di rigidezza e resistenza nell'analisi della risposta, e sono stati progettati per resistere solo ai carichi verticali.

Con l'esclusione dei tamponamenti interni di spessore non superiore a 100 mm, gli elementi non strutturali il cui danneggiamento può provocare danni a persone (quali i pannelli esterni) sono stati verificati, insieme alle loro connessioni alla struttura, per l'azione sismica corrispondente a ciascuno degli stati limite considerati. Gli effetti dell'azione sismica sugli elementi costruttivi senza funzione strutturale sono stati determinati applicando agli elementi detti la forza orizzontale definita al § 7.2.3 delle NTC 2008.

Dato che la costruzione ricade in classe d'uso IV, si è verificato che l'azione sismica di progetto non producesse danni agli elementi costruttivi senza funzione strutturale tali da rendere temporaneamente non operativa la costruzione. Questa condizione è stata ritenuta soddisfatta

verificando che gli spostamenti interpiano ottenuti dall'analisi in presenza dell'azione sismica di progetto relativa allo SLO fossero inferiori a $\frac{2}{3} \cdot 0,005$ volte l'altezza di interpiano (si sono considerati tamponamenti collegati rigidamente alla struttura che interferiscono con la deformabilità della stessa).

6.8 REQUISITI DELLE FONDAZIONI E COLLEGAMENTI TRA FONDAZIONI

Gli elementi strutturali delle fondazioni sono stati dimensionati sulla base delle sollecitazioni ad essi trasmesse dalla struttura sovrastante in modo da avere comportamento non dissipativo, indipendentemente dal comportamento strutturale attribuito alla struttura su di esse gravante. Le fondazioni superficiali sono state quindi progettate per rimanere in campo elastico (non sono necessarie armature specifiche per ottenere un comportamento duttile).

Le travi rovesce di fondazione sono state armate con armature longitudinali in percentuale non inferiore allo 0,2 %, sia inferiormente che superiormente, per l'intera lunghezza.

I possibili effetti nella sovrastruttura indotti da spostamenti relativi del terreno di fondazione sul piano orizzontale non sono stati considerati in quanto le travi rovesce di fondazione sono collegate tra loro da cordoli 30x50 cm in grado di assorbire le forze assiali calcolate come:

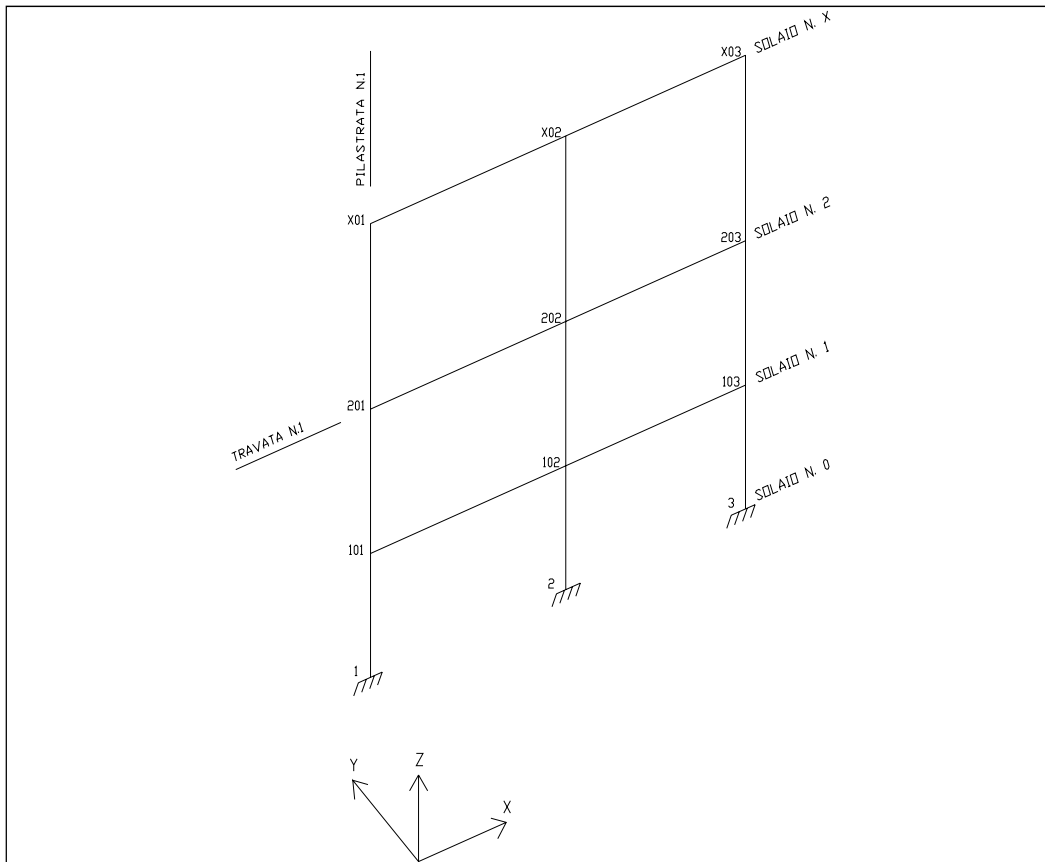
$$\pm 0,4 \cdot N_{sd} \cdot \frac{a_{max}}{g} = \pm 0,4 \cdot N_{sd} \cdot \frac{a_g \cdot S_T \cdot S_S}{g}$$

(profilo stratigrafico di tipo C).

6.9 VINCOLAMENTI INTERNI E/O ESTERNI

I vincoli esterni ed interni sono modellati facendo riferimento all'effettiva realtà strutturale oppure a condizioni limite entro cui lo schema strutturale può essere compreso in virtù delle consuete schematizzazioni della scienza e della tecnica delle costruzioni.

In particolare, per il modello di elevazione, considerando la struttura di fondazione dotata di rigidità molto maggiore rispetto alla struttura in elevazione, è stata ritenuta quest'ultima incastrata alla base.



Per quanto riguarda invece il modello di fondazione, ai nodi alla base della struttura sono stati impediti solamente le traslazioni nel piano orizzontale e le rotazioni attorno all'asse verticale, ed è stata assegnata una costante di Winkler pari a $2,0 \text{ kg/cm}^3$ (valore cautelativo che comunque influenza in modo trascurabile la soluzione).

Sono inoltre stati introdotti degli svincolamenti interni necessari a simulare alcune situazioni specifiche. In particolare:

- le travi afferenti perpendicolarmente nei setti sono state in parte svincolate, per tenere conto della non perfetta continuità strutturale che è in grado di fornire il setto fuori dal suo piano

La struttura da progettare è stata schematizzata con un telaio spaziale (i nodi conservano 6 gradi di libertà) con i solai infinitamente rigidi nel loro piano (a ciascuno verrà assegnato un numero identificativo progressivo) e relative masse concentrate nel nodo "Master di Solaio".

Tutti i nodi appartenenti a un impalcato rigido vengono identificati da un numero composto da tre cifre: la prima indica il numero identificativo del solaio rigido e le altre due il numero

progressivo identificativo; per esempio il nodo 7 appartenente al 2° solaio avrà il numero 207, se appartiene al 5° solaio avrà il numero 507 e così via. Per maggiore chiarezza, tutti i nodi appartenenti ai setti hanno le tre cifre del numero identificativo precedute dalla cifra 1: per esempio il nodo 13 del vano scala appartenente al 2° solaio avrà il numero 1213, se appartiene al 5° solaio avrà il numero 1513 e così via.

6.10 SCHEMI STATICI ADOTTATI

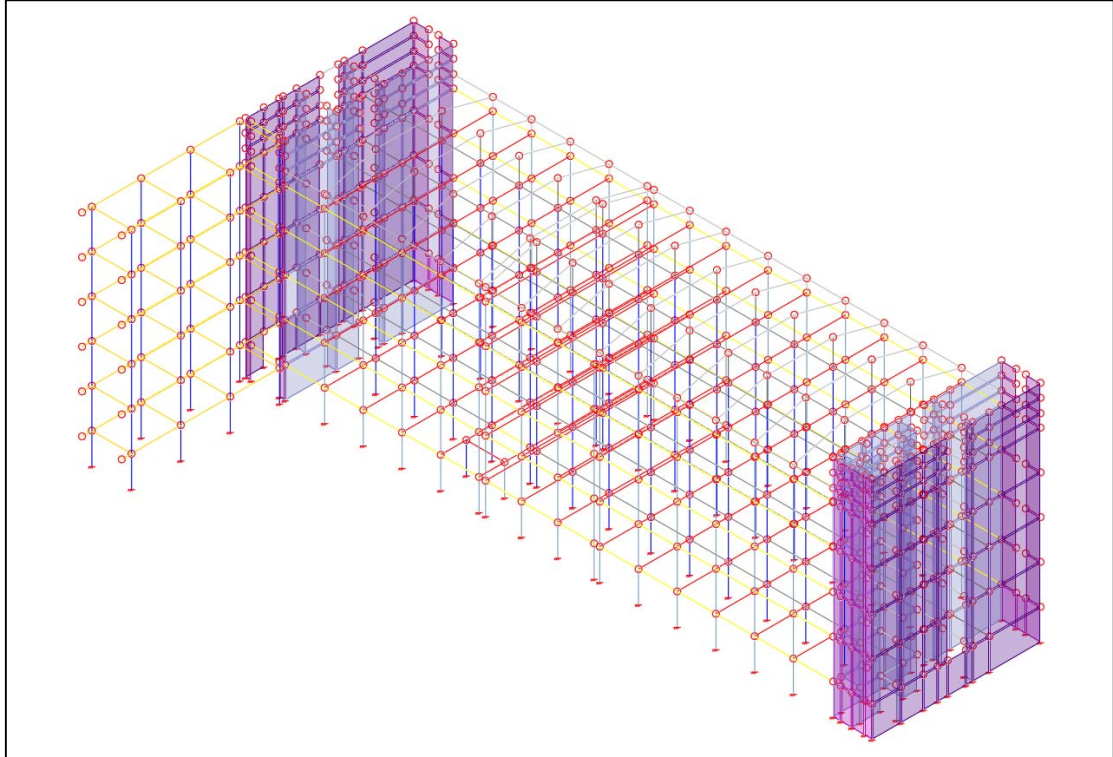
Sono stati utilizzati diversi modelli finalizzati all'indagine e alla verifica di determinati aspetti della struttura. Di seguito sono riassunti assieme alle relative caratteristiche:

- modello incastrato alla base con le tre parti della struttura separate dal giunto, utilizzato per le verifiche statiche e sismiche di travi, pilastri e setti (verifiche SLU, SLV, SLD, SLO) delle due parti dell'edificio principale (fattore di struttura $q=3,3$)
- modello incastrato alla base con le tre parti della struttura separate dal giunto, utilizzato per le verifiche statiche e sismiche di travi, pilastri e setti (verifiche SLU, SLV, SLD, SLO) del tunnel (fattore di struttura $q=3,6$)
- modello incastrato alla base con le tre parti della struttura separate dal giunto, utilizzato per le verifiche degli elementi strutturali in termini di resistenza delle due parti dell'edificio principale, come indicato dalle NTC 2008 al § 7.3.7.1 (verifiche SLD con $\eta = 2/3$)
- modello incastrato alla base con le tre parti della struttura separate dal giunto, utilizzato per le verifiche degli elementi strutturali in termini di resistenza del tunnel, come indicato dalle NTC 2008 al § 7.3.7.1 (verifiche SLD con $\eta = 2/3$)
- modello con le tre parti della struttura separate dal giunto e comprensivo delle travi rovesce di fondazione su suolo alla Winkler, utilizzato per il dimensionamento e la verifica della fondazione (verifiche SLU, SLV, SLD)
- altri modelli ad hoc per il dimensionamento e la verifica dei muri controterra e del tunnel fuori terra in c.a. (che collega con il corpo "B")

Al fine di rendere comprensibile in modo sintetico la modellazione effettuata si riportano graficamente i principali schemi del modello di calcolo.

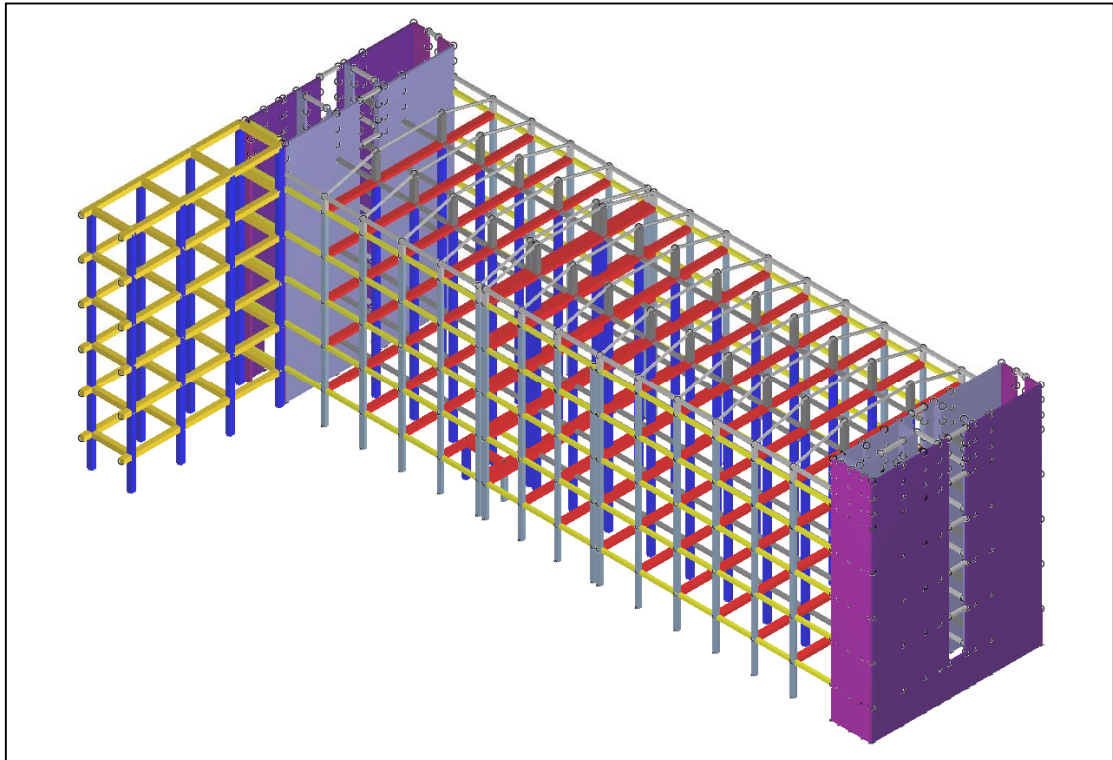
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MODELLO "ELEVAZIONE": SCHEMA "UNIFILARE" INTERO EDIFICIO

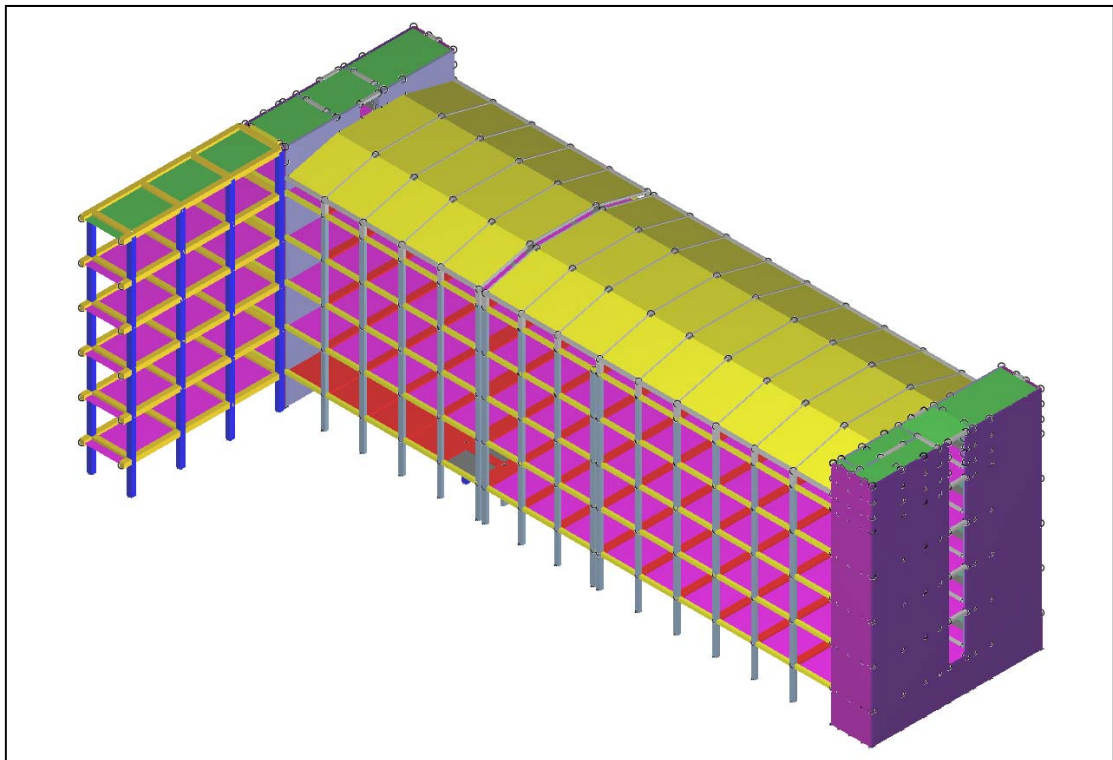


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MODELLO "ELEVAZIONE": SCHEMA "SOLIDO" INTERO EDIFICIO

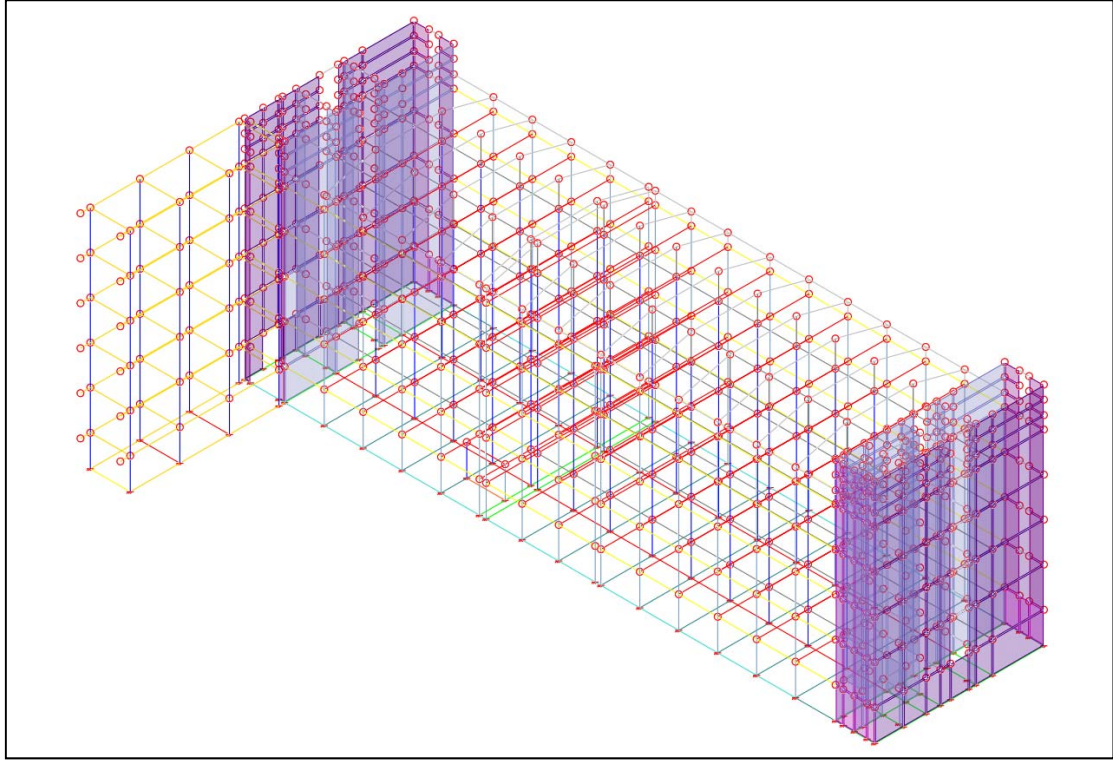


MODELLO "ELEVAZIONE": SCHEMA "SOLIDO" INTERO EDIFICIO CON IMPALCATI

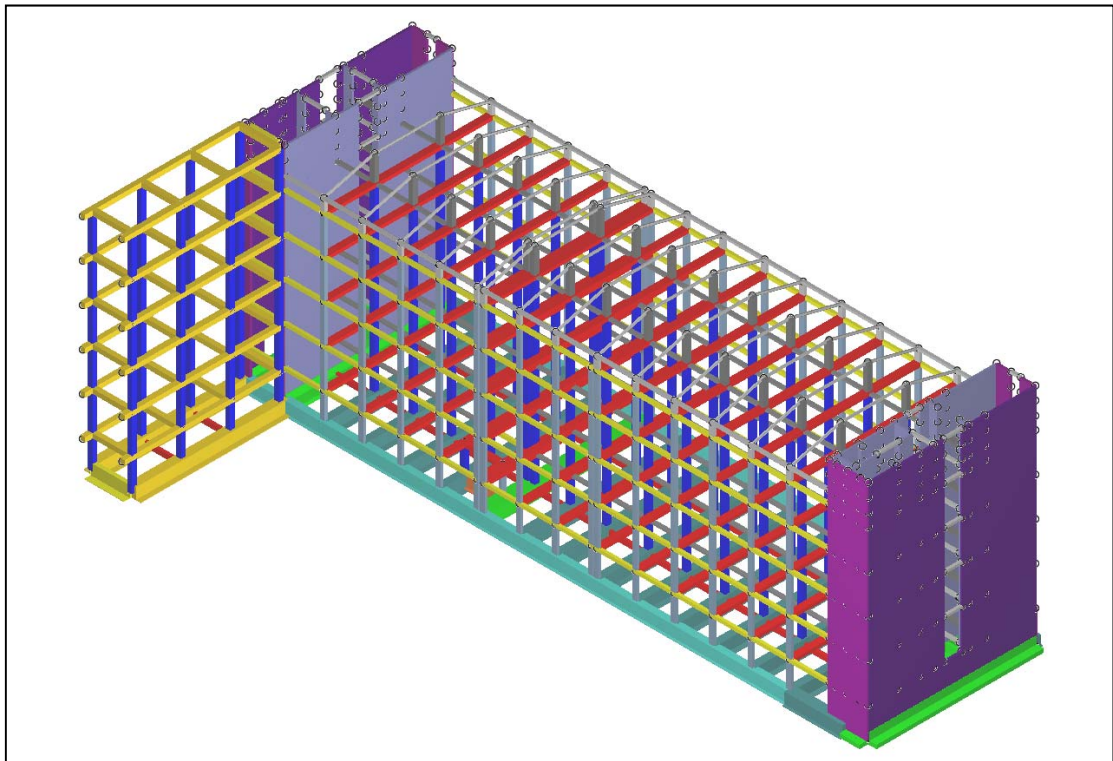


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MODELLO "FONDAZIONE": SCHEMA "UNIFILARE" INTERO EDIFICIO

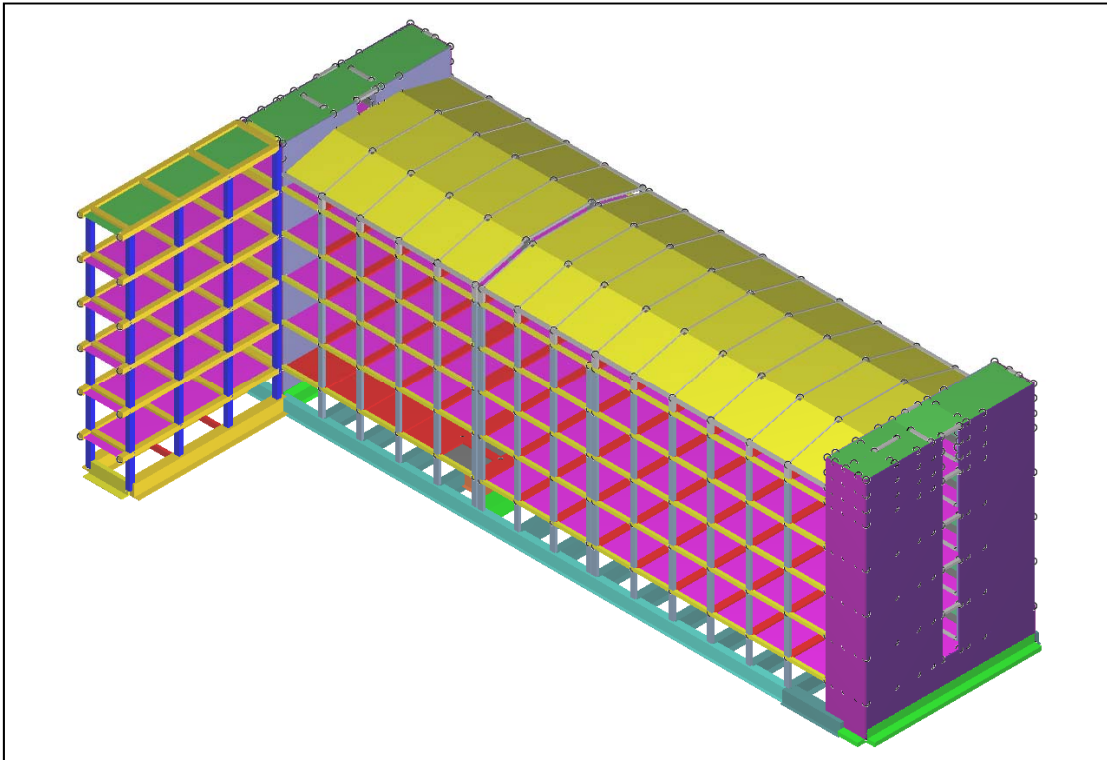


MODELLO "FONDAZIONE": SCHEMA "SOLIDO" INTERO EDIFICIO



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MODELLO "FONDAZIONE": SCHEMA "SOLIDO" INTERO EDIFICIO CON IMPALCATI



La fondazione è stata modellata attraverso apposite travi su suolo alla Winkler con sezione a T rovescia, di geometria analoga a quella reale.

La costante di Winkler è stata cautelativamente assunta pari a $2,0 \text{ kg/cm}^3$, consapevoli del fatto che il suo valore, entrando nel calcolo sotto una radice quarta, influenza in modo trascurabile la soluzione ottenuta.

Le travi semi-prefabbricate sono state modellate attraverso delle beam. Dato che nel modello unifilare il solaio è definito da asse ad asse, senza tener conto della striscia occupata in realtà dalla trave, il peso specifico delle travi di spina è stato diminuito ad hoc in modo da riottenere in totale il carico corretto, una volta sommato al peso del campo di solaio. Sono nel seguito illustrati i calcoli del peso specifico delle travi di spina:

- solaio $h=24$, trave spina
$$\gamma_{24,spina} = 2500 - \frac{375}{0,34} = 1400 \text{ kg/m}^3$$

I pilastri sono stati modellati con elementi beam, e i setti con elementi quadrangolari a 4 nodi.

Sono stati esclusi dalla modellazione, in termini di rigidezza e resistenza, i tamponamenti, le rampe scala e i pianerottoli, in quanto ritenuti non collaboranti: essi sono stati inseriti semplicemente come carichi agenti sulla struttura. Allo stesso modo i solai rivestono esclusivamente la funzione di ripartire i carichi superficiali, senza dare alcun contributo di rigidezza e resistenza.

I nodi appartenenti alla copertura metallica sono stati considerati come nodi liberi non appartenenti a nessun impalcato rigido, in quanto partecipano al comportamento sismico della struttura in c.a. solo con le proprie masse ma senza contribuire alla rigidezza o alla resistenza.

7 PRINCIPALI COMBINAZIONI DELLE AZIONI IN RELAZIONE AGLI SLU / SLE

7.1 COEFFICIENTI PARZIALI PER LE AZIONI

Condizione		Coefficiente γ_F
1	P. Proprio	1,3
2	-	-
3	Sol. gettato	1,3
4	Perm. portati 2/3	1,3
5	Perm. portati 1/3	1,5
6	Tampon.	1,5
7	Variab. (cat. C)	1,5
8	Variab. (cat. Neve)	1,5

7.2 COEFFICIENTI DI COMBINAZIONE

Condizione		Coefficiente Ψ_{0j}	Coefficiente Ψ_{1j}	Coefficiente Ψ_{2j}
1	P. Proprio	1	1	1
2	-	-	-	-
3	Sol. gettato	1	1	1
4	Perm. portati 2/3	1	1	1
5	Perm. portati 1/3	1	1	1
6	Tampon.	1	1	1
7	Variab. (cat. C)	0,7	0,7	0,6
8	Variab. (cat. Neve)	0,5	0,2	0

7.3 COMBINAZIONI DI CARICO

7.3.1 Combinazioni agli Stati Limite Ultimi (SLU)

Combinazione di carico numero

1	SLU
2	SLU - Var. C
3	SLU - Var. Neve

	P	S	P	P	T	V	N
	.	o	e	e	a	a	e
	p	l	r	r	m	r	v
	r	.	m	m	p	.	e
	o	g	.	.	o		
	p	e	p	p	n	C	
Comb.\Cond	r	t	o	o	.		
	i	t	r	r			
	o	a	t	t			
		t	.	.			
		o					
			2	1			
			/	/			
			3	3			

1	1.3	1.3	1.3	1.5	1.5	1.5	1.5
2	1.3	1.3	1.3	1.5	1.5	1.5	0.75
3	1.3	1.3	1.3	1.5	1.5	1.05	1.5

7.3.2 Combinazioni agli Stati Limite di Salvaguardia della Vita (SLV)

Combinazione di carico numero

4	Sisma 0+ / 90+
5	Sisma 0+ / 90-
6	Sisma 0+ / 270+
7	Sisma 0+ / 270-
8	Sisma 0- / 90+
9	Sisma 0- / 90-
10	Sisma 0- / 270+
11	Sisma 0- / 270-
12	Sisma 90+ / 0+
13	Sisma 90+ / 0-
14	Sisma 90+ / 180+
15	Sisma 90+ / 180-
16	Sisma 90- / 0+
17	Sisma 90- / 0-
18	Sisma 90- / 180+
19	Sisma 90- / 180-
20	Sisma 180+ / 90+
21	Sisma 180+ / 90-
22	Sisma 180+ / 270+
23	Sisma 180+ / 270-
24	Sisma 180- / 90+
25	Sisma 180- / 90-
26	Sisma 180- / 270+
27	Sisma 180- / 270-
28	Sisma 270+ / 0+
29	Sisma 270+ / 0-
30	Sisma 270+ / 180+
31	Sisma 270+ / 180-
32	Sisma 270- / 0+
33	Sisma 270- / 0-
34	Sisma 270- / 180+
35	Sisma 270- / 180-

Comb.\Cond	P	S	P	P	T	V	S	S	S	S	S	S	S	S
	.	o	e	e	a	a	i	i	i	i	i	i	i	i
	p	l	r	r	m	r	s	s	s	s	s	s	s	s
	r	.	m	m	p	.	a	a	a	a	a	a	a	a
	o	g	.	.	o	C								
	p	e	p	p	n									
	r	t	o	o	.		0	0	9	9	1	1	2	2
	i	t	r	r			S	S	0	0	8	8	7	7
	o	a	t	t			L	L	S	S	0	0	0	0
	t	.	.	.			V	V	L	L	S	S	S	S
o								V	V	L	L	L	L	
			2	1						V	V	V	V	
			/	/										

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3 3

4	1	1	1	1	1	0.6	1		0.3					
5	1	1	1	1	1	0.6	1			0.3				
6	1	1	1	1	1	0.6	1						0.3	
7	1	1	1	1	1	0.6	1							0.3
8	1	1	1	1	1	0.6		1	0.3					
9	1	1	1	1	1	0.6		1		0.3				
10	1	1	1	1	1	0.6		1					0.3	
11	1	1	1	1	1	0.6		1						0.3
12	1	1	1	1	1	0.6	0.3		1					
13	1	1	1	1	1	0.6		0.3	1					
14	1	1	1	1	1	0.6			1		0.3			
15	1	1	1	1	1	0.6			1				0.3	
16	1	1	1	1	1	0.6	0.3			1				
17	1	1	1	1	1	0.6		0.3		1				
18	1	1	1	1	1	0.6				1	0.3			
19	1	1	1	1	1	0.6				1			0.3	
20	1	1	1	1	1	0.6			0.3		1			
21	1	1	1	1	1	0.6				0.3	1			
22	1	1	1	1	1	0.6					1			0.3
23	1	1	1	1	1	0.6					1			0.3
24	1	1	1	1	1	0.6			0.3				1	
25	1	1	1	1	1	0.6				0.3			1	
26	1	1	1	1	1	0.6							1	0.3
27	1	1	1	1	1	0.6							1	0.3
28	1	1	1	1	1	0.6	0.3							1
29	1	1	1	1	1	0.6		0.3						1
30	1	1	1	1	1	0.6					0.3			1
31	1	1	1	1	1	0.6						0.3		1
32	1	1	1	1	1	0.6	0.3							1
33	1	1	1	1	1	0.6		0.3						1
34	1	1	1	1	1	0.6					0.3			1
35	1	1	1	1	1	0.6						0.3		1

7.3.3 Combinazioni Rare Stati Limite di Esercizio (SLE)

Combinazione di carico numero							
36	RARE						
37	RARE - Var. C						
38	RARE - Var. Neve						
Comb.\Cond	P	S	P	P	T	V	N
	.	o	e	e	a	a	e
	p	l	r	r	m	r	v
	o	.	m	.	p	.	e
	p	g	.	p	o	C	
	r	e	p	p	.		
	i	t	o	r			
	o	a	t	t			
		t	.	.			
		o					
			2	1			
			/	/			
			3	3			
36	1	1	1	1	1	1	1
37	1	1	1	1	1	1	0.5
38	1	1	1	1	1	0.7	1

7.3.4 Combinazioni Frequenti Stati Limite di Esercizio (SLE)

Combinazione di carico numero							
39	FREQ - Var. C						
40	FREQ - Var. Neve						
Comb.\Cond	P	S	P	P	T	V	N
	.	o	e	e	a	a	e
	p	l	r	r	m	r	v
	o	.	m	m	p	.	e
	p	g	.	.	o	C	
	r	e	p	p	.		
	i	t	o	r			
	o	a	t	t			
		t	.	.			
		o					
			2	1			
			/	/			
			3	3			
39	1	1	1	1	1	0.7	
40	1	1	1	1	1	0.6	0.2

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7.3.5 Combinazioni Quasi Permanenti Stati Limite di Esercizio (SLE)

Combinazione di carico numero						
41						QP
	P	S	P	P	T	V
	.	o	e	e	a	a
	p	l	r	r	m	r
	r	.	m	m	p	.
	o	g	.	.	o	
	p	e	p	p	n	C
Comb.\Cond	r	t	o	o	.	
	i	t	r	r		
	o	a	t	t		
		t	.	.		
		o				
			2	1		
			/	/		
			3	3		
41	1	1	1	1	1	0.6

7.3.6 Combinazioni agli Stati Limite di Danno (SLD)

Combinazione di carico numero

42	Sisma 0+ / 90+
43	Sisma 0+ / 90-
44	Sisma 0+ / 270+
45	Sisma 0+ / 270-
46	Sisma 0- / 90+
47	Sisma 0- / 90-
48	Sisma 0- / 270+
49	Sisma 0- / 270-
50	Sisma 90+ / 0+
51	Sisma 90+ / 0-
52	Sisma 90+ / 180+
53	Sisma 90+ / 180-
54	Sisma 90- / 0+
55	Sisma 90- / 0-
56	Sisma 90- / 180+
57	Sisma 90- / 180-
58	Sisma 180+ / 90+
59	Sisma 180+ / 90-
60	Sisma 180+ / 270+
61	Sisma 180+ / 270-
62	Sisma 180- / 90+
63	Sisma 180- / 90-
64	Sisma 180- / 270+
65	Sisma 180- / 270-
66	Sisma 270+ / 0+
67	Sisma 270+ / 0-
68	Sisma 270+ / 180+
69	Sisma 270+ / 180-
70	Sisma 270- / 0+
71	Sisma 270- / 0-
72	Sisma 270- / 180+
73	Sisma 270- / 180-

Comb.\Cond	P	S	P	P	T	V	S	S	S	S	S	S	S	S
	.	o	e	e	a	a	i	i	i	i	i	i	i	i
	p	l	r	r	m	r	s	s	s	s	s	s	s	s
	o	g	.	.	o	.	a	a	a	a	a	a	a	a
	p	e	p	p	n	C								
	r	t	o	o	.		0	0	9	9	1	1	2	2
	i	t	r	r			S	S	0	0	8	8	7	7
	o	a	t	t			L	L	S	S	0	0	0	0
	t	.	.	.			D	D	L	L	S	S	S	S
	o								D	D	L	L	L	L
			2	1						D	D	D	D	
			/	/										

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42	1	1	1	1	1	0.6	1		0.3					
43	1	1	1	1	1	0.6	1			0.3				
44	1	1	1	1	1	0.6	1						0.3	
45	1	1	1	1	1	0.6	1							0.3
46	1	1	1	1	1	0.6		1	0.3					
47	1	1	1	1	1	0.6		1		0.3				
48	1	1	1	1	1	0.6		1					0.3	
49	1	1	1	1	1	0.6		1						0.3
50	1	1	1	1	1	0.6	0.3		1					
51	1	1	1	1	1	0.6		0.3	1					
52	1	1	1	1	1	0.6			1		0.3			
53	1	1	1	1	1	0.6			1				0.3	
54	1	1	1	1	1	0.6	0.3			1				
55	1	1	1	1	1	0.6		0.3		1				
56	1	1	1	1	1	0.6				1	0.3			
57	1	1	1	1	1	0.6				1			0.3	
58	1	1	1	1	1	0.6			0.3		1			
59	1	1	1	1	1	0.6				0.3	1			
60	1	1	1	1	1	0.6					1		0.3	
61	1	1	1	1	1	0.6					1			0.3
62	1	1	1	1	1	0.6			0.3			1		
63	1	1	1	1	1	0.6				0.3		1		
64	1	1	1	1	1	0.6						1	0.3	
65	1	1	1	1	1	0.6						1		0.3
66	1	1	1	1	1	0.6	0.3						1	
67	1	1	1	1	1	0.6		0.3					1	
68	1	1	1	1	1	0.6					0.3		1	
69	1	1	1	1	1	0.6						0.3	1	
70	1	1	1	1	1	0.6	0.3							1
71	1	1	1	1	1	0.6		0.3						1
72	1	1	1	1	1	0.6					0.3			1
73	1	1	1	1	1	0.6						0.3		1

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

7.3.7 Combinazioni agli Stati Limite di Operatività (SLO)

Combinazione di carico numero

74	Sisma 0+ / 90+
75	Sisma 0+ / 90-
76	Sisma 0+ / 270+
77	Sisma 0+ / 270-
78	Sisma 0- / 90+
79	Sisma 0- / 90-
80	Sisma 0- / 270+
81	Sisma 0- / 270-
82	Sisma 90+ / 0+
83	Sisma 90+ / 0-
84	Sisma 90+ / 180+
85	Sisma 90+ / 180-
86	Sisma 90- / 0+
87	Sisma 90- / 0-
88	Sisma 90- / 180+
89	Sisma 90- / 180-
90	Sisma 180+ / 90+
91	Sisma 180+ / 90-
92	Sisma 180+ / 270+
93	Sisma 180+ / 270-
94	Sisma 180- / 90+
95	Sisma 180- / 90-
96	Sisma 180- / 270+
97	Sisma 180- / 270-
98	Sisma 270+ / 0+
99	Sisma 270+ / 0-
100	Sisma 270+ / 180+
101	Sisma 270+ / 180-
102	Sisma 270- / 0+
103	Sisma 270- / 0-
104	Sisma 270- / 180+
105	Sisma 270- / 180-

Comb.\Cond	P	S	P	P	T	V	S	S	S	S	S	S	S
	.	o	e	e	a	a	i	i	i	i	i	i	i
	p	l	r	r	m	r	s	s	s	s	s	s	s
	o	g	.	.	o	.	a	a	a	a	a	a	a
	p	e	p	p	n	C							
	r	t	o	o	.		0	0	9	9	1	1	2
	i	t	r	r			S	S	0	0	8	8	7
	o	a	t	t			L	L	S	S	0	0	0
		t	.	.			O	O	L	L	S	S	S
		o							O	O	L	L	L
		2	1							O	O	O	
		/	/										
		3	3										

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74	1	1	1	1	1	0.6	1		0.3					
75	1	1	1	1	1	0.6	1			0.3				
76	1	1	1	1	1	0.6	1						0.3	
77	1	1	1	1	1	0.6	1							0.3
78	1	1	1	1	1	0.6		1	0.3					
79	1	1	1	1	1	0.6		1		0.3				
80	1	1	1	1	1	0.6		1					0.3	
81	1	1	1	1	1	0.6		1						0.3
82	1	1	1	1	1	0.6	0.3		1					
83	1	1	1	1	1	0.6		0.3	1					
84	1	1	1	1	1	0.6			1		0.3			
85	1	1	1	1	1	0.6			1			0.3		
86	1	1	1	1	1	0.6	0.3			1				
87	1	1	1	1	1	0.6		0.3		1				
88	1	1	1	1	1	0.6				1	0.3			
89	1	1	1	1	1	0.6				1		0.3		
90	1	1	1	1	1	0.6			0.3		1			
91	1	1	1	1	1	0.6				0.3	1			
92	1	1	1	1	1	0.6					1		0.3	
93	1	1	1	1	1	0.6					1			0.3
94	1	1	1	1	1	0.6			0.3			1		
95	1	1	1	1	1	0.6				0.3		1		
96	1	1	1	1	1	0.6						1	0.3	
97	1	1	1	1	1	0.6						1		0.3
98	1	1	1	1	1	0.6	0.3						1	
99	1	1	1	1	1	0.6		0.3					1	
100	1	1	1	1	1	0.6					0.3		1	
101	1	1	1	1	1	0.6						0.3	1	
102	1	1	1	1	1	0.6	0.3							1
103	1	1	1	1	1	0.6		0.3						1
104	1	1	1	1	1	0.6					0.3			1
105	1	1	1	1	1	0.6						0.3		1

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8 METODO DI ANALISI SEGUITO

La metodologia risolutiva più idonea al caso in oggetto è stata individuata in un'analisi lineare, ovvero non tenendo conto delle non linearità di tipo geometrico: questa scelta, dettata dal fatto di avere in oggetto una struttura mista telaio-pareti in c.a. equivalente a pareti, è stata validata a posteriori dall'analisi del fattore θ previsto al § 7.3.1, che è risultato essere sempre inferiore a 0,1, come illustrato qui sotto:

Interpiano Solai	Comb.	Altezza [m]	P [kg]	Direzione x				Direzione y				Direzione $U=\sqrt{d_{r,x}^2+d_{r,y}^2}$					
				V [kg]	P d _r /h [kg]	d _r [cm]	θ	V [kg]	P d _r /h [kg]	d _r [cm]	θ	V [kg]	P d _r /h [kg]	d _r [cm]	θ		
3 2	1	4.05	1844193.0	506798.5	32547.7	7.15	0.0642										
3 2	5	4.50	20247438.0					898484.9	29624.8	0.66	0.0330						
3 2	1	4.05	1844193.0											506798.5	16545.3	3.63	0.0326

Si è svolta un'analisi dinamica condotta per via modale utilizzando gli spettri di risposta previsti dalla normativa (analisi spettrale con i vettori di Ritz), al fine di meglio descrivere l'azione sismica agente.

Si è quindi optato per un'analisi **lineare dinamica**, considerando 20 modi di vibrare per ogni direzione di ingresso del sisma, ottenendo così sempre una massa partecipante superiore all'85% (oscillante tra il 86% e il 100%) e non trascurando nessun modo con almeno il 5% di massa partecipante.

Le masse partecipanti relative ai vari modi, per direzione di ingresso del sisma e stato limite considerato sono illustrate qui sotto:

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- Risultati angolo di ingresso del sisma: 0.00 [°] + SLV

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
6	0.55	5.22081e+002	100	2.7e+005	30	30	0.1678
1	1.08	4.22460e+002	81	1.8e+005	20	49	0.0852
8	0.13	-3.92923e+002	75	1.5e+005	17	66	0.2166
7	0.28	-2.60648e+002	50	6.8e+004	7	74	0.2054
2	1.01	-2.40378e+002	46	5.8e+004	6	80	0.0908
3	0.86	2.38756e+002	46	5.7e+004	6	86	0.1067
4	0.71	-1.48789e+002	28	2.2e+004	2	89	0.1294
5	0.67	1.17758e+002	23	1.4e+004	2	90	0.1381

- Risultati angolo di ingresso del sisma: 0.00 [°] - SLV

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
14	0.53	4.93454e+002	100	2.4e+005	27	27	0.1720
9	1.03	4.26405e+002	86	1.8e+005	20	47	0.0892
16	0.12	-3.87392e+002	79	1.5e+005	16	63	0.2182
11	0.89	2.84815e+002	58	8.1e+004	9	72	0.1036
15	0.26	-2.79153e+002	57	7.8e+004	9	80	0.2054
10	0.98	-2.48728e+002	50	6.2e+004	7	87	0.0936
12	0.73	-1.42470e+002	29	2.0e+004	2	89	0.1257
13	0.64	8.55281e+001	17	7.3e+003	1	90	0.1432

- Risultati angolo di ingresso del sisma: 90.00 [°] + SLV

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
24	0.15	-4.99750e+002	100	2.5e+005	27	27	0.2054
20	0.83	3.75179e+002	75	1.4e+005	15	43	0.1111
23	0.23	-3.51667e+002	70	1.2e+005	14	56	0.2054
21	0.74	-3.12364e+002	63	9.8e+004	11	67	0.1241
22	0.53	2.74734e+002	55	7.5e+004	8	75	0.1727
19	0.89	-2.55183e+002	51	6.5e+004	7	82	0.1037
17	1.07	1.73240e+002	35	3.0e+004	3	86	0.0862
18	0.94	-2.03971e+001	4	4.2e+002	0	86	0.0978

- Risultati angolo di ingresso del sisma: 90.00 [°] - SLV

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
32	0.15	-5.01819e+002	100	2.5e+005	28	28	0.2054
26	0.92	-4.36424e+002	87	1.9e+005	21	48	0.0999
31	0.24	-3.38795e+002	68	1.1e+005	13	61	0.2054
29	0.67	2.98206e+002	59	8.9e+004	10	71	0.1366
27	0.89	2.56571e+002	51	6.6e+004	7	78	0.1034
30	0.55	-2.42639e+002	48	5.9e+004	6	84	0.1681
25	1.04	1.18616e+002	24	1.4e+004	2	86	0.0881
28	0.76	-3.32866e+001	7	1.1e+003	0	86	0.1217

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- Risultati angolo di ingresso del sisma: 180.00 [°] + SLV

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
38	0.53	4.93454e+002	100	2.4e+005	27	27	0.1720
33	1.03	4.26405e+002	86	1.8e+005	20	47	0.0892
40	0.12	-3.87392e+002	79	1.5e+005	16	63	0.2182
35	0.89	2.84815e+002	58	8.1e+004	9	72	0.1036
39	0.26	-2.79153e+002	57	7.8e+004	9	80	0.2054
34	0.98	-2.48728e+002	50	6.2e+004	7	87	0.0936
36	0.73	-1.42470e+002	29	2.0e+004	2	89	0.1257
37	0.64	8.55281e+001	17	7.3e+003	1	90	0.1432

- Risultati angolo di ingresso del sisma: 180.00 [°] - SLV

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
46	0.55	5.22081e+002	100	2.7e+005	30	30	0.1678
41	1.08	4.22460e+002	81	1.8e+005	20	49	0.0852
48	0.13	-3.92923e+002	75	1.5e+005	17	66	0.2166
47	0.28	-2.60648e+002	50	6.8e+004	7	74	0.2054
42	1.01	-2.40378e+002	46	5.8e+004	6	80	0.0908
43	0.86	2.38756e+002	46	5.7e+004	6	86	0.1067
44	0.71	-1.48789e+002	28	2.2e+004	2	89	0.1294
45	0.67	1.17758e+002	23	1.4e+004	2	90	0.1381

- Risultati angolo di ingresso del sisma: 270.00 [°] + SLV

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
56	0.15	-5.01819e+002	100	2.5e+005	28	28	0.2054
50	0.92	-4.36424e+002	87	1.9e+005	21	48	0.0999
55	0.24	-3.38795e+002	68	1.1e+005	13	61	0.2054
53	0.67	2.98205e+002	59	8.9e+004	10	71	0.1366
51	0.89	2.56571e+002	51	6.6e+004	7	78	0.1034
54	0.55	-2.42639e+002	48	5.9e+004	6	84	0.1681
49	1.04	1.18616e+002	24	1.4e+004	2	86	0.0881
52	0.76	-3.32871e+001	7	1.1e+003	0	86	0.1217

- Risultati angolo di ingresso del sisma: 270.00 [°] - SLV

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
64	0.15	-4.99750e+002	100	2.5e+005	27	27	0.2054
60	0.83	3.75179e+002	75	1.4e+005	15	43	0.1111
63	0.23	-3.51667e+002	70	1.2e+005	14	56	0.2054
61	0.74	-3.12364e+002	63	9.8e+004	11	67	0.1241
62	0.53	2.74734e+002	55	7.5e+004	8	75	0.1727
59	0.89	-2.55183e+002	51	6.5e+004	7	82	0.1037
57	1.07	1.73240e+002	35	3.0e+004	3	86	0.0862
58	0.94	-2.03963e+001	4	4.2e+002	0	86	0.0978

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Risultati angolo di ingresso del sisma: 0.00 [°] + SLD

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
70	0.55	5.22081e+002	100	2.7e+005	30	30	0.2339
65	1.08	4.22460e+002	81	1.8e+005	20	49	0.1188
72	0.13	-3.92923e+002	75	1.5e+005	17	66	0.2798
71	0.28	-2.60648e+002	50	6.8e+004	7	74	0.3008
66	1.01	-2.40378e+002	46	5.8e+004	6	80	0.1265
67	0.86	2.38756e+002	46	5.7e+004	6	86	0.1488
68	0.71	-1.48789e+002	28	2.2e+004	2	89	0.1803
69	0.67	1.17758e+002	23	1.4e+004	2	90	0.1924

- Risultati angolo di ingresso del sisma: 0.00 [°] - SLD

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
78	0.53	4.93454e+002	100	2.4e+005	27	27	0.2397
73	1.03	4.26405e+002	86	1.8e+005	20	47	0.1244
80	0.12	-3.87392e+002	79	1.5e+005	16	63	0.2754
75	0.89	2.84815e+002	58	8.1e+004	9	72	0.1444
79	0.26	-2.79153e+002	57	7.8e+004	9	80	0.3008
74	0.98	-2.48728e+002	50	6.2e+004	7	87	0.1305
76	0.73	-1.42470e+002	29	2.0e+004	2	89	0.1751
77	0.64	8.55281e+001	17	7.3e+003	1	90	0.1995

- Risultati angolo di ingresso del sisma: 90.00 [°] + SLD

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
88	0.15	-4.99750e+002	100	2.5e+005	27	27	0.3008
84	0.83	3.75179e+002	75	1.4e+005	15	43	0.1549
87	0.23	-3.51667e+002	70	1.2e+005	14	56	0.3008
85	0.74	-3.12364e+002	63	9.8e+004	11	67	0.1730
86	0.53	2.74734e+002	55	7.5e+004	8	75	0.2407
83	0.89	-2.55183e+002	51	6.5e+004	7	82	0.1445
81	1.07	1.73240e+002	35	3.0e+004	3	86	0.1202
82	0.94	-2.03971e+001	4	4.2e+002	0	86	0.1363

- Risultati angolo di ingresso del sisma: 90.00 [°] - SLD

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
96	0.15	-5.01819e+002	100	2.5e+005	28	28	0.3008
90	0.92	-4.36424e+002	87	1.9e+005	21	48	0.1393
95	0.24	-3.38795e+002	68	1.1e+005	13	61	0.3008
93	0.67	2.98206e+002	59	8.9e+004	10	71	0.1904
91	0.89	2.56571e+002	51	6.6e+004	7	78	0.1441
94	0.55	-2.42639e+002	48	5.9e+004	6	84	0.2344
89	1.04	1.18616e+002	24	1.4e+004	2	86	0.1227
92	0.76	-3.32866e+001	7	1.1e+003	0	86	0.1697

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- Risultati angolo di ingresso del sisma: 180.00 [°] + SLD

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
102	0.53	4.93454e+002	100	2.4e+005	27	27	0.2397
97	1.03	4.26405e+002	86	1.8e+005	20	47	0.1244
104	0.12	-3.87392e+002	79	1.5e+005	16	63	0.2754
99	0.89	2.84815e+002	58	8.1e+004	9	72	0.1444
103	0.26	-2.79153e+002	57	7.8e+004	9	80	0.3008
98	0.98	-2.48728e+002	50	6.2e+004	7	87	0.1305
100	0.73	-1.42470e+002	29	2.0e+004	2	89	0.1751
101	0.64	8.55281e+001	17	7.3e+003	1	90	0.1995

- Risultati angolo di ingresso del sisma: 180.00 [°] - SLD

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
110	0.55	5.22081e+002	100	2.7e+005	30	30	0.2339
105	1.08	4.22460e+002	81	1.8e+005	20	49	0.1188
112	0.13	-3.92923e+002	75	1.5e+005	17	66	0.2798
111	0.28	-2.60648e+002	50	6.8e+004	7	74	0.3008
106	1.01	-2.40378e+002	46	5.8e+004	6	80	0.1265
107	0.86	2.38756e+002	46	5.7e+004	6	86	0.1488
108	0.71	-1.48789e+002	28	2.2e+004	2	89	0.1803
109	0.67	1.17758e+002	23	1.4e+004	2	90	0.1924

- Risultati angolo di ingresso del sisma: 270.00 [°] + SLD

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
120	0.15	-5.01819e+002	100	2.5e+005	28	28	0.3008
114	0.92	-4.36424e+002	87	1.9e+005	21	48	0.1393
119	0.24	-3.38795e+002	68	1.1e+005	13	61	0.3008
117	0.67	2.98205e+002	59	8.9e+004	10	71	0.1904
115	0.89	2.56571e+002	51	6.6e+004	7	78	0.1441
118	0.55	-2.42639e+002	48	5.9e+004	6	84	0.2344
113	1.04	1.18616e+002	24	1.4e+004	2	86	0.1227
116	0.76	-3.32871e+001	7	1.1e+003	0	86	0.1697

- Risultati angolo di ingresso del sisma: 270.00 [°] - SLD

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
128	0.15	-4.99750e+002	100	2.5e+005	27	27	0.3008
124	0.83	3.75179e+002	75	1.4e+005	15	43	0.1549
127	0.23	-3.51667e+002	70	1.2e+005	14	56	0.3008
125	0.74	-3.12364e+002	63	9.8e+004	11	67	0.1730
126	0.53	2.74734e+002	55	7.5e+004	8	75	0.2407
123	0.89	-2.55183e+002	51	6.5e+004	7	82	0.1445
121	1.07	1.73240e+002	35	3.0e+004	3	86	0.1202
122	0.94	-2.03963e+001	4	4.2e+002	0	86	0.1363

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- Risultati angolo di ingresso del sisma: 0.00 [°] + SLO

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
134	0.55	5.22081e+002	100	2.7e+005	30	30	0.1840
129	1.08	4.22460e+002	81	1.8e+005	20	49	0.0934
136	0.13	-3.92923e+002	75	1.5e+005	17	66	0.2245
135	0.28	-2.60648e+002	50	6.8e+004	7	74	0.2397
130	1.01	-2.40378e+002	46	5.8e+004	6	80	0.0995
131	0.86	2.38756e+002	46	5.7e+004	6	86	0.1170
132	0.71	-1.48789e+002	28	2.2e+004	2	89	0.1418
133	0.67	1.17758e+002	23	1.4e+004	2	90	0.1514

- Risultati angolo di ingresso del sisma: 0.00 [°] - SLO

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
142	0.53	4.93454e+002	100	2.4e+005	27	27	0.1886
137	1.03	4.26405e+002	86	1.8e+005	20	47	0.0978
144	0.12	-3.87392e+002	79	1.5e+005	16	63	0.2209
139	0.89	2.84815e+002	58	8.1e+004	9	72	0.1136
143	0.26	-2.79153e+002	57	7.8e+004	9	80	0.2397
138	0.98	-2.48728e+002	50	6.2e+004	7	87	0.1026
140	0.73	-1.42470e+002	29	2.0e+004	2	89	0.1378
141	0.64	8.55281e+001	17	7.3e+003	1	90	0.1570

- Risultati angolo di ingresso del sisma: 90.00 [°] - SLO

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
160	0.15	-5.01819e+002	100	2.5e+005	28	28	0.2397
154	0.92	-4.36424e+002	87	1.9e+005	21	48	0.1096
159	0.24	-3.38795e+002	68	1.1e+005	13	61	0.2397
157	0.67	2.98206e+002	59	8.9e+004	10	71	0.1498
155	0.89	2.56571e+002	51	6.6e+004	7	78	0.1134
158	0.55	-2.42639e+002	48	5.9e+004	6	84	0.1844
153	1.04	1.18616e+002	24	1.4e+004	2	86	0.0966
156	0.76	-3.32866e+001	7	1.1e+003	0	86	0.1335

- Risultati angolo di ingresso del sisma: 180.00 [°] + SLO

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
166	0.53	4.93454e+002	100	2.4e+005	27	27	0.1886
161	1.03	4.26405e+002	86	1.8e+005	20	47	0.0978
168	0.12	-3.87392e+002	79	1.5e+005	16	63	0.2209
163	0.89	2.84815e+002	58	8.1e+004	9	72	0.1136
167	0.26	-2.79153e+002	57	7.8e+004	9	80	0.2397
162	0.98	-2.48728e+002	50	6.2e+004	7	87	0.1026
164	0.73	-1.42470e+002	29	2.0e+004	2	89	0.1378
165	0.64	8.55281e+001	17	7.3e+003	1	90	0.1570

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- Risultati angolo di ingresso del sisma: 180.00 [°] - SLO

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
174	0.55	5.22081e+002	100	2.7e+005	30	30	0.1840
169	1.08	4.22460e+002	81	1.8e+005	20	49	0.0934
176	0.13	-3.92923e+002	75	1.5e+005	17	66	0.2245
175	0.28	-2.60648e+002	50	6.8e+004	7	74	0.2397
170	1.01	-2.40378e+002	46	5.8e+004	6	80	0.0995
171	0.86	2.38756e+002	46	5.7e+004	6	86	0.1170
172	0.71	-1.48789e+002	28	2.2e+004	2	89	0.1418
173	0.67	1.17758e+002	23	1.4e+004	2	90	0.1514

- Risultati angolo di ingresso del sisma: 270.00 [°] + SLO

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
184	0.15	-5.01819e+002	100	2.5e+005	28	28	0.2397
178	0.92	-4.36424e+002	87	1.9e+005	21	48	0.1096
183	0.24	-3.38795e+002	68	1.1e+005	13	61	0.2397
181	0.67	2.98205e+002	59	8.9e+004	10	71	0.1498
179	0.89	2.56571e+002	51	6.6e+004	7	78	0.1134
182	0.55	-2.42639e+002	48	5.9e+004	6	84	0.1844
177	1.04	1.18616e+002	24	1.4e+004	2	86	0.0966
180	0.76	-3.32871e+001	7	1.1e+003	0	86	0.1335

- Risultati angolo di ingresso del sisma: 270.00 [°] - SLO

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
192	0.15	-4.99750e+002	100	2.5e+005	27	27	0.2397
188	0.83	3.75179e+002	75	1.4e+005	15	43	0.1218
191	0.23	-3.51667e+002	70	1.2e+005	14	56	0.2397
189	0.74	-3.12364e+002	63	9.8e+004	11	67	0.1361
190	0.53	2.74734e+002	55	7.5e+004	8	75	0.1894
187	0.89	-2.55183e+002	51	6.5e+004	7	82	0.1136
185	1.07	1.73240e+002	35	3.0e+004	3	86	0.0946
186	0.94	-2.03963e+001	4	4.2e+002	0	86	0.1072

- Risultati angolo di ingresso del sisma: 0.00 [°] + SLD*(spettro SLD con $\eta=2/3$ per verifiche elementi strutturali in termini di resistenza)

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
7	0.55	5.23277e+002	100	2.7e+005	30	30	0.1558
1	1.08	4.22461e+002	81	1.8e+005	20	49	0.0792
2	1.01	-2.40365e+002	46	5.8e+004	6	56	0.0843
4	0.86	2.38819e+002	46	5.7e+004	6	62	0.0992
10	0.28	-2.00532e+002	38	4.0e+004	4	66	0.2006
18	0.12	-1.98891e+002	38	4.0e+004	4	71	0.1869
16	0.14	1.98744e+002	38	3.9e+004	4	75	0.2006

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24	0.04	-1.81766e+002	35	3.3e+004	4	79	0.1431
6	0.69	1.71702e+002	33	2.9e+004	3	82	0.1232
22	0.06	-1.58477e+002	30	2.5e+004	3	85	0.1582
23	0.05	1.57070e+002	30	2.5e+004	3	87	0.1527

- Risultati angolo di ingresso del sisma: 0.00 [°] - SLD*

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
32	0.53	4.95346e+002	100	2.5e+005	27	27	0.1597
26	1.03	4.26421e+002	86	1.8e+005	20	47	0.0829
28	0.89	2.85235e+002	58	8.1e+004	9	56	0.0962
27	0.98	-2.48577e+002	50	6.2e+004	7	62	0.0870
44	0.12	-2.42049e+002	49	5.9e+004	6	69	0.1872
35	0.26	-1.96018e+002	40	3.8e+004	4	73	0.2006
48	0.06	1.93453e+002	39	3.7e+004	4	77	0.1538
49	0.04	-1.77033e+002	36	3.1e+004	3	80	0.1436
36	0.25	1.64746e+002	33	2.7e+004	3	83	0.2006
42	0.14	-1.62314e+002	33	2.6e+004	3	86	0.2006

- Risultati angolo di ingresso del sisma: 90.00 [°] + SLD*

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
54	0.83	3.76149e+002	100	1.4e+005	15	15	0.1031
64	0.18	-3.57682e+002	95	1.3e+005	14	29	0.2006
56	0.74	-3.13658e+002	83	9.8e+004	11	40	0.1152
73	0.05	2.74894e+002	73	7.6e+004	8	48	0.1495
57	0.53	2.74702e+002	73	7.5e+004	8	57	0.1604
53	0.89	-2.51454e+002	67	6.3e+004	7	64	0.0962
63	0.19	2.41010e+002	64	5.8e+004	6	70	0.2006
65	0.17	2.33622e+002	62	5.5e+004	6	76	0.2006
62	0.23	2.04546e+002	54	4.2e+004	5	81	0.2006
75	0.02	-1.90824e+002	51	3.6e+004	4	85	0.1333
51	1.07	1.73240e+002	46	3.0e+004	3	88	0.0801

- Risultati angolo di ingresso del sisma: 90.00 [°] - SLD*

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
78	0.92	-4.39428e+002	100	1.9e+005	21	21	0.0929
88	0.19	3.65189e+002	83	1.3e+005	15	36	0.2006
90	0.17	-3.22047e+002	73	1.0e+005	11	47	0.2006
81	0.67	2.97495e+002	68	8.9e+004	10	57	0.1268
79	0.89	2.51454e+002	57	6.3e+004	7	64	0.0962
82	0.55	-2.43495e+002	55	5.9e+004	6	70	0.1558
98	0.05	-2.42766e+002	55	5.9e+004	6	77	0.1495
86	0.26	-2.06735e+002	47	4.3e+004	5	81	0.2006
100	0.02	1.89254e+002	43	3.6e+004	4	85	0.1330
92	0.15	-1.64449e+002	37	2.7e+004	3	88	0.2006

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- Risultati angolo di ingresso del sisma: 180.00 [°] + SLD*

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
107	0.53	4.95346e+002	100	2.5e+005	27	27	0.1597
101	1.03	4.26421e+002	86	1.8e+005	20	47	0.0829
103	0.89	2.85235e+002	58	8.1e+004	9	56	0.0962
102	0.98	-2.48577e+002	50	6.2e+004	7	62	0.0870
119	0.12	-2.42049e+002	49	5.9e+004	6	69	0.1872
110	0.26	-1.96018e+002	40	3.8e+004	4	73	0.2006
123	0.06	-1.93453e+002	39	3.7e+004	4	77	0.1538
124	0.04	-1.77033e+002	36	3.1e+004	3	80	0.1436
111	0.25	1.64746e+002	33	2.7e+004	3	83	0.2006
117	0.14	1.62314e+002	33	2.6e+004	3	86	0.2006

- Risultati angolo di ingresso del sisma: 180.00 [°] - SLD*

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
132	0.55	5.23277e+002	100	2.7e+005	30	30	0.1558
126	1.08	4.22461e+002	81	1.8e+005	20	49	0.0792
127	1.01	-2.40365e+002	46	5.8e+004	6	56	0.0843
129	0.86	2.38819e+002	46	5.7e+004	6	62	0.0992
135	0.28	-2.00532e+002	38	4.0e+004	4	66	0.2006
143	0.12	-1.98891e+002	38	4.0e+004	4	71	0.1869
141	0.14	1.98744e+002	38	3.9e+004	4	75	0.2006
149	0.04	-1.81766e+002	35	3.3e+004	4	79	0.1431
131	0.69	1.71702e+002	33	2.9e+004	3	82	0.1232
147	0.06	-1.58477e+002	30	2.5e+004	3	85	0.1582
148	0.05	-1.57070e+002	30	2.5e+004	3	87	0.1527

- Risultati angolo di ingresso del sisma: 270.00 [°] + SLD*

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
153	0.92	-4.39428e+002	100	1.9e+005	21	21	0.0929
163	0.19	3.65189e+002	83	1.3e+005	15	36	0.2006
165	0.17	-3.22047e+002	73	1.0e+005	11	47	0.2006
156	0.67	2.97495e+002	68	8.9e+004	10	57	0.1268
154	0.89	2.51454e+002	57	6.3e+004	7	64	0.0962
157	0.55	-2.43495e+002	55	5.9e+004	6	70	0.1558
173	0.05	-2.42766e+002	55	5.9e+004	6	77	0.1495
161	0.26	-2.06735e+002	47	4.3e+004	5	81	0.2006
175	0.02	1.89254e+002	43	3.6e+004	4	85	0.1330
167	0.15	-1.64448e+002	37	2.7e+004	3	88	0.2006

- Risultati angolo di ingresso del sisma: 270.00 [°] - SLD*

Modo	Periodo [sec]	Coeff.di Part.	Li / L1	MassaModale	Mmi/Mmtot	Sum Mmi/Mmtot	R
179	0.83	3.76149e+002	100	1.4e+005	15	15	0.1031
189	0.18	-3.57682e+002	95	1.3e+005	14	29	0.2006

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181	0.74	-3.13658e+002	83	9.8e+004	11	40	0.1152
198	0.05	2.74894e+002	73	7.6e+004	8	48	0.1495
182	0.53	2.74702e+002	73	7.5e+004	8	57	0.1604
178	0.89	-2.51454e+002	67	6.3e+004	7	64	0.0962
188	0.19	2.41010e+002	64	5.8e+004	6	70	0.2006
190	0.17	2.33622e+002	62	5.5e+004	6	76	0.2006
187	0.23	2.04546e+002	54	4.2e+004	5	81	0.2006
200	0.02	-1.90824e+002	51	3.6e+004	4	85	0.1333
176	1.07	1.73240e+002	46	3.0e+004	3	88	0.0801

8.1 SINTESI DEI PRINCIPALI RISULTATI

- Risultati angolo di ingresso del sisma: 0.00 [°] + SLV

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
1	6	400.7	304.1	2892.0	6.3199911104e-006	5.1095883154e-006	4.6864830918e-007
	1	3062.4	2154.2	21283.6	1.1786677533e-004	8.8080397545e-005	8.3493575480e-006
	8	37823.7	-1095.0	35469.2	-6.5391384246e-004	1.8941102047e-005	-4.1506875882e-007
	7	13291.9	10136.8	100751.8	-3.4173709717e-004	-2.7866808212e-004	-2.6893766395e-005
	2	0.7	0.0	1.1	-4.5670568281e-008	-1.6586552308e-010	-3.8314581696e-010
	3	-5.2	1.9	5.3	-3.0538624996e-007	1.0811322442e-007	6.2663293162e-009
	4	-265.0	-713.8	-5661.5	1.6256770085e-005	5.4596390396e-005	4.5606927727e-006
	5	-878.3	-1176.1	-10052.4	-7.1400122422e-005	-1.0648244524e-004	-9.2292670166e-006
	Per via statica	: 32129.3	0.0	-480614.4			
	Totali	: 40396.5	10526.2	110152.7			
	Variazione	: 8267.2	10526.2	590767.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
13	6	421.4	-0.0	405.1	3.4348473614e-005	-1.8833987741e-010	1.6923928624e-007
	1	-0.1	-0.0	-1.2	-1.9377224624e-008	-1.3188235022e-012	-7.6071987513e-009
	8	13337.1	-0.0	-7882.7	-1.1710846912e-003	5.6467547773e-010	5.7284252614e-005
	7	6163.6	0.0	10469.7	-8.0396888895e-004	-4.5974113416e-010	-2.5956645472e-005
	2	1497.2	-0.0	3748.9	-4.6756650822e-004	8.6541666824e-011	-2.9740004191e-005
	3	-5.1	0.0	-81.3	-8.0321987041e-007	4.4403704957e-010	-7.8065829124e-007
	4	444.4	-0.0	-5595.6	-2.3153019501e-004	1.7673415454e-009	7.9958529629e-005
	5	-514.9	0.0	2247.2	-2.6206774399e-004	2.5431045019e-009	4.2420357838e-005
	Per via statica	: 6595.7	0.0	-79235.5			
	Totali	: 14863.9	-0.0	14143.0			
	Variazione	: 8268.2	-0.0	93378.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
7	6	8080.7	-11212.2	118687.3	9.1357073621e-005	-1.3555225004e-004	7.2001710538e-006
	1	-0.1	0.0	-0.2	-2.6551188371e-009	6.6775056985e-010	-1.6401152520e-011
	8	57332.4	-1257.2	47019.2	-7.1386075831e-004	1.5648754568e-005	2.2812112018e-007
	7	353.9	6436.5	-62624.7	-1.2849505301e-005	-1.2732967887e-004	6.6455982421e-006
	2	0.5	-0.1	0.8	-2.1839840197e-008	5.0381833813e-009	-1.1055540976e-010
	3	452.6	1912.5	-18415.1	2.2488984894e-005	7.9498711986e-005	-4.1743452566e-006

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	4	61.9	-26.2	213.7	-3.3669504394e-006	1.4420779301e-006	-4.6764567538e-008
	5	-126.3	46.4	-348.0	-8.1594044508e-006	3.0215434780e-006	-8.2357305276e-008
	Per via statica	: 44648.7	0.0	475179.5			
	Totali	: 57932.3	-12946.3	141545.3			
	Variazione	: 13283.6	-12946.3	-333634.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\Phi_{i,Ux}$	$\Phi_{i,Uy}$	$\Phi_{i,\theta z}$
2	6	279.1	878.3	8172.3	3.8678782152e-006	1.6871717248e-005	1.6964776405e-006
	1	12078.0	5941.8	66533.0	5.3900189399e-004	2.7776633972e-004	2.9118715399e-005
	8	54359.7	-23299.6	-179126.0	-1.1191045651e-003	4.6080594931e-004	5.0013264407e-005
	7	41098.7	19633.5	224997.6	-1.2335722068e-003	-6.1709537492e-004	-6.6128742175e-005
	2	0.7	-0.6	-3.6	-5.8423800861e-008	4.4484894415e-008	3.6464617882e-009
	3	-6.8	12.3	94.1	-5.1206976894e-007	8.1439615255e-007	7.3599055042e-008
	4	160.0	-2728.9	-23426.0	-3.4192959338e-005	2.3862337727e-004	2.2960963920e-005
	5	-237.0	-4086.6	-36003.2	1.1797915262e-005	-4.2302729670e-004	-4.1284578841e-005
	Per via statica	: 63293.3	0.0	-876530.6			
	Totali	: 69695.8	-31385.4	297541.1			
	Variazione	: 6402.4	-31385.4	1174071.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\Phi_{i,Ux}$	$\Phi_{i,Uy}$	$\Phi_{i,\theta z}$
8	6	34802.5	-31475.7	337388.9	3.9853977188e-004	-3.7596848525e-004	1.9507480671e-005
	1	0.1	0.3	-3.0	4.6408777317e-009	9.3584102855e-009	-4.8730917406e-010
	8	126727.1	4631.0	1908.1	-1.5648693018e-003	-5.6954654316e-005	7.1768217729e-006
	7	8636.3	24134.4	-237737.1	-1.9126340517e-004	-4.7171066291e-004	2.5528485997e-005
	2	-0.7	-1.6	14.6	3.8052514066e-008	7.4984294165e-008	-3.8966147831e-009
	3	4047.9	9520.8	-96548.6	1.8550782833e-004	3.9102153032e-004	-2.1889131569e-005
	4	-188.0	-314.9	2965.2	1.1020502810e-005	1.7123032536e-005	-9.0628141009e-007
	5	460.6	662.0	-6180.2	3.1636266950e-005	4.2614757349e-005	-2.2568475542e-006
	Per via statica	: 101782.9	0.0	1347283.9			
	Totali	: 132097.5	40368.9	416493.8			
	Variazione	: 30314.6	40368.9	-930790.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\Phi_{i,Ux}$	$\Phi_{i,Uy}$	$\Phi_{i,\theta z}$
14	6	1091.6	-0.0	774.6	8.8471770401e-005	-6.2902578327e-010	-3.6436281652e-007
	1	-0.3	-0.0	-3.7	-3.2461213973e-008	-4.3584694889e-012	-2.4428665927e-008
	8	-389.4	-0.0	-51768.7	-9.4032067110e-005	1.8355024176e-009	1.5323367014e-004
	7	17038.5	0.0	26416.9	-2.2036706461e-003	-1.4374538850e-009	-5.8506136222e-005
	2	5161.0	-0.0	12715.3	-1.5931258619e-003	2.9507797980e-010	-9.8257115006e-005
	3	-9.3	0.0	-261.7	-4.9135259864e-007	1.4713817482e-009	-2.5271876007e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	4	1418.9	-0.0	-18982.6	-7.4069571138e-004	5.8237033782e-009	2.6539633749e-004
	5	-1445.0	0.0	8050.1	-7.4787229293e-004	8.4281804512e-009	1.4408106651e-004
	Per via statica	: 15051.8	0.0	-180730.3			
	Totali	: 17914.5	-0.0	-60721.3			
	Variazione	: 2862.7	-0.0	120009.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
3	6	-447.7	1472.1	13063.4	-1.1102625237e-005	2.8206711593e-005	2.8683104548e-006
	1	25860.2	10321.7	120697.1	1.1612191134e-003	4.8132876329e-004	5.0803990240e-005
	8	17686.0	-36398.0	-388474.1	-4.2694435689e-004	7.1807460965e-004	8.8667236743e-005
	7	54017.6	15892.0	203503.9	-1.6457465099e-003	-4.9826168578e-004	-5.4395668219e-005
	2	0.7	-2.0	-15.7	-6.7493136454e-008	1.5215214171e-007	1.3996709845e-008
	3	-12.1	32.7	268.3	-9.7395158265e-007	2.1549404124e-006	2.0441367814e-007
	4	2042.1	-5742.6	-48827.0	-2.2135122303e-004	5.0091162798e-004	4.9119887879e-005
	5	2799.3	-8061.8	-69325.9	3.6162098868e-004	-8.3245448645e-004	-8.2459230842e-005
	Per via statica	: 98556.2	0.0	-1368006.6			
	Totali	: 63023.8	-42570.9	-463589.4			
	Variazione	: -35532.4	-42570.9	904417.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
9	6	73961.2	-45353.0	489786.6	8.6010886081e-004	-5.4200286743e-004	2.7026875716e-005
	1	0.5	0.5	-4.5	1.5323060491e-008	1.4451398943e-008	-7.5994450659e-010
	8	109684.4	-3555.7	60739.4	-1.3517004717e-003	4.3752112924e-005	2.3445827159e-006
	7	15685.7	29608.6	-282410.3	-3.3387698900e-004	-5.7899692129e-004	3.0844734641e-005
	2	-2.5	-2.4	21.2	1.2524000016e-007	1.1408189519e-007	-5.9768767516e-009
	3	10236.3	20289.9	-208913.3	4.6257753371e-004	8.3372957126e-004	-4.7682806006e-005
	4	-561.9	-508.8	4649.9	3.1882287098e-005	2.7682779993e-005	-1.4903373397e-006
	5	1331.3	1061.6	-9580.7	8.8982798993e-005	6.8370921575e-005	-3.6874549315e-006
	Per via statica	: 158017.3	0.0	2301591.0			
	Totali	: 134525.0	56728.8	593141.0			
	Variazione	: -23492.3	56728.8	-1708450.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
15	6	1377.9	-0.0	-557.3	1.1537822852e-004	-1.0512177265e-009	-4.9027976697e-006
	1	-0.3	-0.0	-5.4	-2.3755286839e-008	-7.1460975134e-012	-3.6469802911e-008
	8	-15480.0	-0.0	-61735.4	1.1674687636e-003	2.5606862811e-009	1.4590772352e-004
	7	15863.5	0.0	24097.3	-2.0543706319e-003	-2.0827613833e-009	-5.2139743294e-005
	2	8830.2	-0.0	21472.0	-2.7294451813e-003	9.8138724850e-010	-1.6490120706e-004
	3	-6.6	0.0	-400.8	1.4153867848e-006	2.4700169323e-009	-3.9341850013e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	4	2291.2	-0.0	-32483.5	-1.2164151933e-003	8.3640652730e-009	4.5288004135e-004
	5	-2070.7	0.0	15158.4	-1.1187223417e-003	1.3349090150e-008	2.6306731006e-004
	Per via statica	: 23371.4	0.0	-280628.5			
	Totali	: 23873.4	-0.0	-73059.4			
	Variazione	: 502.1	-0.0	207569.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
16	6	880.6	-0.0	-4304.4	8.3168943530e-005	-1.3809847453e-009	-1.4560258437e-005
	1	0.0	-0.0	-5.6	4.1893700643e-008	-9.4745880293e-012	-3.9731647360e-008
	8	-10399.4	-0.0	-28701.3	8.1570091836e-004	3.4165670621e-009	5.9960335667e-005
	7	4452.4	0.0	9249.7	-5.6688800340e-004	-2.5929038507e-009	-2.6408357502e-005
	2	11978.9	-0.0	28825.9	-3.7056196017e-003	1.3222684943e-009	-2.2018353097e-004
	3	11.4	0.0	-458.2	6.9967395468e-006	3.2745290979e-009	-4.6529402156e-006
	4	2767.5	-0.0	-44731.3	-1.5290052771e-003	1.0953200470e-008	6.1942324182e-004
	5	-1930.2	0.0	23555.1	-1.1640800203e-003	1.7574920738e-008	3.9222109667e-004
	Per via statica	: 31696.3	0.0	-380588.8			
	Totali	: 16674.1	-0.1	-52082.6			
	Variazione	: -15022.1	-0.1	328506.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
4	6	-1025.2	1626.6	14193.9	-2.2475711919e-005	3.1167529507e-005	3.2175710715e-006
	1	40078.0	14398.4	172092.7	1.8064803684e-003	6.7143351996e-004	7.0973900734e-005
	8	-12115.8	-7381.0	-198735.9	2.0270575886e-004	1.4561639994e-004	4.1273268346e-005
	7	26353.7	-678.9	20434.7	-8.2711495509e-004	2.1285972267e-005	9.6137986584e-007
	2	2.1	-4.5	-36.2	-1.9360681440e-007	3.4677134905e-007	3.2600319696e-008
	3	-32.3	63.3	515.8	-2.4812960976e-006	4.1704492702e-006	3.9885705441e-007
	4	4951.0	-8904.3	-74297.0	-4.9901738827e-004	7.7669533290e-004	7.6316666353e-005
	5	6611.7	-11528.3	-97134.4	7.8678119759e-004	-1.1904141513e-003	-1.1825405078e-004
	Per via statica	: 133662.2	0.0	-1903423.6			
	Totali	: 51000.1	-24177.6	-302187.1			
	Variazione	: -82662.1	-24177.6	1601236.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
10	6	120026.0	-53129.9	578602.6	1.4079141564e-003	-6.3494269235e-004	3.0099095937e-005
	1	0.4	0.0	0.7	1.2752902729e-008	1.2664893303e-009	4.1817451057e-011
	8	34333.8	-5952.4	51032.8	-4.2126780864e-004	7.3242618520e-005	-1.3641073901e-006
	7	9749.2	8675.8	-48903.3	-1.9591347468e-004	-1.6965608690e-004	5.9856359059e-006
	2	-2.2	-0.0	-5.2	1.0270971147e-007	1.7667895380e-009	8.4336317553e-010
	3	16624.6	30292.1	-313255.9	7.4625112899e-004	1.2447271908e-003	-7.1743510987e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	4	-580.3	-154.0	598.6	3.1854770237e-005	8.3805437178e-006	-3.2136884145e-007
	5	1414.3	235.4	-165.1	9.1508877065e-005	1.5158666449e-005	-4.8342462591e-007
	Per via statica	: 214303.6	0.0	3261233.5			
	Totali	: 127561.5	-60744.6	648754.4			
	Variazione	: -86742.0	-60744.6	-2612479.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
17	6	-157.7	-0.0	-9005.1	8.4455989203e-006	-1.5669129203e-009	-2.5685546000e-005
	1	0.6	-0.0	-4.8	1.4853811209e-007	-1.1028803896e-011	-3.7043395370e-008
	8	6143.7	-0.0	16802.2	-4.8227610042e-004	4.0115923154e-009	-3.4964646008e-005
	7	-9007.1	0.0	-6651.7	1.1939099867e-003	-2.8104993830e-009	-3.6896334019e-006
	2	14313.0	-0.0	34101.7	-4.4309321002e-003	1.8127291193e-009	-2.5912333712e-004
	3	39.7	0.0	-452.4	1.5009025488e-005	3.8251466018e-009	-4.8273386032e-006
	4	2865.7	-0.0	-54171.3	-1.6685989019e-003	1.1914817244e-008	7.4486362674e-004
	5	-1194.4	0.0	31434.7	-9.3723832422e-004	1.9862072653e-008	5.0564944428e-004
	Per via statica	: 40021.1	0.0	-480548.7			
	Totali	: 18175.1	-0.1	54212.4			
	Variazione	: -21846.0	-0.1	534761.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
5	6	-1276.3	1389.7	11198.3	-2.8503151075e-005	2.8296046584e-005	2.8587302655e-006
	1	49591.6	17372.2	197408.8	2.3811239067e-003	8.6088494011e-004	8.6826545198e-005
	8	-10202.8	37570.6	169492.0	2.5142039127e-004	-7.8766712188e-004	-4.2634033409e-005
	7	-26285.0	-21004.0	-209052.4	8.1365478197e-004	6.9981505874e-004	7.0584011174e-005
	2	4.2	-7.6	-56.7	-3.9532720464e-007	6.1991885299e-007	5.6273390038e-008
	3	-57.8	97.5	734.5	-4.6000929097e-006	6.8241559495e-006	6.2656446365e-007
	4	7702.2	-11654.5	-89303.0	-8.0325294675e-004	1.0803089955e-003	1.0148135978e-004
	5	9751.3	-13975.1	-107980.7	1.1982808811e-003	-1.5335170335e-003	-1.4574197479e-004
	Per via statica	: 158813.6	0.0	-2383145.0			
	Totali	: 59757.8	51448.9	-374004.4			
	Variazione	: -99055.8	51448.9	2009140.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
11	6	158742.4	-53875.3	560066.3	1.9760607517e-003	-6.7939026359e-004	2.9259746449e-005
	1	0.0	-0.7	8.0	-1.5101573018e-011	-2.1316710648e-008	1.3571277788e-009
	8	-57996.5	1551.3	-57580.1	7.5261017323e-004	-2.0141416157e-005	4.6891949044e-007
	7	-4166.3	-22489.7	268415.2	1.1323867358e-004	4.6406257740e-004	-3.0988319656e-005
	2	-0.1	3.7	-42.6	-4.0679352570e-009	-1.8828968046e-007	1.1886669947e-008
	3	21412.9	37609.3	-361087.2	1.0084576829e-003	1.6306992080e-003	-9.0926290570e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	4	-296.2	456.4	-5627.9	1.5509483138e-005	-2.6201405967e-005	1.7006788157e-006
	5	815.7	-1152.2	13914.2	5.1079594650e-005	-7.8300276721e-005	4.9500099101e-006
	Per via statica	: 256434.6	0.0	4176374.3			
	Totali	: 171196.8	-68522.8	712374.2			
	Variazione	: -85237.8	-68522.8	-3464000.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
6	6	-167.1	0.7	334.4	-3.0785037529e-005	1.2227117171e-007	2.7130581696e-006
	1	7212.3	80.5	13706.4	2.8947604161e-003	3.3283477333e-005	1.0093258598e-004
	8	512.6	2895.1	20451.0	1.2409162306e-005	-5.0667252344e-004	-1.1603997883e-004
	7	-9842.0	-112.6	-23379.9	2.6179712385e-003	3.1318733948e-005	1.3571989766e-004
	2	0.8	-0.2	-2.7	-6.1786324481e-007	1.0906403254e-007	7.6261444381e-008
	3	-10.5	1.9	33.2	-6.8378450209e-006	1.0823319239e-006	8.2248414718e-007
	4	1267.5	-172.1	-3738.2	-1.0903546672e-003	1.3314232156e-004	1.2451015956e-004
	5	1535.7	-175.6	-4325.1	1.5584445675e-003	-1.6081036158e-004	-1.7238451118e-004
	Per via statica	: 22981.7	0.0	-365097.7			
	Totali	: 12502.6	2913.5	34426.6			
	Variazione	: -10479.1	2913.5	399524.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
18	6	-610.7	-0.0	-7446.5	-5.3102161282e-005	-1.6260704792e-009	-3.3046017409e-005
	1	0.6	-0.0	-2.4	2.3349407652e-007	-1.1794305527e-011	-3.4085863373e-008
	8	11702.3	-0.0	28377.9	-1.5099660933e-003	4.4479016812e-009	-9.1760106343e-005
	7	-11047.3	0.0	-10165.3	2.3721854603e-003	-2.8871959171e-009	8.1880977558e-006
	2	9658.3	-0.0	22634.2	-4.8734663494e-003	2.2287130124e-009	-2.8036026106e-004
	3	38.2	0.0	-263.2	2.1255668883e-005	4.1012642935e-009	-4.8229301451e-006
	4	1773.0	-0.0	-36180.1	-1.7350946964e-003	1.1855689591e-008	8.1565919270e-004
	5	-349.3	0.0	22096.7	-7.2147779715e-004	2.0574431348e-008	5.7419781839e-004
	Per via statica	: 29683.4	0.0	-356134.9			
	Totali	: 18779.0	-0.0	45515.1			
	Variazione	: -10904.4	-0.0	401650.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
12	6	15465.1	-1216.1	18270.7	2.5514311377e-003	-2.0228917153e-004	2.3961255256e-005
	1	-0.0	0.0	0.2	-1.2610019048e-008	2.9975523111e-009	2.6171010681e-009
	8	-11163.4	362.1	-6157.4	1.9290386851e-003	-6.2021999024e-005	-1.9404812474e-005
	7	-1227.4	341.6	6252.2	3.8835075315e-004	-9.2987384572e-005	-6.1673231913e-005
	2	0.1	-0.0	-1.0	-1.0890110293e-007	2.4335782816e-008	2.2442450347e-008
	3	1938.8	76.8	-4427.4	1.2042851471e-003	4.3919854424e-005	-1.0840724927e-004

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	4	-3.1	-5.8	-156.7	-8.5370250102e-007	4.3615174799e-006	3.6028218794e-006
	5	22.0	11.4	381.0	1.0915613608e-005	1.0220945739e-005	1.0016664142e-005
	Per via statica	: 23484.0	0.0	408471.8			
	Totali	: 19246.3	-1306.2	20679.4			
	Variazione	: -4237.6	-1306.2	-387792.5			

- Risultati angolo di ingresso del sisma: 0.00 [°] - SLV

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
1	14	232.8	239.1	1699.4	4.3572977728e-006	4.1467268230e-006	3.6281812320e-007
	9	2906.5	2210.2	16529.3	1.1959575015e-004	8.5514793085e-005	8.1125568330e-006
	16	41361.7	1077.3	8863.6	-7.2784319510e-004	-1.8759211605e-005	-8.6578546247e-006
	11	-1.1	6.5	50.7	-3.1820141923e-008	3.2386919402e-007	2.7224741076e-008
	15	12279.9	9699.6	75797.3	-3.3669312418e-004	-2.4897371754e-004	-2.4419816403e-005
	10	0.7	-1.2	-9.9	-3.9309096268e-008	7.7559905781e-008	6.4153368758e-009
	12	-481.1	-1093.6	-8148.5	4.6371103969e-005	8.9914634972e-005	7.7421291337e-006
	13	-527.0	-730.1	-5314.8	-7.0073075103e-005	-8.7764400716e-005	-7.6311013615e-006
	Per via statica	: 32928.9	0.0	-55033.3			
	Totali	: 43419.1	10105.6	78792.3			
	Variazione	: 10490.2	10105.6	133825.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
13	14	401.8	0.0	291.6	3.5505231173e-005	1.6346114136e-011	1.8947484358e-006
	9	-0.5	0.0	6.1	-7.0633559612e-008	1.8226959755e-013	3.8326222781e-008
	16	12717.0	0.0	7702.4	-1.1245117735e-003	-9.4452226959e-011	-5.5551642484e-005
	11	-7.7	-0.0	125.9	-1.0131441393e-006	-1.9043328354e-010	1.0456402860e-006
	15	6720.8	-0.0	-6570.4	-8.3653283321e-004	8.8928763760e-011	4.6169578040e-006
	10	1645.0	0.0	-2488.9	-4.9630922975e-004	-4.8540278043e-011	1.2548299252e-005
	12	158.3	0.0	4169.9	-1.1453312508e-004	-4.9839799855e-010	-6.1999224941e-005
	13	-573.2	-0.0	-2967.1	-3.9548993804e-004	-5.6503867835e-010	-7.2511643941e-005
	Per via statica	: 6759.9	0.0	8614.6			
	Totali	: 14579.0	0.0	11076.8			
	Variazione	: 7819.1	0.0	2462.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
7	14	6723.3	-11646.2	108466.4	9.0615314957e-005	-1.4534924101e-004	7.6198619817e-006
	9	-0.4	-0.1	2.0	-9.7376269834e-009	-2.9734063795e-009	2.5271752179e-010
	16	58769.6	-4804.4	16502.7	-7.4041730974e-004	6.0200292407e-005	-4.5627826996e-006
	11	772.1	2040.1	-20821.0	2.4324049451e-005	7.3247564989e-005	-3.8600828491e-006
	15	2041.7	8162.9	-80517.2	-3.0883148511e-005	-1.5077675304e-004	7.7612993946e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	10	1.5	0.5	-9.2	-6.6844457941e-008	-2.3699225204e-008	1.9016713521e-009
	12	29.8	4.1	-130.8	-1.7326797472e-006	-2.4187389083e-007	3.3042490344e-008
	13	-172.5	-47.0	1022.5	-1.4570473881e-005	-4.0650411564e-006	4.0203643260e-007
	Per via statica	: 45759.9	0.0	3904.4			
	Totali	: 59245.9	-14965.8	136060.7			
	Variazione	: 13486.0	-14965.8	132156.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
2	14	-67.2	730.0	6093.3	-1.5991947658e-007	1.4475819977e-005	1.3331708002e-006
	9	12214.9	5928.5	44934.7	5.6449817890e-004	2.6225598784e-004	2.7445551340e-005
	16	59556.9	-19648.6	-163519.2	-1.1640030214e-003	3.9117544240e-004	2.4646291438e-005
	11	0.5	27.2	249.2	1.6659175782e-007	1.5508777748e-006	1.5865116687e-007
	15	40547.1	18248.0	147646.6	-1.2426995311e-003	-5.3553084106e-004	-5.9945832734e-005
	10	-0.3	-5.6	-52.0	6.0280230835e-008	4.0296534612e-007	4.2140205848e-008
	12	104.9	-3967.3	-35016.1	2.2330199076e-005	3.7293773322e-004	3.6578820625e-005
	13	131.4	-2443.9	-21049.9	-1.0148282958e-005	-3.3589869899e-004	-3.2058478972e-005
	Per via statica	: 64868.6	0.0	-36404.7			
	Totali	: 73586.8	-27690.1	-227286.8			
	Variazione	: 8718.2	-27690.1	-190882.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
8	14	30320.4	-33647.3	296647.4	3.9255321933e-004	-4.1489753659e-004	2.1225535249e-005
	9	0.3	0.4	-2.5	8.2369612099e-009	1.2052756779e-008	-3.3137401034e-010
	16	125427.3	-7662.7	43560.5	-1.5617278461e-003	9.4864689069e-005	-1.0145834801e-005
	11	5902.2	10392.0	-115037.7	1.9111772415e-004	3.6864366441e-004	-2.0744696426e-005
	15	15407.5	30203.3	-312396.1	-2.5562867342e-004	-5.5119532802e-004	2.9034192105e-005
	10	-1.1	-1.4	6.2	4.8157385590e-008	6.4216162300e-008	-1.2566099514e-009
	12	-60.5	-77.6	640.8	3.3744492472e-006	4.5370868947e-006	-1.8287468591e-007
	13	429.0	413.1	-3311.9	3.5493698097e-005	3.5307516813e-005	-1.3352012374e-006
	Per via statica	: 104316.0	0.0	104833.3			
	Totali	: 130537.4	-46286.4	-441190.1			
	Variazione	: 26221.3	-46286.4	-546023.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
14	14	1043.8	0.0	1322.0	9.2411710837e-005	5.6836824754e-011	6.5193252001e-006
	9	-1.2	0.0	19.9	-1.1818609064e-007	5.7093337415e-013	1.2612705286e-007
	16	-3794.4	0.0	36841.8	2.3427039584e-004	-2.6128651884e-010	-1.0107359961e-004
	11	-17.3	-0.0	415.1	-1.3187545510e-006	-6.3145165590e-010	3.4436601881e-006
	15	18511.1	-0.0	-17283.8	-2.2770615311e-003	2.6592280272e-010	8.8926333984e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	10	5683.4	0.0	-8497.2	-1.6934998376e-003	-1.6328879251e-010	4.1462625600e-005
	12	481.3	0.0	14074.4	-3.5925228317e-004	-1.6250640248e-009	-2.0487060497e-004
	13	-1521.7	-0.0	-10398.0	-1.0784877123e-003	-1.8702107249e-009	-2.4121168195e-004
	Per via statica	: 15426.4	0.0	19750.0			
	Totali	: 19766.6	0.0	43468.4			
	Variazione	: 4340.2	0.0	23718.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
3	14	-741.6	1304.5	11148.6	-1.2636472137e-005	2.5802915558e-005	2.3094273923e-006
	9	27088.3	10082.8	71508.9	1.2365124008e-003	4.4492387129e-004	4.6801368880e-005
	16	18234.7	-35765.4	-263004.1	-3.1411925097e-004	7.1027490052e-004	5.4554994107e-005
	11	-10.6	60.4	584.1	-2.8441967253e-007	3.4374160589e-006	3.6379987343e-007
	15	55626.8	13905.4	107521.7	-1.6732938456e-003	-4.0707612286e-004	-5.0954265444e-005
	10	1.1	-12.9	-126.9	1.0903783172e-008	9.2928877644e-007	1.0104407998e-007
	12	2656.6	-8111.5	-75106.0	-1.8231598469e-004	7.6062878140e-004	7.5903109193e-005
	13	2029.9	-4721.1	-42323.8	2.2389572900e-004	-6.4728144582e-004	-6.1823495463e-005
	Per via statica	: 101009.1	0.0	-59895.6			
	Totali	: 65073.8	-40701.2	-305717.0			
	Variazione	: -35935.3	-40701.2	-245821.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
9	14	66432.7	-50103.9	403946.9	8.4631382009e-004	-6.1813310543e-004	3.0377548459e-005
	9	1.3	0.8	-4.6	3.6447193605e-008	2.3368783068e-008	-5.0323279462e-010
	16	102690.2	-15312.8	254663.9	-1.2919817074e-003	1.8966920109e-004	-2.2757201383e-005
	11	14448.9	22347.1	-254008.0	4.7268886432e-004	7.9313932377e-004	-4.5602681913e-005
	15	24536.0	36750.0	-366854.5	-4.1845546111e-004	-6.7101023349e-004	3.3569015223e-005
	10	-5.1	-2.7	9.5	2.2713462943e-007	1.2034327486e-007	-1.2102922424e-009
	12	-198.8	-156.8	1305.8	1.1319886425e-005	9.1695777551e-006	-3.5217178843e-007
	13	1336.4	842.0	-6815.0	1.1201549644e-004	7.1997847237e-005	-2.5677139702e-006
	Per via statica	: 161950.0	0.0	246259.3			
	Totali	: 126723.0	-66558.1	642107.8			
	Variazione	: -35227.1	-66558.1	395848.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
15	14	1263.5	0.0	3286.5	1.1606226291e-004	6.6189883590e-011	1.2933529100e-005
	9	-1.2	0.0	31.5	-5.3716840793e-008	2.8432821535e-013	2.0319160432e-007
	16	-19539.3	0.0	45588.0	1.5634079586e-003	-2.2791040885e-010	-8.8393624189e-005
	11	-17.6	-0.0	669.3	4.1520212048e-007	-1.0723418607e-009	5.6277308003e-006
	15	17271.4	-0.0	-17858.0	-2.1189934939e-003	3.2948838135e-010	1.5958599167e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	10	9735.4	0.0	-14417.1	-2.9031456067e-003	-4.7839431280e-010	6.9552030521e-005
	12	739.5	0.0	23781.7	-5.7744506050e-004	-1.6674699309e-009	-3.4547666317e-004
	13	-1964.8	-0.0	-18797.0	-1.4847983069e-003	-1.9312063747e-009	-4.2283004839e-004
	Per via statica	: 23953.0	0.0	30663.1			
	Totali	: 27754.6	-0.0	55838.2			
	Variazione	: 3801.6	-0.0	25175.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
16	14	703.6	0.0	6341.1	7.5750614668e-005	8.5654758027e-011	2.0679516423e-005
	9	0.2	0.0	38.3	2.4907004561e-007	3.2327294834e-013	2.5639632133e-007
	16	-12133.0	0.0	29029.8	9.6902109984e-004	-2.1523364280e-010	-5.7053120767e-005
	11	1.3	-0.0	842.4	6.2874646927e-006	-1.4229325570e-009	7.2494725404e-006
	15	4949.9	-0.0	-11012.1	-5.8579184215e-004	2.2618647146e-010	3.0636003904e-005
	10	13217.1	0.0	-19425.4	-3.9427443520e-003	-6.4307545587e-010	9.2816590679e-005
	12	820.3	0.0	32103.8	-7.0739815196e-004	-2.1296745924e-009	-4.6429000342e-004
	13	-1369.6	-0.0	-27648.3	-1.2834944222e-003	-2.4702633082e-009	-5.9595776762e-004
	Per via statica	: 32485.1	0.0	41585.3			
	Totali	: 18645.4	-0.0	48805.2			
	Variazione	: -13839.7	-0.0	7220.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
4	14	-1003.9	1595.2	13073.6	-1.7497183312e-005	3.1553619181e-005	2.6821796960e-006
	9	42706.7	13913.1	94039.5	1.9413749339e-003	6.1394278573e-004	6.4606866996e-005
	16	-16380.1	-15562.1	-33052.8	3.3452404317e-004	3.0905309176e-004	1.0485897615e-005
	11	-47.3	101.5	1014.5	-2.1502210139e-006	5.7763551584e-006	6.1579607332e-007
	15	28452.6	-2345.7	-8640.9	-8.3764030105e-004	6.8669398469e-005	-5.3396812923e-006
	10	9.7	-22.7	-231.4	-5.4025471493e-007	1.6356711843e-006	1.7876051046e-007
	12	6357.5	-12254.0	-115863.6	-4.9493738489e-004	1.1490746581e-003	1.1501906598e-004
	13	3677.1	-6565.6	-59045.7	4.2924281418e-004	-9.0016049845e-004	-8.5115005768e-005
	Per via statica	: 136988.8	0.0	-130557.8			
	Totali	: 54964.4	-25636.5	-171617.8			
	Variazione	: -82024.4	-25636.5	-41060.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
10	14	109982.6	-60594.9	435453.4	1.3876255039e-003	-7.4756040317e-004	3.4964855791e-005
	9	0.9	-0.1	11.4	2.7234515418e-008	-4.0861631772e-009	1.7935749748e-009
	16	30186.8	962.5	295153.2	-3.9257734027e-004	-1.1921239791e-005	-2.1219411833e-005
	11	23189.1	33482.5	-384835.9	7.6241386899e-004	1.1883532701e-003	-6.8874350436e-005
	15	13902.4	11306.1	-47578.6	-2.5081577619e-004	-2.0643622413e-004	3.4364437059e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	10	-3.1	1.9	-62.3	1.5142098407e-007	-8.6206252919e-008	1.5569534302e-008
	12	-195.4	-90.3	115.1	1.1445967169e-005	5.2833210191e-006	1.7718906364e-008
	13	1353.3	344.8	1458.5	1.1678123116e-004	2.9486926363e-005	1.2063626484e-006
	Per via statica	: 219637.2	0.0	423970.3			
	Totali	: 118662.0	-68913.5	644145.3			
	Variazione	: -100975.2	-68913.5	220175.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
17	14	-364.5	0.0	9584.9	-7.5188747648e-006	6.9654582300e-011	2.7738179190e-005
	9	2.5	0.0	41.0	7.0572603351e-007	5.1517655456e-014	2.8685583430e-007
	16	7858.2	0.0	4359.8	-6.8492395933e-004	-7.4080763785e-011	-3.2524524966e-005
	11	32.9	-0.0	934.7	1.4722244763e-005	-1.6696058488e-009	8.2671548434e-006
	15	-9616.1	0.0	-2905.8	1.2266527542e-003	-1.6319448966e-011	4.7928101167e-005
	10	15803.5	0.0	-23062.8	-4.7157388373e-003	-8.6427052351e-010	1.0919498598e-004
	12	752.6	0.0	38168.1	-7.5084204231e-004	-1.8739878180e-009	-5.4939050900e-004
	13	-53.7	-0.0	-35335.6	-6.3550453234e-004	-2.0751945181e-009	-7.3266996469e-004
	Per via statica	: 41017.2	0.0	52507.4			
	Totali	: 20102.1	-0.0	-46405.7			
	Variazione	: -20915.1	-0.0	-98913.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
5	14	-865.7	1569.9	11138.6	-1.6009456972e-005	3.2998623412e-005	2.4853673689e-006
	9	53430.8	16640.1	99501.4	2.5744189417e-003	7.8030463936e-004	7.8288931131e-005
	16	-12989.3	20087.0	279247.9	2.1745261131e-004	-4.2391801512e-004	-6.4402022472e-005
	11	-91.2	143.3	1361.6	-4.7389695767e-006	8.6634351635e-006	8.8289613541e-007
	15	-25990.0	-21716.5	-123435.9	8.5417740597e-004	6.7559176506e-004	5.1862637411e-005
	10	20.8	-33.2	-322.0	-1.3632407708e-006	2.5461595033e-006	2.6514793677e-007
	12	9726.7	-15690.6	-140392.9	-8.3752771852e-004	1.5635462166e-003	1.4968972198e-004
	13	4602.9	-7683.5	-64344.9	5.8254523052e-004	-1.1194595921e-003	-1.0009727460e-004
	Per via statica	: 162766.1	0.0	-279701.9			
	Totali	: 62716.7	-38476.9	360076.7			
	Variazione	: -100049.4	-38476.9	639778.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
11	14	147503.9	-63453.5	360992.2	1.9512402859e-003	-8.2603791130e-004	3.5265602951e-005
	9	-0.6	-1.8	33.5	-1.1679774977e-008	-5.3388090466e-008	5.2981962530e-009
	16	-54585.7	31054.1	170758.0	7.0564732848e-004	-4.0587855881e-004	-8.8533533452e-006
	11	29594.6	41665.2	-449334.6	1.0313440491e-003	1.5604022669e-003	-8.7500015796e-005
	15	-7664.8	-26416.8	385312.7	1.1224831686e-004	5.0896337121e-004	-4.0258276706e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	10	3.4	9.3	-157.0	-1.2511163729e-007	-4.4037860537e-007	4.0343489694e-008
	12	-74.7	55.3	-1903.0	5.2015767103e-006	-3.4134674507e-006	6.7061380543e-007
	13	624.1	-636.5	14592.1	6.2951716391e-005	-5.7436476816e-005	7.5410660144e-006
	Per via statica	: 262816.8	0.0	788138.1			
	Totali	: 161064.1	-85258.5	711000.3			
	Variazione	: -101752.7	-85258.5	-77137.9			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
6	14	-78.6	64.9	496.2	-1.1605100449e-005	1.1380117071e-005	2.4844365439e-006
	9	7820.5	89.6	71.7	3.1407732363e-003	3.5086818723e-005	9.0241037482e-005
	16	1006.6	-996.3	22962.8	-2.9990453366e-004	1.7552894951e-004	-1.3928777238e-004
	11	-16.6	0.4	81.2	-7.3792280429e-006	2.2173221782e-007	1.1154343819e-006
	15	-10111.0	-909.6	-3365.6	2.7187158516e-003	2.3621595404e-004	1.0558024472e-004
	10	3.9	0.0	-19.5	-2.2217500778e-006	-3.0541317341e-009	3.3921890339e-007
	12	1581.7	-187.7	-7983.8	-1.1558070479e-003	1.5610840721e-004	1.8178845092e-004
	13	654.1	-161.8	-3449.9	6.9352065216e-004	-1.9678141814e-004	-1.1589545687e-004
	Per via statica	: 23553.7	0.0	-61214.4			
	Totali	: 13003.3	-1391.2	25109.7			
	Variazione	: -10550.4	-1391.2	86324.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
18	14	-751.8	0.0	7139.5	-7.5706969896e-005	3.8444853830e-011	3.2033429507e-005
	9	2.7	-0.0	25.3	1.0570076527e-006	-2.6132244260e-013	3.0153241333e-007
	16	14310.4	-0.0	-7601.9	-1.9690366982e-003	3.3632176036e-012	-2.0740355535e-005
	11	35.4	-0.0	592.4	2.1099464835e-005	-1.7976599573e-009	8.7875576831e-006
	15	-11882.2	0.0	1634.9	2.4381103387e-003	-2.3250047141e-010	5.9398674894e-005
	10	10681.1	0.0	-15407.0	-5.1928231083e-003	-1.0465441966e-009	1.1814379754e-004
	12	405.8	0.0	25258.2	-7.5319900603e-004	-1.3694178610e-009	-5.9616278254e-004
	13	636.9	-0.0	-24345.7	-6.9603323668e-005	-1.3414193923e-009	-8.1127826706e-004
	Per via statica	: 30422.1	0.0	39235.7			
	Totali	: 21381.8	-0.0	-32048.3			
	Variazione	: -9040.3	-0.0	-71284.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
12	14	14562.1	-1478.0	-7034.4	2.5275879752e-003	-2.5380797488e-004	3.0672772537e-005
	9	-0.2	0.1	0.9	-5.0480899949e-008	5.2120501270e-008	8.9071402305e-009
	16	-10846.8	4168.0	14695.9	1.8459058811e-003	-7.1858077568e-004	-2.7441495923e-005
	11	2688.6	63.8	-9219.1	1.2361602516e-003	3.1512618293e-005	-1.0461945299e-004
	15	-1969.7	971.0	11509.1	4.3303366955e-004	-2.4677798113e-004	-7.6774912154e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	10	0.7	-0.6	-4.0	-3.9763984435e-007	3.5234763804e-007	6.5723733463e-008
	12	3.1	-13.5	-56.1	-1.3324780142e-006	1.0991888838e-005	1.3431103463e-006
	13	-4.1	82.9	382.7	7.4080276781e-006	9.8676205694e-005	1.3944781216e-005
	Per via statica	: 24068.4	0.0	98828.4			
	Totali	: 18496.1	4525.8	22049.1			
	Variazione	: -5572.4	4525.8	-76779.3			

- Risultati angolo di ingresso del sisma: 90.00 [°] + SLV

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
1	24	-6045.7	33441.9	153660.7	8.6682914242e-005	-4.5778733477e-004	-1.7769699611e-005
	20	124.9	203.2	1523.8	4.4080280714e-006	6.5695775627e-006	4.9473057140e-007
	23	10549.6	10551.7	98672.9	-2.1495379579e-004	-1.9154672922e-004	-1.9201546055e-005
	21	997.8	2683.9	22221.2	-3.7876259249e-005	-9.2233415402e-005	-7.8994704231e-006
	22	161.5	223.2	1691.2	5.0102691666e-006	6.3335028863e-006	4.8342838171e-007
	19	-84.6	-136.1	-1013.0	4.7069953014e-006	6.9427482828e-006	5.1768172640e-007
	17	1214.2	1024.7	9145.1	1.1963530225e-004	9.0528064526e-005	8.5441001057e-006
	18	25.1	40.3	298.5	-1.8488386083e-005	-2.7252613916e-005	-2.0210699609e-006
	Per via statica	: -0.0	39329.8	911544.0			
	Totali	: 12010.1	35726.6	188709.8			
	Variazione	: 12010.1	-3603.2	-722834.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
13	24	240.9	7499.8	-2051.3	-1.6827547449e-005	-5.2569525720e-004	9.0698334932e-006
	20	154.7	98.4	-338.2	2.6601983489e-005	1.7378314248e-005	-2.2202485636e-006
	23	-160.7	7526.6	2693.9	1.5952811329e-005	-7.4620617815e-004	-4.0448747301e-006
	21	-51.7	-94.3	-1739.0	9.5616558263e-006	1.5060782797e-005	1.1445160392e-005
	22	29.4	185.4	205.9	4.4419589614e-006	2.7826800888e-005	9.1061583718e-007
	19	-256.2	1939.6	1541.9	6.9452187475e-005	-5.2347732559e-004	-1.1119336285e-005
	17	1.2	-0.5	1.0	5.6327057454e-007	-2.2194052662e-007	1.8921644738e-008
	18	139.8	49.4	73.8	-5.0255870369e-004	-1.7577208715e-004	-8.2249442318e-006
	Per via statica	: -0.0	8073.9	106561.5			
	Totali	: 314.3	11094.7	3885.0			
	Variazione	: 314.3	3020.8	-102676.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
7	24	-952.0	62469.7	-367075.3	9.8220650266e-006	-6.9946322701e-004	2.7170503465e-005
	20	1135.0	2776.7	-24604.7	2.8835575768e-005	7.8826361363e-005	-4.0977010485e-006
	23	6078.2	6959.3	-59819.3	-8.9119558399e-005	-1.1372940000e-004	5.7826765428e-006
	21	-23.0	-176.6	1304.4	6.2762013710e-007	5.3141907122e-006	-2.4225222081e-007

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	22	-3956.5	6129.2	-54925.2	-8.8319365733e-005	1.5303320904e-004	-8.0207592089e-006
	19	8.9	-70.1	433.0	-3.5714784833e-007	3.0553974448e-006	-1.2284964193e-007
	17	-0.0	-0.4	2.8	-2.2888030744e-010	-3.1802411256e-008	1.3801235848e-009
	18	-0.8	26.1	-174.5	4.2714829015e-007	-1.5173810428e-005	6.4411942838e-007
	Per via statica	: -0.0	54654.9	-1624668.9			
	Totali	: 7297.8	63618.7	-380273.3			
	Variazione	: 7297.8	8963.8	1244395.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
2	24	-34146.2	32961.9	-77860.4	5.5975757920e-004	-5.6669008391e-004	2.1573693116e-005
	20	301.6	291.4	2529.3	1.2174130597e-005	1.0566881357e-005	9.7751038547e-007
	23	24804.0	32273.3	283360.0	-5.7783017761e-004	-6.7450717655e-004	-6.3319078568e-005
	21	-1677.4	10595.9	95511.9	7.2802103447e-005	-4.1110781903e-004	-3.9929308266e-005
	22	462.2	231.4	2043.7	1.6393442409e-005	7.3586047161e-006	6.9592199549e-007
	19	-214.1	-177.3	-1525.8	1.3621270180e-005	1.0147882794e-005	9.2819908088e-007
	17	4832.8	2868.7	27318.8	5.4443400342e-004	2.8665745039e-004	2.9892731483e-005
	18	64.5	50.1	429.1	-5.4421746350e-005	-3.8073100345e-005	-3.4577934208e-006
	Per via statica	: -0.0	77478.0	1731721.4			
	Totali	: -41462.0	48702.6	307961.2			
	Variazione	: -41462.0	-28775.4	-1423760.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
8	24	-19914.8	67881.7	38941.0	2.0300931268e-004	-7.0276131631e-004	5.3337959534e-006
	20	8549.8	13551.4	-133775.7	2.1460351448e-004	3.8368380852e-004	-2.1537175844e-005
	23	28579.2	47854.3	-383053.5	-4.1401107371e-004	-7.6804009906e-004	3.7003004122e-005
	21	-93.9	-144.8	1335.1	2.5349898571e-006	4.3821212812e-006	-2.3390013451e-007
	22	-17544.9	17510.0	-154258.2	-3.8695216046e-004	4.3119917653e-004	-2.2268597209e-005
	19	118.3	170.6	-1774.0	-4.6788735484e-006	-7.6509556225e-006	4.4630142379e-007
	17	0.2	0.2	-2.2	1.2787058778e-008	1.4571216962e-008	-9.6340535161e-010
	18	-21.2	-27.5	299.9	1.1128623592e-005	1.6417849012e-005	-9.9276064342e-007
	Per via statica	: -0.0	124593.4	-3706027.8			
	Totali	: -38912.6	88254.0	-438563.1			
	Variazione	: -38912.6	-36339.5	3267464.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
14	24	872.2	-12170.5	-9433.2	-6.0126711577e-005	8.3540791798e-004	1.7053879846e-005
	20	535.1	144.1	-1186.2	9.0826793099e-005	2.5999505091e-005	-7.3922561661e-006
	23	-567.7	25015.7	6854.7	5.5616438355e-005	-2.4493227802e-003	-5.8378477400e-006
	21	-173.7	-121.3	-5795.4	3.1706282431e-005	1.4307027319e-005	3.7714841476e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	22	100.0	379.0	619.0	1.4911403263e-005	5.5919170528e-005	2.8862580780e-006
	19	-888.2	6639.9	5215.6	2.3764612864e-004	-1.7688819831e-003	-3.6774281896e-005
	17	4.1	-1.0	3.5	1.9215822983e-006	-4.7200297558e-007	6.2936493080e-008
	18	483.1	125.9	238.1	-1.7139319679e-003	-4.4102135690e-004	-2.6927417413e-005
	Per via statica	: -0.0	18425.1	243178.6			
	Totali	: 1121.8	28112.5	-13282.0			
	Variazione	: 1121.8	9687.5	-256460.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
3	24	-47388.6	22195.4	-444941.4	7.7491576144e-004	-4.6780888123e-004	8.5864730075e-005
	20	339.4	302.6	3215.1	1.3664028307e-005	1.0626165136e-005	1.2745164780e-006
	23	24034.8	37042.1	265300.8	-5.5852558829e-004	-7.9132129777e-004	-5.6885039593e-005
	21	-10079.1	22216.6	202673.6	4.3635960397e-004	-8.5859385043e-004	-8.4537806664e-005
	22	653.7	62.7	1219.0	2.3126203281e-005	1.6708142241e-006	4.4957311083e-007
	19	-260.8	-155.8	-1738.1	1.6555029230e-005	8.5531227999e-006	1.0928218391e-006
	17	10413.1	4999.0	47897.7	1.1701668173e-003	4.9796525879e-004	5.2241592881e-005
	18	80.7	40.1	460.9	-6.7938889745e-005	-2.9049873855e-005	-3.8562917727e-006
	Per via statica	: -0.0	120643.7	2698209.5			
	Totali	: -53844.5	50018.5	549154.9			
	Variazione	: -53844.5	-70625.2	-2149054.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
9	24	-37534.2	25530.4	901890.9	3.8281347589e-004	-1.6703646564e-004	-4.6178518042e-005
	20	21018.2	29109.2	-297631.9	5.2783278772e-004	8.2739109260e-004	-4.7670512266e-005
	23	39496.0	65292.7	-388291.8	-5.7244585074e-004	-1.0275112980e-003	4.0154767980e-005
	21	-260.2	-123.0	2665.9	7.0249664759e-006	4.1673459499e-006	-4.1906204120e-007
	22	-37598.9	26701.5	-227214.3	-8.2966172624e-004	6.5598982780e-004	-3.3040401131e-005
	19	268.0	504.0	-4206.1	-1.0607929384e-005	-2.2176767647e-005	1.1013673195e-006
	17	0.3	1.0	-6.1	2.4463503765e-008	7.4562489950e-008	-3.0171496326e-009
	18	-45.2	-100.8	747.7	2.3716584579e-005	5.8257276807e-005	-2.6591068125e-006
	Per via statica	: -0.0	193430.6	-5747671.5			
	Totali	: -67674.4	82499.8	-1037129.0			
	Variazione	: -67674.4	-110930.8	4710542.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
15	24	1523.4	-24088.8	-8122.8	-1.0504999101e-004	1.6594981002e-003	7.7169018081e-006
	20	916.1	63.2	-2098.3	1.5554075469e-004	1.3395612632e-005	-1.2840824967e-005
	23	-972.7	24607.5	4731.8	9.5320026665e-005	-2.4116752468e-003	1.3136299783e-006
	21	-291.9	-12.9	-9596.5	5.3293627597e-005	-1.0662141285e-005	6.2736531815e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	22	167.5	369.1	868.6	2.4987335722e-005	5.4181941216e-005	4.2323528658e-006
	19	-1523.5	11206.5	8807.9	4.0775458142e-004	-2.9864825868e-003	-6.2146027762e-005
	17	7.0	-1.1	6.2	3.2961819612e-006	-5.4604797520e-007	1.0916727510e-007
	18	827.6	172.9	376.3	-2.9368854649e-003	-6.0464959457e-004	-4.3267949140e-005
	Per via statica	: -0.0	28609.1	-377590.4			
	Totali	: 1943.4	35437.4	-14674.2			
	Variazione	: 1943.4	6828.3	362916.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
16	24	2065.5	-11716.2	1868.7	-1.4243241109e-004	8.1012546484e-004	-1.0620174692e-005
	20	1242.7	-175.3	-2989.0	2.1100718164e-004	-2.6031240327e-005	-1.7957243335e-005
	23	-1301.3	7005.6	-1858.0	1.2752410837e-004	-6.8892278716e-004	1.1624082359e-005
	21	-389.1	259.5	-12602.8	7.1036569880e-005	-6.4547692692e-005	8.2764966122e-005
	22	221.9	104.0	876.6	3.3110874969e-005	1.4565478615e-005	4.5693267232e-006
	19	-2070.7	15036.8	11862.5	5.5422747535e-004	-4.0071741553e-003	-8.3809894370e-005
	17	9.5	-0.7	8.8	4.4809145149e-006	-3.7087645828e-007	1.5242820796e-007
	18	1123.7	174.9	462.5	-3.9877354059e-003	-6.0943688782e-004	-5.4178353850e-005
	Per via statica	: -0.0	38799.7	-512088.7			
	Totali	: 2627.2	20164.2	-15377.1			
	Variazione	: 2627.2	-18635.5	496711.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
4	24	-19746.7	38516.0	-538522.5	3.2290591269e-004	-7.5990503625e-004	1.0651225133e-004
	20	24.9	273.6	3857.4	1.0016200333e-006	9.0903127664e-006	1.5780170072e-006
	23	6140.5	15631.1	-27264.6	-1.4269345064e-004	-3.7787114063e-004	1.1982222090e-005
	21	-20981.9	33700.7	307378.2	9.0837943946e-004	-1.3024491699e-003	-1.2820731575e-004
	22	394.5	-182.4	81.9	1.3958509983e-005	-6.6012832983e-006	1.1991269343e-007
	19	-67.4	-107.5	-1938.9	4.2801505127e-006	5.2652392257e-006	1.2761487430e-006
	17	16182.4	6980.7	66923.7	1.8184867925e-003	6.9530006880e-004	7.2999231842e-005
	18	25.4	22.3	492.9	-2.1405917080e-005	-1.3449060249e-005	-4.3586096109e-006
	Per via statica	: -0.0	163617.3	3660482.8			
	Totali	: -32713.9	55011.9	-627600.4			
	Variazione	: -32713.9	-108605.4	-4288083.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
10	24	-17041.6	33889.2	1192589.8	1.7380850447e-004	-2.2222836941e-004	-6.1048342616e-005
	20	34020.4	43799.7	-454228.9	8.5436084955e-004	1.2466744328e-003	-7.2582700952e-005
	23	20801.7	29831.0	198568.5	-3.0149568270e-004	-4.1079254195e-004	-1.0671120505e-005
	21	-491.9	-224.4	5939.0	1.3283640476e-005	7.9175541806e-006	-9.1917105120e-007

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	22	-61072.3	33615.4	-275325.8	-1.3476283162e-003	8.2329870052e-004	-4.0335645396e-005
	19	384.3	733.5	-5129.7	-1.5212220959e-005	-3.1853342910e-005	1.3938599006e-006
	17	0.4	1.4	-3.9	2.5069760218e-008	1.0114097562e-007	-2.5052310710e-009
	18	-58.3	-144.3	754.0	3.0579542188e-005	8.1632710893e-005	-2.9225132741e-006
	Per via statica	: -0.0	262331.2	-7794244.5			
	Totali	: -73245.0	73579.8	1331493.9			
	Variazione	: -73245.0	-188751.4	9125738.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
17	24	2442.0	10931.2	13244.5	-1.6839178771e-004	-7.4816143844e-004	-2.7110627400e-005
	20	1485.5	-486.0	-3714.5	2.5223560799e-004	-7.7957346102e-005	-2.1977306273e-005
	23	-1527.9	-14029.3	-8497.1	1.4973068026e-004	1.3707238957e-003	1.9606979769e-005
	21	-457.9	602.0	-14611.3	8.3588918426e-005	-1.2989915625e-004	9.6363567249e-005
	22	260.3	-288.4	738.4	3.8832660059e-005	-4.3916825647e-005	4.2657316087e-006
	19	-2479.2	17742.8	14060.5	6.6355362395e-004	-4.7281730466e-003	-9.9499002236e-005
	17	11.3	-0.0	11.0	5.3638544182e-006	-4.6969644047e-008	1.8632513532e-007
	18	1344.0	144.9	502.2	-4.7693672378e-003	-5.0167472402e-004	-6.0012824445e-005
	Per via statica	: -0.0	48990.3	-646586.4			
	Totali	: 3107.4	24725.2	23454.0			
	Variazione	: 3107.4	-24265.1	670040.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
5	24	24011.0	60957.3	-447936.8	-4.1724709486e-004	-1.1855950120e-003	1.0343445936e-004
	20	-548.2	192.1	3808.1	-2.3455345529e-005	6.0906596203e-006	1.7422979199e-006
	23	-13865.9	-14777.2	-376554.3	3.4241590645e-004	2.4172068859e-004	1.0087839136e-004
	21	-30106.6	42935.4	370036.5	1.3851192230e-003	-1.7720014874e-003	-1.6649558513e-004
	22	-241.9	-466.0	-1333.6	-9.0944101632e-006	-1.7119978197e-005	-3.2750553787e-007
	19	311.6	-28.1	-1761.4	-2.1017682415e-005	2.7690869256e-007	1.3272471672e-006
	17	20060.9	8381.3	75864.7	2.3956355211e-003	8.9181632701e-004	8.9302144429e-005
	18	-86.2	-4.2	423.8	7.7129235820e-005	9.0587307455e-006	-4.3697631481e-006
	Per via statica	: -0.0	194405.3	4454816.5			
	Totali	: -44416.8	76250.4	-710408.1			
	Variazione	: -44416.8	-118154.9	-5165224.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
11	24	27435.3	67360.8	1000830.9	-2.9525908934e-004	-6.2110988743e-004	-5.1362512189e-005
	20	43763.5	54944.3	-522860.6	1.1597072068e-003	1.6434305224e-003	-9.2722235011e-005
	23	-10591.3	-23771.9	875653.6	1.6198188504e-004	5.2119085961e-004	-7.7975309534e-005
	21	-663.2	-296.0	8124.2	1.8896649812e-005	1.1206032453e-005	-1.3717771596e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	22	-80830.7	36837.4	-263501.0	-1.8820724509e-003	9.4553100893e-004	-4.3435174585e-005
	19	474.5	912.8	-5024.5	-1.9819408894e-005	-4.1330750793e-005	1.5838813587e-006
	17	0.4	1.7	-0.9	2.8098145485e-008	1.2890427829e-007	-1.7589005076e-009
	18	-69.1	-178.9	604.2	3.8245520503e-005	1.0507793211e-004	-2.9527132345e-006
	Per via statica	: -0.0	313904.3	-9602455.0			
	Totali	: -94652.2	97745.5	1483045.8			
	Variazione	: -94652.2	-216158.8	11085501.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
6	24	7751.2	17705.1	-17974.4	-1.1244138045e-003	-2.5899651521e-003	1.0410899583e-004
	20	-141.7	-43.5	151.1	-5.0604267620e-005	-1.5939553537e-005	1.8959408333e-006
	23	-3588.4	4520.0	-24905.4	7.3974935455e-004	-9.6844297510e-004	1.7661891303e-004
	21	-4730.5	675.8	16020.5	1.8168089610e-003	-2.1760584714e-004	-2.0219287364e-004
	22	-114.1	-65.0	-84.6	-3.5817659320e-005	-2.0255299364e-005	-7.4036003935e-007
	19	87.8	32.4	-66.9	-4.9462299765e-005	-1.8536927911e-005	1.3752246822e-006
	17	2920.5	63.9	3153.2	2.9114013631e-003	4.2182660665e-005	1.0377047492e-004
	18	-25.2	-10.0	15.6	1.8849790240e-004	7.5662877648e-005	-4.3811403181e-006
	Per via statica	: -0.0	28132.2	376295.8			
	Totali	: 9980.9	18511.8	-35470.1			
	Variazione	: 9980.9	-9620.4	-411765.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
18	24	1629.1	16097.4	12268.7	-1.8296291648e-004	-1.8004161266e-003	-3.6269020531e-005
	20	1005.1	-427.3	-2516.7	2.7794484824e-004	-1.1312762150e-004	-2.4286241993e-005
	23	-1018.3	-16451.1	-7510.0	1.6253214307e-004	2.6207878067e-003	2.3647023854e-005
	21	-302.1	509.7	-9530.2	8.9831533326e-005	-1.7305881311e-004	1.0363170036e-004
	22	173.9	-344.6	377.6	4.2252895827e-005	-8.4545880676e-005	3.9469396225e-006
	19	-1680.0	11744.6	9297.9	7.3236445894e-004	-5.0972826035e-003	-1.0817256775e-004
	17	7.7	0.3	7.4	5.9048498885e-006	1.9054970023e-007	2.0576355307e-007
	18	908.3	72.6	314.8	-5.2497484567e-003	-4.0676989329e-004	-6.2667139439e-005
	Per via statica	: -0.0	36335.7	-479568.1			
	Totali	: 2077.8	25238.2	18233.5			
	Variazione	: 2077.8	-11097.5	497801.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
12	24	5555.5	12536.8	11905.7	-7.8867315551e-004	-1.7713883073e-003	-4.1023650172e-005
	20	3995.3	-9.6	-10310.3	1.3965639632e-003	1.9342133184e-005	-1.1135063319e-004
	23	-2663.8	5526.7	22416.4	5.3740268639e-004	-1.0879045071e-003	-1.3272849693e-004
	21	-62.1	47.8	163.4	2.3328370446e-005	-1.7602050583e-005	-1.7843021188e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	22	-7925.7	695.9	-4228.8	-2.4342966289e-003	2.2220223708e-004	-4.1482743352e-005
	19	42.5	32.9	-97.3	-2.3422373942e-005	-1.8468595847e-005	1.7699983517e-006
	17	0.0	0.1	-0.0	3.1043022305e-008	1.3427448656e-007	-1.1601091837e-009
	18	-6.1	-9.9	11.4	4.4388016267e-005	7.2815691651e-005	-3.0250041800e-006
	Per via statica	: -0.0	28747.0	379649.4			
	Totali	: -10601.8	13983.9	28183.8			
	Variazione	: -10601.8	-14763.1	-351465.6			

- Risultati angolo di ingresso del sisma: 90.00 [°] - SLV

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
1	32	1200.9	36007.6	158942.4	-1.7146935915e-005	-5.5301717622e-004	-3.1828684177e-005
	26	8.4	20.4	120.1	-2.8238486672e-007	-7.5270177640e-007	-5.3750378658e-008
	31	7090.4	4606.9	34773.9	-1.4995920301e-004	-1.0889772485e-004	-9.3862941296e-006
	29	1821.4	2921.2	22240.3	6.5811927362e-005	1.1805888430e-004	1.0243595362e-005
	27	-14.3	-34.1	-202.2	-7.9395601095e-007	-2.0714995217e-006	-1.4856006916e-007
	30	102.6	213.8	1276.6	-3.7009748334e-006	-8.4597319425e-006	-6.0947879097e-007
	25	838.3	526.5	4523.9	1.1812669484e-004	8.3965697096e-005	7.9983718547e-006
	28	35.9	78.1	480.2	-1.3025400336e-005	-3.1178848571e-005	-2.2967730382e-006
	Per via statica	: -0.0	39329.8	263566.6			
	Totali	: 7553.4	36646.1	165975.9			
	Variazione	: 7553.4	-2683.7	-97590.7			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
13	32	-562.1	8754.6	1542.7	3.9098194139e-005	-6.1067319537e-004	-8.4107235476e-006
	26	-215.1	-4.0	-141.1	3.5376165795e-005	8.3485944715e-007	8.3984298743e-007
	31	405.7	6382.4	-2489.4	-4.1795739450e-005	-6.5665027679e-004	4.3205070739e-006
	29	208.6	-218.1	167.9	3.6722937262e-005	-3.8231908648e-005	7.7674570561e-007
	27	290.3	2004.2	-1332.3	7.8440252631e-005	5.3972191969e-004	-8.9143375669e-006
	30	-163.4	335.7	-251.6	2.8711239770e-005	-5.8759626216e-005	1.1512319269e-006
	25	-2.7	-0.1	-1.7	-1.8802550678e-006	-5.8924150919e-008	-4.3066294964e-008
	28	-172.2	131.1	1221.1	3.0465731059e-004	-2.4849767305e-004	-7.9517795125e-005
	Per via statica	: -0.0	8073.9	-26460.2			
	Totali	: -729.3	11260.6	-3328.7			
	Variazione	: -729.3	3186.7	23131.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
7	32	-527.2	54872.2	-390320.2	5.4171589620e-006	-5.3283953019e-004	1.5323633519e-005
	26	828.7	3498.6	-38241.3	-2.0129454538e-005	-7.6811790590e-005	4.0411370393e-006
	31	5584.1	13134.2	-163547.4	-8.4985919216e-005	-1.7739599903e-004	1.1129157145e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	29	-70.5	-304.0	2624.9	-1.8342162983e-006	-7.3390416542e-006	2.7901878114e-007
	27	-2.6	-33.6	217.4	-1.0574707946e-007	-1.2754119990e-006	3.1870468306e-008
	30	-3386.2	6289.5	-68112.7	8.7916955422e-005	-1.4777766232e-004	7.6773945346e-006
	25	-0.1	-0.5	4.9	-8.8362446947e-009	-4.9900488543e-008	2.0538702750e-009
	28	24.3	132.8	-1146.3	-6.3611891069e-006	-3.2231238195e-005	1.2250167145e-006
	Per via statica	: -0.0	54654.9	-724201.6			
	Totali	: 6541.2	57498.8	-437715.5			
	Variazione	: 6541.2	2843.9	286486.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
2	32	-20518.5	48571.0	77843.6	3.3497168491e-004	-8.2340901593e-004	-2.4949132562e-005
	26	19.9	7.1	86.7	-7.6817026601e-007	-3.2514972209e-007	-4.1024352634e-008
	31	18642.2	18775.0	110774.0	-4.5078578276e-004	-4.9799090492e-004	-3.6022742233e-005
	29	632.7	10828.4	94223.6	2.6139315806e-005	5.0772862880e-004	4.9456376663e-005
	27	-34.2	-13.1	-156.1	-2.1695554574e-006	-9.7812031781e-007	-1.2156621738e-007
	30	314.8	-42.3	149.7	-1.2984895594e-005	1.6899048027e-006	-4.5039168862e-008
	25	3460.1	1393.9	13398.7	5.5745709481e-004	2.5767401994e-004	2.7107874280e-005
	28	79.5	53.2	565.1	-3.3004237467e-005	-2.5675842868e-005	-2.9161485612e-006
	Per via statica	: -0.0	77478.0	455232.5			
	Totali	: 27347.9	54037.9	168943.8			
	Variazione	: 27347.9	-23440.1	-286288.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
8	32	-19632.8	40993.3	277191.0	1.9931000061e-004	-4.5549694938e-004	-1.9459992897e-005
	26	7014.2	17178.0	-197237.1	-1.6833111403e-004	-3.7027583482e-004	2.0763232311e-005
	31	27244.1	64144.4	-744578.7	-4.0966539942e-004	-8.6501990600e-004	4.9225715691e-005
	29	-264.6	-248.2	1715.2	-6.7971879886e-006	-6.0401427827e-006	1.6595497053e-007
	27	32.3	108.1	-1497.3	1.2739078272e-006	3.7196301002e-006	-2.6851651429e-007
	30	-15592.9	16213.1	-173504.8	3.9998983465e-004	-3.7704849938e-004	1.9219004290e-005
	25	-0.4	-0.9	8.4	-4.0941700520e-008	-8.0663791939e-008	3.5415723288e-009
	28	81.3	97.7	-609.0	-2.0992996436e-005	-2.4089508653e-005	5.6579982934e-007
	Per via statica	: -0.0	124593.4	-1653288.3			
	Totali	: -36871.1	81555.1	-829820.2			
	Variazione	: -36871.1	-43038.4	823468.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
14	32	-1977.4	-5853.1	8051.2	1.3574301752e-004	3.9831775079e-004	-1.6808609702e-005
	26	-743.4	-48.6	-466.6	1.2064444155e-004	8.4694666071e-006	2.7707671383e-006
	31	1413.1	21613.9	-6491.8	-1.4369075998e-004	-2.1962312603e-003	7.3083044221e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	29	720.1	-446.7	495.2	1.2509469978e-004	-7.7084490956e-005	2.5038873313e-006
	27	1005.7	6783.5	-4489.7	2.6823361650e-004	1.8030616011e-003	-2.9438883178e-005
	30	-562.4	669.1	-725.4	9.7553254552e-005	-1.1530802069e-004	3.6439030893e-006
	25	-9.5	0.1	-5.9	-6.4138707231e-006	5.5366207755e-008	-1.4242061713e-007
	28	-598.1	317.9	4135.0	1.0445013838e-003	-6.0971294086e-004	-2.6276865304e-004
	Per via statica	: -0.0	18425.1	-60383.5			
	Totali	: -2552.2	23203.2	11588.7			
	Variazione	: -2552.2	4778.2	71972.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
3	32	-36304.8	42068.9	-211306.7	5.9122247761e-004	-6.4970885235e-004	2.8971112608e-005
	26	30.6	-13.4	121.1	-1.1769624475e-006	4.6094075943e-007	-4.4859536736e-008
	31	19342.1	26916.8	69273.2	-4.6655335881e-004	-6.8273296936e-004	-2.7407163772e-005
	29	-6390.7	22164.0	195702.4	-2.6335143501e-004	1.0380506100e-003	1.0211552516e-004
	27	-52.5	19.7	-224.5	-3.3217331916e-006	1.0751588472e-006	-1.4104745379e-007
	30	582.7	-442.0	-606.5	-2.3977485816e-005	1.8829543206e-005	5.2468497284e-007
	25	7596.1	2370.5	23010.1	1.2208002669e-003	4.3752726731e-004	4.6311046159e-005
	28	106.9	11.1	952.3	-4.4305302774e-005	-1.0019067107e-005	-4.4511116964e-006
	Per via statica	: -0.0	120643.7	710544.6			
	Totali	: -41500.2	55752.5	295768.1			
	Variazione	: -41500.2	-64891.1	-414776.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
9	32	-36909.2	-566.7	1300779.5	3.7488722602e-004	-1.3633831686e-004	-7.0291749910e-005
	26	17529.3	36487.1	-425750.3	-4.2089241829e-004	-7.8510710584e-004	4.5004569836e-005
	31	37923.6	74956.0	-811184.1	-5.7054056749e-004	-1.0208444513e-003	5.2846292510e-005
	29	-506.7	-31.4	418.3	-1.3023863589e-005	-7.0941589561e-007	4.8558982858e-008
	27	105.8	339.6	-3988.1	4.1732627630e-006	1.1998350850e-005	-6.9373740601e-007
	30	-34054.8	22218.4	-231503.9	8.7401636825e-004	-5.1868638884e-004	2.5500310137e-005
	25	-0.9	-1.2	13.4	-8.7504091916e-008	-1.0477970454e-007	5.8808445783e-009
	28	145.3	-16.4	213.9	-3.7540094972e-005	3.7382451392e-006	-2.4863548021e-007
	Per via statica	: -0.0	193430.6	-2560806.0			
	Totali	: -63967.4	87073.3	-1582408.1			
	Variazione	: -63967.4	-106357.3	978398.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
15	32	-3412.8	-16790.3	7781.1	2.3436761470e-004	1.1508496916e-003	-1.0569706639e-005
	26	-1273.6	-107.0	-765.9	2.0675861106e-004	1.8325647525e-005	4.5828597486e-006
	31	2419.9	21123.1	-5002.8	-2.4614460381e-004	-2.1481297179e-003	2.2580041556e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	29	1231.0	-520.6	679.7	2.1391846533e-004	-8.9734336029e-005	3.5581282424e-006
	27	1725.2	11365.3	-7542.3	4.6027964607e-004	3.0219375857e-003	-4.9539334039e-005
	30	-957.6	724.7	-949.4	1.6617129611e-004	-1.2473169545e-004	4.9660854386e-006
	25	-16.2	0.5	-10.1	-1.0997062814e-005	2.7313418010e-007	-2.4196923038e-007
	28	-1026.6	436.9	6993.7	1.7935738822e-003	-8.5533034678e-004	-4.4333419202e-004
	Per via statica	: -0.0	28609.1	93759.2			
	Totali	: -4389.8	28773.8	13092.1			
	Variazione	: -4389.8	164.7	-80667.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
16	32	-4632.2	-8625.6	404.9	3.1810591366e-004	5.9305129452e-004	3.4064413565e-006
	26	-1729.6	-179.1	-992.3	2.8078698673e-004	3.0309656532e-005	5.9857632215e-006
	31	3266.8	5550.2	369.6	-3.3229288628e-004	-5.6569984207e-004	-5.5423039448e-006
	29	1667.7	-365.7	639.2	2.8980991036e-004	-6.2819456239e-005	3.5064442941e-006
	27	2345.4	15128.4	-10092.2	6.2574701185e-004	4.0224092355e-003	-6.6444338318e-005
	30	-1291.8	394.2	-802.4	2.2416382877e-004	-6.7480087290e-005	4.4787568527e-006
	25	-22.0	1.0	-13.8	-1.4942052438e-005	6.2178289571e-007	-3.2899063752e-007
	28	-1396.2	444.1	9443.9	2.4393438537e-003	-8.9967967529e-004	-5.9675684509e-004
	Per via statica	: -0.0	38799.7	127156.4			
	Totali	: -5947.8	18123.4	-12589.4			
	Variazione	: -5947.8	-20676.3	-139745.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
4	32	-17768.1	40573.9	-429963.4	2.8935308169e-004	-5.7658642921e-004	6.8911048468e-005
	26	11.8	-19.7	383.2	-4.5478528241e-007	5.7045174810e-007	-1.5379444953e-007
	31	5685.4	21363.2	-135504.7	-1.3713798684e-004	-4.7945117776e-004	2.9357648529e-005
	29	-16463.2	33225.4	292592.7	-6.7842259633e-004	1.5556762805e-003	1.5272094505e-004
	27	-21.7	29.1	-668.7	-1.3708047852e-006	1.2945343400e-006	-4.4563997815e-007
	30	482.5	-676.3	1364.7	-1.9856063983e-005	2.7529289400e-005	-2.4658862704e-007
	25	11923.5	3272.8	31818.7	1.9162652560e-003	6.0417292889e-004	6.4028195168e-005
	28	22.5	16.5	2105.8	-9.3092838001e-006	-1.8782016820e-005	-9.7974769867e-006
	Per via statica	: -0.0	163617.3	964806.3			
	Totali	: -27038.0	57586.8	-543255.1			
	Variazione	: -27038.0	-106030.5	-1508061.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
10	32	-17829.6	34430.1	1400536.9	1.8109579094e-004	-5.1044281567e-004	-7.9513230524e-005
	26	28266.5	54391.0	-638618.8	-6.7870160562e-004	-1.1693301650e-003	6.7593496740e-005
	31	21449.9	18268.0	-50294.4	-3.2270211135e-004	-2.7266720479e-004	1.0707424148e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	29	-647.5	430.0	-2733.6	-1.6640745535e-005	1.0535055837e-005	-2.5517317736e-007
	27	203.9	606.2	-6685.8	8.0450255834e-006	2.1603172603e-005	-1.1473271040e-006
	30	-55829.5	24991.6	-251621.7	1.4328619424e-003	-5.8585173410e-004	2.7483444119e-005
	25	-1.2	-1.1	15.7	-1.2047978592e-007	-9.6675059177e-008	7.1804587243e-009
	28	163.0	-232.8	1798.8	-4.2116406921e-005	5.6466284332e-005	-1.8275191757e-006
	Per via statica	: -0.0	262331.2	-3472206.0			
	Totali	: -67487.1	73119.1	1562668.8			
	Variazione	: -67487.1	-189212.1	5034875.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	φ_{i,u_x}	φ_{i,u_y}	φ_{i,θ_z}
17	32	-5516.8	8238.8	-8274.8	3.7885648036e-004	-5.6243313851e-004	1.6148949022e-005
	26	-2068.9	-251.6	-1134.8	3.3586253234e-004	4.2274855830e-005	6.9021158563e-006
	31	3880.4	-12935.3	5808.7	-3.9470800839e-004	1.3133924618e-003	-1.1383981297e-005
	29	1991.2	-59.7	464.1	3.4601474731e-004	-9.7823948121e-006	2.8113886687e-006
	27	2808.3	17723.7	-11894.0	7.4924099157e-004	4.7123259576e-003	-7.8516279731e-005
	30	-1537.1	-170.2	-449.6	2.6673231057e-004	3.0164770910e-005	3.0139463866e-006
	25	-26.4	1.6	-16.5	-1.7879766154e-005	1.0248291568e-006	-3.9343810782e-007
	28	-1672.7	364.2	11228.7	2.9223469403e-003	-7.8307005893e-004	-7.0740870702e-004
	Per via statica	: -0.0	48990.3	160553.4			
	Totali	: -7080.9	23103.1	-17784.2			
	Variazione	: -7080.9	-25887.2	-178337.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	φ_{i,u_x}	φ_{i,u_y}	φ_{i,θ_z}
5	32	16745.4	37913.1	-537577.3	-2.8979157357e-004	-5.3780506934e-004	9.6874445836e-005
	26	-44.3	-20.6	632.3	1.8141214330e-006	4.9694763043e-007	-2.8300505216e-007
	31	-10130.9	8764.7	-361576.8	2.5968620559e-004	-9.9509788235e-005	1.0248125104e-004
	29	-25437.6	42475.2	342105.4	-1.1139461060e-003	2.1001297161e-003	1.9658748410e-004
	27	71.5	29.7	-1085.7	4.8075444809e-006	1.0134682657e-006	-8.0397858563e-007
	30	-130.4	-822.1	3703.9	5.7038615588e-006	3.4307998066e-005	-1.3452471458e-006
	25	14875.9	3944.8	35108.9	2.5406049177e-003	7.6861343079e-004	7.7698173241e-005
	28	-192.7	35.8	3086.7	8.4843100803e-005	-3.4929002554e-005	-1.5704184414e-005
	Per via statica	: -0.0	194405.3	1251891.1			
	Totali	: -34734.4	58170.4	-744671.7			
	Variazione	: -34734.4	-136234.9	-1996562.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	φ_{i,u_x}	φ_{i,u_y}	φ_{i,θ_z}
11	32	21292.8	97264.5	918645.8	-2.2820939330e-004	-1.1758189978e-003	-6.5975816841e-005
	26	36155.7	67161.1	-747350.0	-9.1604815233e-004	-1.5287132133e-003	8.5526984365e-005
	31	-5190.7	-53939.0	845296.7	8.2401573258e-005	7.2586331023e-004	-6.4513058985e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	29	-613.4	1105.7	-7741.1	-1.6636080734e-005	2.8319777623e-005	-8.2422547562e-007
	27	306.0	869.1	-8774.4	1.2739372793e-005	3.2925813377e-005	-1.6128294684e-006
	30	-74269.4	24021.0	-219238.6	2.0113398180e-003	-5.9895457161e-004	2.5513156177e-005
	25	-1.3	-0.6	12.4	-1.3259164889e-007	-5.1622517504e-008	6.5296824030e-009
	28	114.7	-537.7	4086.8	-3.1281212452e-005	1.3749972485e-004	-4.5146977055e-006
	Per via statica	: -0.0	313904.3	-4430725.0			
	Totali	: -84506.0	131131.5	1497691.9			
	Variazione	: -84506.0	-182772.7	5928416.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
6	32	6072.6	12051.3	-28127.4	-8.7728618589e-004	-1.7155338761e-003	1.2273459754e-004
	26	-13.7	-13.2	37.0	4.6894651241e-006	4.4189551842e-006	-3.8802285654e-007
	31	-2761.1	6750.6	-24839.7	5.9082947954e-004	-1.4099959406e-003	1.6627269025e-004
	29	-4128.4	595.1	19479.5	-1.5092119354e-003	2.6685258175e-004	2.3757229294e-004
	27	22.5	21.8	-63.4	1.2639966689e-005	1.2006815904e-005	-1.0959538984e-006
	30	-110.0	-177.2	215.5	4.0156673105e-005	6.4223586486e-005	-2.1632382955e-006
	25	2173.9	6.3	1896.7	3.0993144020e-003	2.7634798952e-005	8.9707361091e-005
	28	-54.7	-44.6	178.6	2.0103072577e-004	1.5964601363e-004	-2.0634713733e-005
	Per via statica	: -0.0	28132.2	-87196.0			
	Totali	: 8018.8	14085.4	-43008.9			
	Variazione	: 8018.8	-14046.8	44187.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
18	32	-3711.8	12184.5	-8263.2	4.1515816368e-004	-1.3580212121e-003	2.3199853107e-005
	26	-1398.1	-182.2	-734.0	3.6967223002e-004	4.9718766086e-005	7.3807787553e-006
	31	2610.2	-14804.7	5439.7	-4.3242859145e-004	2.4497613411e-003	-1.4187396624e-005
	29	1344.6	104.4	197.5	3.8055558139e-004	3.0022312064e-005	2.2434134621e-006
	27	1901.9	11684.6	-7842.1	8.2646646563e-004	5.0597069977e-003	-8.5144235684e-005
	30	-1036.1	-356.6	-111.2	2.9282891757e-004	1.0117622434e-004	1.8933360865e-006
	25	-17.8	1.2	-11.0	-1.9682984343e-005	1.2902720016e-006	-4.2945484664e-007
	28	-1135.3	178.8	7429.5	3.2304670852e-003	-6.6818117661e-004	-7.6846424069e-004
	Per via statica	: -0.0	36335.7	119081.2			
	Totali	: -4766.7	22017.5	-13727.2			
	Variazione	: -4766.7	-14318.3	-132808.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
12	32	4596.8	19484.7	8931.5	-6.4987365171e-004	-2.7661549422e-003	-5.6364755958e-005
	26	3265.4	165.2	-9894.2	-1.0913085743e-003	-3.4472417927e-005	1.0183764995e-004
	31	-1896.6	2545.8	17352.2	3.9716622751e-004	-5.5666106011e-004	-1.1564411842e-004

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	29	-49.0	59.8	-118.1	-1.7519779902e-005	2.1150969359e-005	-1.1712218999e-006
	27	29.4	13.5	-120.0	1.6157140768e-005	7.0262113675e-006	-1.9902439194e-006
	30	-7259.9	509.0	-1860.6	2.5934715797e-003	-1.7789055768e-004	1.9394731858e-005
	25	-0.1	0.1	0.1	-1.4167385379e-007	9.8986612521e-008	6.6477234808e-009
	28	7.0	-25.3	61.7	-2.5108613866e-005	8.9647790665e-005	-6.2897763716e-006
	Per via statica	: -0.0	28747.0	-93971.5			
	Totali	: -9276.2	19773.4	22287.1			
	Variazione	: -9276.2	-8973.6	116258.6			

- Risultati angolo di ingresso del sisma: 180.00 [°] + SLV

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
1	38	-232.8	-239.1	-1699.4	-4.3572938992e-006	-4.1467233928e-006	-3.6281777746e-007
	33	-2906.5	-2210.2	-16529.3	-1.1959575003e-004	-8.5514792507e-005	-8.1125567821e-006
	40	-41361.7	-1077.3	-8863.5	7.2784311768e-004	1.8758815283e-005	8.6578331410e-006
	35	1.1	-6.5	-50.7	3.1820399356e-008	-3.2386894085e-007	-2.7224722291e-008
	39	-12279.9	-9699.6	-75797.3	3.3669312213e-004	2.4897367041e-004	2.4419813873e-005
	34	-0.7	1.2	9.9	3.9309170122e-008	-7.7559768321e-008	-6.4153263572e-009
	36	481.1	1093.6	8148.5	-4.6371120830e-005	-8.9914662910e-005	-7.7421315975e-006
	37	527.0	730.1	5314.8	7.0073043503e-005	8.7764367930e-005	7.6310980828e-006
	Per via statica	: -32928.9	-0.0	492576.0			
	Totali	: -43419.1	-10105.6	-78792.2			
	Variazione	: -10490.2	-10105.6	-571368.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
13	38	-401.8	-0.0	-291.6	-3.5505212358e-005	-8.0142904884e-012	-1.8947474696e-006
	33	0.5	-0.0	-6.1	7.0633592065e-008	-6.1740785553e-014	-3.8326244211e-008
	40	-12717.0	0.0	-7702.4	1.1245116963e-003	-4.8467997751e-010	5.5551640035e-005
	35	7.7	0.0	-125.9	1.0131450518e-006	4.3951016720e-010	-1.0456412493e-006
	39	-6720.8	0.0	6570.4	8.3653300587e-004	-4.0050227551e-010	-4.6169598759e-006
	34	-1645.0	-0.0	2488.9	4.9630922906e-004	5.3652716321e-011	-1.2548299823e-005
	36	-158.3	-0.0	-4169.9	1.1453308163e-004	4.9229050473e-010	6.1999190828e-005
	37	573.2	0.0	2967.1	3.9548988491e-004	4.5748886949e-010	7.2511673280e-005
	Per via statica	: -6759.9	-0.0	81207.5			
	Totali	: -14579.0	0.0	-11076.8			
	Variazione	: -7819.1	0.0	-92284.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
7	38	-6723.3	11646.2	-108466.4	-9.0615314942e-005	1.4534924086e-004	-7.6198619985e-006
	33	0.4	0.1	-2.0	9.7376365712e-009	2.9734126806e-009	-2.5271780121e-010

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	-58769.6	4804.4	-16502.9	7.4041724337e-004	-6.0200751438e-005	4.5627990773e-006
	35	-772.1	-2040.1	20820.9	-2.4324049218e-005	-7.3247564396e-005	3.8600828200e-006
	39	-2041.7	-8162.9	80517.1	3.0883115467e-005	1.5077668210e-004	-7.7612961993e-006
	34	-1.5	-0.5	9.2	6.6844510875e-008	2.3699267930e-008	-1.9016731100e-009
	36	-29.8	-4.1	130.8	1.7326806028e-006	2.4187464120e-007	-3.3042506997e-008
	37	172.5	47.0	-1022.5	1.4570479446e-005	4.0650456777e-006	-4.0203639751e-007
	Per via statica	: -45759.9	-0.0	-487005.7			
	Totali	: -59245.9	14965.8	-136060.7			
	Variazione	: -13486.0	14965.8	350944.9			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
2	38	67.2	-730.0	-6093.3	1.5992393065e-007	-1.4475809359e-005	-1.3331694102e-006
	33	-12214.9	-5928.5	-44934.7	-5.6449818040e-004	-2.6225598517e-004	-2.7445551070e-005
	40	-59556.9	19648.6	163519.2	1.1640031416e-003	-3.9117603772e-004	-2.4646301221e-005
	35	-0.5	-27.2	-249.2	-1.6659216937e-007	-1.5508767174e-006	-1.5865110346e-007
	39	-40547.0	-18248.0	-147646.5	1.2426996155e-003	5.3553067132e-004	5.9945826092e-005
	34	0.3	5.6	52.0	-6.0280363354e-008	-4.0296472228e-007	-4.2140158861e-008
	36	-104.9	3967.3	35016.2	-2.2330216332e-005	-3.7293784483e-004	-3.6578831990e-005
	37	-131.4	2443.9	21049.9	1.0148241076e-005	3.3589859347e-004	3.2058465011e-005
	Per via statica	: -64868.6	-0.0	898345.8			
	Totali	: -73586.8	27690.1	227286.8			
	Variazione	: -8718.2	27690.1	-671058.9			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
8	38	-30320.5	33647.3	-296647.4	-3.9255322320e-004	4.1489753116e-004	-2.1225535125e-005
	33	-0.3	-0.4	2.5	-8.2369502704e-009	-1.2052730419e-008	3.3137324572e-010
	40	-125427.3	7662.7	-43560.5	1.5617277938e-003	-9.4865240936e-005	1.0145837265e-005
	35	-5902.2	-10392.0	115037.6	-1.9111772366e-004	-3.6864366207e-004	2.0744696313e-005
	39	-15407.4	-30203.2	312395.9	2.5562856720e-004	5.5119508093e-004	-2.9034182064e-005
	34	1.1	1.4	-6.2	-4.8157289891e-008	-6.4215946923e-008	1.2566032031e-009
	36	60.5	77.6	-640.8	-3.3744467520e-006	-4.5370814397e-006	1.8287457200e-007
	37	-429.0	-413.1	3311.9	-3.5493656954e-005	-3.5307459551e-005	1.3351999842e-006
	Per via statica	: -104316.0	-0.0	-1380814.8			
	Totali	: -130537.4	46286.4	441190.0			
	Variazione	: -26221.3	46286.4	1822004.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
14	38	-1043.8	-0.0	-1322.0	-9.2411660445e-005	-3.5401838818e-011	-6.5193218528e-006
	33	1.2	-0.0	-19.9	1.1818612752e-007	-1.4135909150e-013	-1.2612712352e-007

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	3794.4	-0.0	-36841.8	-2.3427034572e-004	1.4098173074e-010	1.0107359664e-004
	35	17.3	0.0	-415.1	1.3187555498e-006	1.4569044456e-009	-3.4436633626e-006
	39	-18511.1	0.0	17283.8	2.2770620242e-003	-1.1061830198e-009	-8.8926378564e-006
	34	-5683.4	-0.0	8497.2	1.6934998350e-003	1.8042864068e-010	-4.1462627489e-005
	36	-481.3	-0.0	-14074.4	3.5925213495e-004	1.6113239564e-009	2.0487049231e-004
	37	1521.7	0.0	10398.0	1.0784875966e-003	1.5747234930e-009	2.4121177784e-004
	Per via statica	: -15426.4	-0.0	185228.4			
	Totali	: -19766.6	0.0	-43468.4			
	Variazione	: -4340.2	0.0	-228696.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
3	38	741.6	-1304.5	-11148.6	1.2636469521e-005	-2.5802893619e-005	-2.3094243251e-006
	33	-27088.3	-10082.8	-71508.9	-1.2365124063e-003	-4.4492386562e-004	-4.6801368296e-005
	40	-18234.7	35765.4	263004.0	3.1411964486e-004	-7.1027542063e-004	-5.4554958769e-005
	35	10.6	-60.4	-584.1	2.8441810101e-007	-3.4374143751e-006	-3.6379981521e-007
	39	-55626.7	-13905.4	-107521.7	1.6732940394e-003	4.0707589069e-004	5.0954266300e-005
	34	-1.1	12.9	126.9	-1.0904394370e-008	-9.2928762354e-007	-1.01044400300e-007
	36	-2656.6	8111.6	75106.1	1.8231601911e-004	-7.6062900958e-004	-7.5903133022e-005
	37	-2029.9	4721.1	42323.8	-2.2389570620e-004	6.4728121856e-004	6.1823463459e-005
	Per via statica	: -101009.1	-0.0	1402053.6			
	Totali	: -65073.8	40701.3	305716.9			
	Variazione	: 35935.3	40701.3	-1096336.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
9	38	-66432.7	50103.9	-403947.0	-8.4631382730e-004	6.1813309908e-004	-3.0377548571e-005
	33	-1.3	-0.8	4.6	-3.6447194368e-008	-2.3368753186e-008	5.0323298742e-010
	40	-102690.2	15312.8	-254663.4	1.2919817603e-003	-1.8966947743e-004	2.2757167461e-005
	35	-14448.9	-22347.1	254007.8	-4.7268886352e-004	-7.9313931943e-004	4.5602681711e-005
	39	-24535.9	-36750.0	366854.3	4.1845534179e-004	6.7100996317e-004	-3.3569008926e-005
	34	5.1	2.7	-9.5	-2.2713455945e-007	-1.2034299756e-007	1.2102904549e-009
	36	198.8	156.8	-1305.8	-1.1319884379e-005	-9.1695720626e-006	3.5217196145e-007
	37	-1336.4	-842.0	6815.0	-1.1201542928e-004	-7.1997779180e-005	2.5677151073e-006
	Per via statica	: -161950.0	-0.0	-2358872.8			
	Totali	: -126723.0	66558.1	-642107.5			
	Variazione	: 35227.1	66558.2	1716765.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
15	38	-1263.5	-0.0	-3286.5	-1.1606219967e-004	-3.2991755988e-011	-1.2933522465e-005
	33	1.2	0.0	-31.5	5.3716826740e-008	4.3761705543e-013	-2.0319171824e-007

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	19539.2	-0.0	-45588.0	-1.5634078132e-003	6.5361825901e-010	8.8393622422e-005
	35	17.6	0.0	-669.3	-4.1520283214e-007	2.4506494173e-009	-5.6277359858e-006
	39	-17271.4	0.0	17858.0	2.1189939677e-003	-1.0732050765e-009	-1.5958605177e-005
	34	-9735.4	-0.0	14417.1	2.9031456019e-003	5.0704887502e-010	-6.9552033672e-005
	36	-739.5	-0.0	-23781.7	5.7744480772e-004	1.6460635959e-009	3.4547647429e-004
	37	1964.8	0.0	18797.0	1.4847982361e-003	1.4558714913e-009	4.2283020373e-004
	Per via statica	: -23953.0	-0.0	287612.8			
	Totali	: -27754.6	0.0	-55838.2			
	Variazione	: -3801.6	0.0	-343451.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
16	38	-703.6	-0.0	-6341.1	-7.5750574824e-005	-5.3125589881e-011	-2.0679505867e-005
	33	-0.2	0.0	-38.3	-2.4907022493e-007	6.8091398370e-013	-2.5639646499e-007
	40	12133.0	-0.0	-29029.8	-9.6902102026e-004	4.8982600303e-010	5.7053119189e-005
	35	-1.3	0.0	-842.4	-6.2874707296e-006	3.2508690816e-009	-7.2494792116e-006
	39	-4949.9	0.0	11012.1	5.8579198007e-004	-3.6367649309e-010	-3.0636012052e-005
	34	-13217.1	-0.0	19425.4	3.9427443448e-003	6.8138889974e-010	-9.2816594851e-005
	36	-820.3	-0.0	-32103.8	7.0739781148e-004	2.1120041591e-009	4.6428975153e-004
	37	1369.6	0.0	27648.3	1.2834945869e-003	1.9446835768e-009	5.9595796602e-004
	Per via statica	: -32485.1	-0.0	390061.0			
	Totali	: -18645.4	0.0	-48805.2			
	Variazione	: 13839.7	0.0	-438866.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
4	38	1003.9	-1595.2	-13073.6	1.7497168935e-005	-3.1553586626e-005	-2.6821748930e-006
	33	-42706.7	-13913.1	-94039.5	-1.9413749445e-003	-6.1394277714e-004	-6.4606866108e-005
	40	16380.1	15562.2	33052.6	-3.3452374305e-004	-3.0905369071e-004	-1.0485833867e-005
	35	47.3	-101.5	-1014.5	2.1502196167e-006	-5.7763535076e-006	-6.1579610402e-007
	39	-28452.6	2345.7	8640.8	8.3764044089e-004	-6.8669599625e-005	5.3397021388e-006
	34	-9.7	22.7	231.4	5.4025385742e-007	-1.6356696539e-006	-1.7876042512e-007
	36	-6357.6	12254.0	115863.7	4.9493750663e-004	-1.1490750039e-003	-1.1501910246e-004
	37	-3677.1	6565.6	59045.6	-4.2924265303e-004	9.0016014299e-004	8.5114953676e-005
	Per via statica	: -136988.8	-0.0	1950796.3			
	Totali	: -54964.4	25636.5	171617.9			
	Variazione	: 82024.4	25636.5	-1779178.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
10	38	-109982.6	60594.9	-435453.5	-1.3876255099e-003	7.4756040234e-004	-3.4964856589e-005
	33	-0.9	0.1	-11.4	-2.7234512400e-008	4.0862046749e-009	-1.7935740842e-009

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	-30186.8	-962.4	-295152.4	3.9257734276e-004	1.1920929194e-005	2.1219360096e-005
	35	-23189.1	-33482.4	384835.7	-7.6241386735e-004	-1.1883532634e-003	6.8874350128e-005
	39	-13902.4	-11306.1	47578.7	2.5081571515e-004	2.0643610296e-004	-3.4364520916e-006
	34	3.1	-1.9	62.3	-1.5142088597e-007	8.6206591920e-008	-1.5569529394e-008
	36	195.4	90.3	-115.1	-1.1445966538e-005	-5.2833176514e-006	-1.7718229193e-008
	37	-1353.3	-344.8	-1458.4	-1.1678116741e-004	-2.9486895418e-005	-1.2063555946e-006
	Per via statica	: -219637.2	-0.0	-3342399.3			
	Totali	: -118662.0	68913.5	-644144.9			
	Variazione	: 100975.1	68913.5	2698254.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
17	38	364.5	-0.0	-9584.9	7.5188674223e-006	-4.9536095965e-011	-2.7738165096e-005
	33	-2.5	0.0	-41.0	-7.0572645219e-007	1.2010429548e-012	-2.8685599482e-007
	40	-7858.2	0.0	-4359.8	6.8492389964e-004	-1.8484423099e-010	3.2524522438e-005
	35	-32.9	0.0	-934.7	-1.4722258387e-005	3.8038878214e-009	-8.2671624402e-006
	39	9616.1	-0.0	2905.8	-1.2266530296e-003	5.4916023612e-010	-4.7928111819e-005
	34	-15803.5	-0.0	23062.8	4.7157388279e-003	9.0953324296e-010	-1.0919499085e-004
	36	-752.6	-0.0	-38168.1	7.5084163834e-004	1.8711331834e-009	5.4939021289e-004
	37	53.7	0.0	35335.6	6.3550504029e-004	1.6315028698e-009	7.3267018940e-004
	Per via statica	: -41017.2	-0.0	492508.7			
	Totali	: -20102.1	0.0	46405.7			
	Variazione	: 20915.1	0.0	-446103.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
5	38	865.7	-1569.9	-11138.5	1.6009426342e-005	-3.2998581447e-005	-2.4853611959e-006
	33	-53430.8	-16640.1	-99501.4	-2.5744189575e-003	-7.8030462771e-004	-7.8288929980e-005
	40	12989.3	-20087.0	-279248.2	-2.1745266115e-004	4.2391727839e-004	6.4402102209e-005
	35	91.2	-143.3	-1361.6	4.7389695415e-006	-8.6634339935e-006	-8.8289629923e-007
	39	25990.0	21716.5	123435.7	-8.5417749299e-004	-6.7559189053e-004	-5.1862593147e-005
	34	-20.8	33.2	322.0	1.3632399738e-006	-2.5461576518e-006	-2.6514785495e-007
	36	-9726.7	15690.6	140393.1	8.3752794287e-004	-1.5635466871e-003	-1.4968976962e-004
	37	-4602.9	7683.5	64344.9	-5.8254486931e-004	1.1194591081e-003	1.0009720514e-004
	Per via statica	: -162766.1	-0.0	2442457.0			
	Totali	: -62716.7	38476.9	-360076.9			
	Variazione	: 100049.4	38476.9	-2802534.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
11	38	-147503.9	63453.5	-360992.3	-1.9512402887e-003	8.2603791684e-004	-3.5265604461e-005
	33	0.6	1.8	-33.5	1.1679802136e-008	5.3388162383e-008	-5.2981957584e-009

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	54585.7	-31054.1	-170757.3	-7.0564750436e-004	4.0587802612e-004	8.8532985611e-006
	35	-29594.5	-41665.2	449334.3	-1.0313440461e-003	-1.5604022576e-003	8.7500015375e-005
	39	7664.8	26416.8	-385312.3	-1.1224831003e-004	-5.0896331426e-004	4.0258252649e-005
	34	-3.4	-9.3	157.0	1.2511185964e-007	4.4037910232e-007	-4.0343483603e-008
	36	74.7	-55.3	1903.0	-5.2015764471e-006	3.4134700672e-006	-6.7061273711e-007
	37	-624.1	636.5	-14592.1	-6.2951663734e-005	5.7436471801e-005	-7.5410533408e-006
	Per via statica	: -262816.8	-0.0	-4280316.0			
	Totali	: -161064.2	85258.5	-710999.8			
	Variazione	: 101752.6	85258.5	3569316.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
6	38	78.6	-64.9	-496.2	1.1605053152e-005	-1.1380140024e-005	-2.4844290476e-006
	33	-7820.4	-89.6	-71.7	-3.1407732567e-003	-3.5086817976e-005	-9.0241036085e-005
	40	-1006.6	996.3	-22962.9	2.9990408758e-004	-1.7553075399e-004	1.3928786653e-004
	35	16.6	-0.4	-81.2	7.3792297879e-006	-2.2172867084e-007	-1.1154346504e-006
	39	10111.0	909.6	3365.6	-2.7187162311e-003	-2.3621665950e-004	-1.0558018089e-004
	34	-3.9	-0.0	19.5	2.2217494830e-006	3.0555088859e-009	-3.3921882103e-007
	36	-1581.7	187.7	7983.9	1.1558073702e-003	-1.5610842156e-004	-1.8178850891e-004
	37	-654.1	161.8	3449.9	-6.9352008262e-004	1.9678166052e-004	1.1589537120e-004
	Per via statica	: -23553.7	-0.0	374184.3			
	Totali	: -13003.3	1391.2	-25109.7			
	Variazione	: 10550.4	1391.2	-399294.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
18	38	751.8	-0.0	-7139.5	7.5706924195e-005	-2.9411725690e-011	-3.2033413270e-005
	33	-2.7	0.0	-25.3	-1.0570082545e-006	1.6610870102e-012	-3.0153258191e-007
	40	-14310.4	0.0	7601.9	1.9690365364e-003	-6.5412023057e-010	2.0740352090e-005
	35	-35.4	0.0	-592.4	-2.1099484197e-005	4.0847930691e-009	-8.7875657508e-006
	39	11882.2	-0.0	-1634.9	-2.4381108952e-003	1.1607238293e-009	-5.9398687251e-005
	34	-10681.1	-0.0	15407.0	5.1928230974e-003	1.0954272746e-009	-1.1814380279e-004
	36	-405.8	-0.0	-25258.2	7.5319856742e-004	1.3790264592e-009	5.9616246239e-004
	37	-636.9	0.0	24345.7	6.9604090696e-005	9.8644093159e-010	8.1127850502e-004
	Per via statica	: -30422.1	-0.0	364998.5			
	Totali	: -21381.8	0.0	32048.3			
	Variazione	: 9040.3	0.0	-332950.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
12	38	-14562.1	1478.0	7034.4	-2.5275879757e-003	2.5380794772e-004	-3.0672774699e-005
	33	0.2	-0.1	-0.9	5.0480954035e-008	-5.2120398314e-008	-8.9071404218e-009

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	10846.8	-4167.9	-14695.8	-1.8459062640e-003	7.1857899843e-004	2.7441437855e-005
	35	-2688.6	-63.8	9219.1	-1.2361602474e-003	-3.1512615850e-005	1.0461945246e-004
	39	1969.7	-971.0	-11509.0	-4.3303362186e-004	2.4677751999e-004	7.6774875753e-005
	34	-0.7	0.6	4.0	3.9764020666e-007	-3.5234686464e-007	-6.5723727937e-008
	36	-3.1	13.5	56.1	1.3324787864e-006	-1.0991861395e-005	-1.3431089446e-006
	37	4.1	-82.9	-382.7	-7.4079781558e-006	-9.8675925731e-005	-1.3944763552e-005
	Per via statica	: -24068.4	-0.0	-418637.9			
	Totali	: -18496.1	-4525.8	-22049.0			
	Variazione	: 5572.4	-4525.8	396588.9			

- Risultati angolo di ingresso del sisma: 180.00 [°] - SLV

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
1	46	-400.7	-304.1	-2892.0	-6.3199871776e-006	-5.1095852230e-006	-4.6864797730e-007
	41	-3062.4	-2154.2	-21283.6	-1.1786677519e-004	-8.8080397753e-005	-8.3493575655e-006
	48	-37823.7	1095.0	-35469.1	6.5391379813e-004	-1.8941475576e-005	4.1504899562e-007
	47	-13291.9	-10136.8	-100751.8	3.4173709694e-004	2.7866805107e-004	2.6893765079e-005
	42	-0.7	-0.0	-1.1	4.5670568407e-008	1.6588964242e-010	3.8314731837e-010
	43	5.2	-1.9	-5.3	3.0538655812e-007	-1.0811305361e-007	-6.2663165776e-009
	44	265.0	713.8	5661.5	-1.6256771413e-005	-5.4596397176e-005	-4.5606934235e-006
	45	878.3	1176.1	10052.4	7.1400104378e-005	1.0648243485e-004	9.2292657657e-006
	Per via statica	: -32129.3	-0.0	53696.9			
	Totali	: -40396.5	-10526.2	-110152.6			
	Variazione	: -8267.2	-10526.2	-163849.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
13	46	-421.4	0.0	-405.1	-3.4348459541e-005	5.0648535577e-011	-1.6923916605e-007
	41	0.1	0.0	1.2	1.9377223647e-008	3.0648641527e-013	7.6071993787e-009
	48	-13337.1	0.0	7882.7	1.1710846663e-003	-7.8621444567e-010	-5.7284247651e-005
	47	-6163.6	0.0	-10469.7	8.0396904651e-004	-1.1240508504e-010	2.5956651405e-005
	42	-1497.2	0.0	-3748.9	4.6756650718e-004	-9.1092062854e-011	2.9740004444e-005
	43	5.1	-0.0	81.3	8.0322034482e-007	-8.9263366352e-011	7.8065897819e-007
	44	-444.4	0.0	5595.6	2.3153020064e-004	-8.4518136048e-010	-7.9958521350e-005
	45	514.9	-0.0	-2247.3	2.6206770673e-004	-8.3309495079e-010	-4.2420371958e-005
	Per via statica	: -6595.7	-0.0	-8405.4			
	Totali	: -14863.9	0.0	-14143.0			
	Variazione	: -8268.2	0.0	-5737.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
7	46	-8080.7	11212.2	-118687.3	-9.1357074056e-005	1.3555224754e-004	-7.2001709554e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	41	0.1	-0.0	0.2	2.6551204305e-009	-6.6774910839e-010	1.6401098602e-011
	48	-57332.4	1257.2	-47019.4	7.1386068348e-004	-1.5649201489e-005	-2.2810537039e-007
	47	-353.9	-6436.5	62624.6	1.2849472682e-005	1.2732959771e-004	-6.6455944774e-006
	42	-0.5	0.1	-0.8	2.1839850879e-008	-5.0381702038e-009	1.1055492670e-010
	43	-452.6	-1912.5	18415.1	-2.2488984615e-005	-7.9498712568e-005	4.1743452858e-006
	44	-61.9	26.2	-213.7	3.3669538820e-006	-1.4420763736e-006	4.6764516557e-008
	45	126.3	-46.4	348.0	8.1594084122e-006	-3.0215375617e-006	8.2357131187e-008
	Per via statica	: -44648.7	-0.0	-3809.5			
	Totali	: -57932.3	12946.3	-141545.4			
	Variazione	: -13283.6	12946.3	-137735.9			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
2	46	-279.1	-878.3	-8172.3	-3.8678700668e-006	-1.6871709590e-005	-1.6964764386e-006
	41	-12078.0	-5941.8	-66533.0	-5.3900189206e-004	-2.7776634091e-004	-2.9118715519e-005
	48	-54359.7	23299.7	179126.1	1.1191047648e-003	-4.6080652770e-004	-5.0013273575e-005
	47	-41098.7	-19633.4	-224997.6	1.2335722828e-003	6.1709524713e-004	6.6128738424e-005
	42	-0.7	0.6	3.6	5.8423720352e-008	-4.4484749304e-008	-3.6464523642e-009
	43	6.8	-12.3	-94.1	5.1206956211e-007	-8.1439541829e-007	-7.3599015658e-008
	44	-160.0	2728.9	23426.0	3.4192955877e-005	-2.3862340177e-004	-2.2960967124e-005
	45	237.0	4086.6	36003.3	-1.1797964345e-005	4.2302728271e-004	4.1284574932e-005
	Per via statica	: -63293.3	-0.0	35520.6			
	Totali	: -69695.8	31385.4	-297541.1			
	Variazione	: -6402.4	31385.5	-333061.7			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
8	46	-34802.5	31475.7	-337389.0	-3.9853977646e-004	3.7596847188e-004	-1.9507480163e-005
	41	-0.1	-0.3	3.0	-4.6408740232e-009	-9.3584013635e-009	4.8730892398e-010
	48	-126727.1	-4631.0	-1908.2	1.5648692251e-003	5.6954088528e-005	-7.1768188979e-006
	47	-8636.3	-24134.4	237737.0	1.9126329326e-004	4.7171037911e-004	-2.5528473980e-005
	42	0.7	1.6	-14.6	-3.8052477958e-008	-7.4984209364e-008	3.8966121397e-009
	43	-4047.8	-9520.8	96548.5	-1.8550782854e-004	-3.9102153284e-004	2.1889131713e-005
	44	188.0	314.9	-2965.2	-1.1020501138e-005	-1.7123025614e-005	9.0628141059e-007
	45	-460.6	-662.0	6180.2	-3.1636238023e-005	-4.2614710080e-005	2.2568460199e-006
	Per via statica	: -101782.9	-0.0	-102287.4			
	Totali	: -132097.5	-40368.9	-416493.8			
	Variazione	: -30314.6	-40368.9	-314206.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
14	46	-1091.6	0.0	-774.6	-8.8471732381e-005	1.6763235806e-010	3.6436279856e-007

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	41	0.3	0.0	3.7	3.2461207292e-008	1.0131667132e-012	2.4428668068e-008
	48	389.4	0.0	51768.7	9.4032229969e-005	-8.3070421116e-010	-1.5323365724e-004
	47	-17038.5	0.0	-26416.9	2.2036710931e-003	-2.8556347422e-010	5.8506149718e-005
	42	-5161.0	0.0	-12715.3	1.5931258584e-003	-3.1008440279e-010	9.8257115845e-005
	43	9.3	-0.0	261.7	4.9135225016e-007	-2.9591637076e-010	2.5271898333e-006
	44	-1418.9	0.0	18982.7	7.4069570761e-004	-2.7578802600e-009	-2.6539631054e-004
	45	1445.0	-0.0	-8050.1	7.4787221378e-004	-2.7339761326e-009	-1.4408111119e-004
	Per via statica	: -15051.8	-0.0	-19270.4			
	Totali	: -17914.5	0.0	60721.3			
	Variazione	: -2862.7	0.0	79991.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
3	46	447.7	-1472.1	-13063.4	1.1102629519e-005	-2.8206697288e-005	-2.8683079046e-006
	41	-25860.2	-10321.7	-120697.1	-1.1612191077e-003	-4.8132876601e-004	-5.0803990524e-005
	48	-17686.0	36398.0	388473.9	4.2694480375e-004	-7.1807513419e-004	-8.8667203574e-005
	47	-54017.6	-15892.0	-203503.9	1.6457466798e-003	4.9826149894e-004	5.4395670479e-005
	42	-0.7	2.0	15.7	6.7492917886e-008	-1.5215185487e-007	-1.3996693595e-008
	43	12.1	-32.7	-268.3	9.7395045232e-007	-2.1549394246e-006	-2.0441366795e-007
	44	-2042.1	5742.6	48827.1	2.2135123761e-004	-5.0091168559e-004	-4.9119895763e-005
	45	-2799.3	8061.8	69325.9	-3.6162104480e-004	8.3245446354e-004	8.2459222185e-005
	Per via statica	: -98556.2	-0.0	58441.0			
	Totali	: -63023.8	42571.0	463589.3			
	Variazione	: 35532.4	42571.0	405148.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
9	46	-73961.2	45353.0	-489786.7	-8.6010886811e-004	5.4200284910e-004	-2.7026875279e-005
	41	-0.5	-0.5	4.5	-1.5323057572e-008	-1.4451388425e-008	7.5994458302e-010
	48	-109684.4	3555.7	-60738.9	1.3517005151e-003	-4.3752424907e-005	-2.3446160600e-006
	47	-15685.7	-29608.6	282410.1	3.3387686022e-004	5.7899660453e-004	-3.0844726082e-005
	42	2.5	2.4	-21.2	-1.2523995875e-007	-1.1408179030e-007	5.9768764337e-009
	43	-10236.3	-20289.9	208913.2	-4.6257753509e-004	-8.3372957648e-004	4.7682806321e-005
	44	561.9	508.8	-4649.9	-3.1882294331e-005	-2.7682776225e-005	1.4903381820e-006
	45	-1331.3	-1061.6	9580.7	-8.8982750920e-005	-6.8370864866e-005	3.6874546241e-006
	Per via statica	: -158017.3	-0.0	-240278.9			
	Totali	: -134525.0	-56728.8	-593140.9			
	Variazione	: 23492.3	-56728.8	-352862.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
15	46	-1377.9	0.0	557.3	-1.1537818231e-004	2.8405718009e-010	4.9027961156e-006

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	41	0.3	0.0	5.4	2.3755280215e-008	1.5553975274e-012	3.6469806171e-008
	48	15480.0	0.0	61735.4	-1.1674685222e-003	-1.8394376103e-010	-1.4590771110e-004
	47	-15863.5	0.0	-24097.3	2.0543710578e-003	-1.5662251279e-010	5.2139755148e-005
	42	-8830.2	0.0	-21472.0	2.7294451752e-003	-1.0064782686e-009	1.6490120847e-004
	43	6.6	-0.0	400.8	-1.4153888412e-006	-5.0773956807e-010	3.9341884859e-006
	44	-2291.2	0.0	32483.5	1.2164151748e-003	-3.2530110599e-009	-4.5287999921e-004
	45	2070.7	-0.0	-15158.4	1.1187222974e-003	-3.8618143894e-009	-2.6306737780e-004
	Per via statica	: -23371.4	-0.0	-29918.4			
	Totali	: -23873.4	0.0	73059.4			
	Variazione	: -502.1	0.0	102977.9			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
16	46	-880.6	0.0	4304.4	-8.3168914551e-005	3.6120194994e-010	1.4560253745e-005
	41	-0.0	0.0	5.6	-4.1893706126e-008	2.0661364903e-012	3.9731650748e-008
	48	10399.4	0.0	28701.3	-8.1570081861e-004	-4.1312950637e-010	-5.9960329179e-005
	47	-4452.4	-0.0	-9249.7	5.6688812666e-004	4.5796574766e-010	2.6408362633e-005
	42	-11978.9	0.0	-28825.9	3.7056195936e-003	-1.3554947715e-009	2.2018353286e-004
	43	-11.4	-0.0	458.2	-6.9967460834e-006	-6.7313112206e-010	4.6529443364e-006
	44	-2767.5	0.0	44731.3	1.5290052151e-003	-4.1730534561e-009	-6.1942319197e-004
	45	1930.2	-0.0	-23555.1	1.1640801235e-003	-4.9849302587e-009	-3.9222117466e-004
	Per via statica	: -31696.3	-0.0	-40575.4			
	Totali	: -16674.1	0.0	52082.6			
	Variazione	: 15022.1	0.0	92658.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
4	46	1025.2	-1626.6	-14193.9	2.2475700308e-005	-3.1167509430e-005	-3.2175671075e-006
	41	-40078.0	-14398.4	-172092.7	-1.8064803581e-003	-6.7143352418e-004	-7.0973901178e-005
	48	12115.8	7381.1	198735.6	-2.0270551417e-004	-1.4561699061e-004	-4.1273205810e-005
	47	-26353.7	678.9	-20434.8	8.2711506192e-004	-2.1286153162e-005	-9.6136261380e-007
	42	-2.1	4.5	36.2	1.9360654536e-007	-3.4677094530e-007	-3.2600300975e-008
	43	32.3	-63.3	-515.8	2.4812955751e-006	-4.1704488292e-006	-3.9885716487e-007
	44	-4951.0	8904.3	74297.1	4.9901746287e-004	-7.7669543459e-004	-7.6316680288e-005
	45	-6611.7	11528.4	97134.4	-7.8678120315e-004	1.1904141214e-003	1.1825403666e-004
	Per via statica	: -133662.2	-0.0	127387.3			
	Totali	: -51000.1	24177.7	302187.0			
	Variazione	: 82662.1	24177.7	174799.7			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
10	46	-120026.0	53129.9	-578602.7	-1.4079141613e-003	6.3494267844e-004	-3.0099096199e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	41	-0.4	-0.0	-0.7	-1.2752900832e-008	-1.2664802423e-009	-4.1816769177e-011
	48	-34333.8	5952.4	-51032.0	4.2126785719e-004	-7.3242953148e-005	1.3640540867e-006
	47	-9749.2	-8675.8	48903.3	1.9591341733e-004	1.6965594682e-004	-5.9856440557e-006
	42	2.2	0.0	5.2	-1.0270967963e-007	-1.7667077793e-009	-8.4335779342e-010
	43	-16624.6	-30292.1	313255.7	-7.4625113088e-004	-1.2447271978e-003	7.1743511427e-005
	44	580.3	154.0	-598.6	-3.1854780529e-005	-8.3805388404e-006	3.2137043459e-007
	45	-1414.3	-235.4	165.1	-9.1508832469e-005	-1.5158644369e-005	4.8342854974e-007
	Per via statica	: -214303.6	-0.0	-413674.3			
	Totali	: -127561.5	60744.6	-648754.3			
	Variazione	: 86742.0	60744.6	-235080.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
17	46	157.7	0.0	9005.1	-8.4456020765e-006	3.6690823563e-010	2.5685537789e-005
	41	-0.6	0.0	4.8	-1.4853811973e-007	2.3971440912e-012	3.7043398180e-008
	48	-6143.7	0.0	-16802.2	4.8227597202e-004	-9.5721139912e-010	3.4964646490e-005
	47	9007.1	-0.0	6651.7	-1.1939102303e-003	1.0068113479e-009	3.6896321899e-006
	42	-14313.0	0.0	-34101.7	4.4309320905e-003	-1.8513795113e-009	2.5912333934e-004
	43	-39.7	-0.0	452.4	-1.5009038566e-005	-7.8897158419e-010	4.8273428696e-006
	44	-2865.7	0.0	54171.3	1.6685987720e-003	-3.9830036050e-009	-7.4486357520e-004
	45	1194.4	-0.0	-31434.8	9.3723863097e-004	-5.1167989871e-009	-5.0564952330e-004
	Per via statica	: -40021.1	-0.0	-51232.4			
	Totali	: -18175.1	0.0	-54212.4			
	Variazione	: 21846.0	0.0	-2980.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
5	46	1276.3	-1389.7	-11198.3	2.8503113415e-005	-2.8296021882e-005	-2.8587251890e-006
	41	-49591.6	-17372.2	-197408.8	-2.3811238920e-003	-8.6088494592e-004	-8.6826545784e-005
	48	10202.8	-37570.5	-169492.4	-2.5142064449e-004	7.8766642773e-004	4.2634115271e-005
	47	26285.0	21004.0	209052.3	-8.1365490880e-004	-6.9981520541e-004	-7.0583976983e-005
	42	-4.2	7.6	56.7	3.9532700206e-007	-6.1991833131e-007	-5.6273370263e-008
	43	57.8	-97.5	-734.5	4.6000944431e-006	-6.8241565996e-006	-6.2656473982e-007
	44	-7702.2	11654.5	89303.1	8.0325311276e-004	-1.0803091501e-003	-1.0148137980e-004
	45	-9751.3	13975.1	107980.7	-1.1982807803e-003	1.5335170030e-003	1.4574195641e-004
	Per via statica	: -158813.6	-0.0	272909.5			
	Totali	: -59757.8	-51448.9	374004.6			
	Variazione	: 99055.8	-51448.8	101095.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
11	46	-158742.4	53875.3	-560066.4	-1.9760607521e-003	6.7939025611e-004	-2.9259747513e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	41	-0.0	0.7	-8.0	1.5104578172e-011	2.1316720639e-008	-1.3571266389e-009
	48	57996.5	-1551.2	57580.9	-7.5261023118e-004	2.0140879839e-005	-4.6897842933e-007
	47	4166.3	22489.7	-268414.9	-1.1323863812e-004	-4.6406249299e-004	3.0988292726e-005
	42	0.1	-3.7	42.6	4.0679650622e-009	1.8828974898e-007	-1.1886659557e-008
	43	-21412.9	-37609.2	361086.9	-1.0084576846e-003	-1.6306992161e-003	9.0926291075e-005
	44	296.2	-456.4	5627.9	-1.5509488134e-005	2.6201420284e-005	-1.7006769853e-006
	45	-815.7	1152.2	-13914.2	-5.1079561505e-005	7.8300257999e-005	-4.9500015542e-006
	Per via statica	: -256434.6	-0.0	-768998.8			
	Totali	: -171196.9	68522.8	-712374.1			
	Variazione	: 85237.8	68522.8	56624.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
6	46	167.1	-0.7	-334.4	3.0784971695e-005	-1.2230281430e-007	-2.7130520933e-006
	41	-7212.3	-80.5	-13706.4	-2.8947603973e-003	-3.3283477554e-005	-1.0093258670e-004
	48	-512.6	-2895.0	-20451.0	-1.2409963221e-005	5.0667074242e-004	1.1604007817e-004
	47	9842.0	112.6	23379.9	-2.6179716633e-003	-3.1319341979e-005	-1.3571984978e-004
	42	-0.8	0.2	2.7	6.1786315939e-007	-1.0906360350e-007	-7.6261422585e-008
	43	10.5	-1.9	-33.2	6.8378491437e-006	-1.0823293773e-006	-8.2248455510e-007
	44	-1267.5	172.1	3738.2	1.0903549313e-003	-1.3314227236e-004	-1.2451018488e-004
	45	-1535.7	175.6	4325.1	-1.5584443451e-003	1.6081055281e-004	1.7238448907e-004
	Per via statica	: -22981.7	-0.0	59727.9			
	Totali	: -12502.6	-2913.5	-34426.6			
	Variazione	: 10479.1	-2913.5	-94154.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
18	46	610.7	0.0	7446.5	5.3102132971e-005	3.3237935406e-010	3.3046006900e-005
	41	-0.6	0.0	2.4	-2.3349408723e-007	2.5592194842e-012	3.4085865656e-008
	48	-11702.3	0.0	-28377.9	1.5099658021e-003	-1.4808452157e-009	9.1760103462e-005
	47	11047.3	-0.0	10165.3	-2.3721859515e-003	1.3114973883e-009	-8.1881024845e-006
	42	-9658.3	0.0	-22634.2	4.8734663387e-003	-2.2700156432e-009	2.8036026346e-004
	43	-38.2	-0.0	263.2	-2.1255687131e-005	-8.4840072006e-010	4.8229343993e-006
	44	-1773.0	0.0	36180.1	1.7350945113e-003	-3.3423724045e-009	-8.1565914138e-004
	45	349.4	-0.0	-22096.7	7.2147825688e-004	-4.7343243516e-009	-5.7419789617e-004
	Per via statica	: -29683.4	-0.0	-38282.9			
	Totali	: -18779.0	0.0	-45515.1			
	Variazione	: 10904.4	0.0	-7232.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
12	46	-15465.1	1216.1	-18270.7	-2.5514311345e-003	2.0228913809e-004	-2.3961257030e-005

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	41	0.0	-0.0	-0.2	1.2610024243e-008	-2.9975135557e-009	-2.6170995655e-009
	48	11163.4	-362.1	6157.4	-1.9290388817e-003	6.2020122490e-005	1.9404747351e-005
	47	1227.4	-341.6	-6252.2	-3.8835065526e-004	9.2986892456e-005	6.1673190159e-005
	42	-0.1	0.0	1.0	1.0890113955e-007	-2.4335458958e-008	-2.2442435790e-008
	43	-1938.8	-76.8	4427.4	-1.2042851482e-003	-4.3919853393e-005	1.0840724982e-004
	44	3.1	5.8	156.7	8.5370491064e-007	-4.3614574321e-006	-3.6028199407e-006
	45	-22.0	-11.4	-381.0	-1.0915586140e-005	-1.0220780929e-005	-1.0016651980e-005
	Per via statica	: -23484.0	-0.0	-96428.5			
	Totali	: -19246.4	1306.1	-20679.4			
	Variazione	: 4237.6	1306.2	75749.1			

- Risultati angolo di ingresso del sisma: 270.00 [°] + SLV

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
1	56	-1200.9	-36007.6	-158942.4	1.7147059940e-005	5.5301722596e-004	3.1828686419e-005
	50	-8.4	-20.4	-120.1	2.8238296375e-007	7.5269231582e-007	5.3749762303e-008
	55	-7090.4	-4606.9	-34774.0	1.4995931466e-004	1.0889790271e-004	9.3863089527e-006
	53	-1821.4	-2921.2	-22240.3	-6.5811870782e-005	-1.1805876684e-004	-1.0243586700e-005
	51	14.3	34.1	202.2	7.9395039342e-007	2.0714737194e-006	1.4855838101e-007
	54	-102.6	-213.8	-1276.6	3.7009950483e-006	8.4597597982e-006	6.0948056101e-007
	49	-838.3	-526.5	-4523.9	-1.1812669486e-004	-8.3965697447e-005	-7.9983718805e-006
	52	-35.9	-78.1	-480.2	1.3025689171e-005	3.1179339780e-005	2.2968139649e-006
	Per via statica	: 0.0	-39329.8	-911544.1			
	Totali	: -7553.4	-36646.1	-165975.9			
	Variazione	: -7553.4	2683.7	745568.1			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
13	56	562.1	-8754.6	-1542.7	-3.9097753372e-005	6.1067332214e-004	8.4108919590e-006
	50	215.1	4.0	141.1	-3.5375224485e-005	-8.3464181753e-007	-8.3986105466e-007
	55	-405.7	-6382.4	2489.4	4.1795867382e-005	6.5665001351e-004	-4.3206778806e-006
	53	-208.6	218.1	-167.8	-3.6723428217e-005	3.8232670453e-005	-7.7639497963e-007
	51	-290.3	-2004.2	1332.3	-7.8438616170e-005	-5.3972242681e-004	8.9142753988e-006
	54	163.4	-335.7	251.6	-2.8711209075e-005	5.8759977149e-005	-1.1510727122e-006
	49	2.7	0.1	1.7	1.8802158025e-006	5.8925531019e-008	4.3064252014e-008
	52	172.2	-131.1	-1221.2	-3.0465356674e-004	2.4849676642e-004	7.9518422652e-005
	Per via statica	: 0.0	-8073.9	-106561.5			
	Totali	: 729.3	-11260.6	3328.7			
	Variazione	: 729.3	-3186.7	109890.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

7	56	527.2	-54872.2	390320.2	-5.4169750460e-006	5.3283962288e-004	-1.5323634991e-005
	50	-828.7	-3498.6	38241.3	2.0129455335e-005	7.6811783643e-005	-4.0411369001e-006
	55	-5584.1	-13134.2	163547.5	8.4985879160e-005	1.7739602429e-004	-1.1129157151e-005
	53	70.5	304.0	-2624.9	1.8342697066e-006	7.3391686977e-006	-2.7902360931e-007
	51	2.6	33.6	-217.4	1.0576325981e-007	1.2754420250e-006	-3.1872673816e-008
	54	3386.2	-6289.5	68112.7	-8.7916935990e-005	1.4777776233e-004	-7.6773989046e-006
	49	0.1	0.5	-4.9	8.8361159241e-009	4.9899552164e-008	-2.0538284509e-009
	52	-24.3	-132.8	1146.4	6.3613336418e-006	3.2231472534e-005	-1.2250270397e-006
	Per via statica	: 0.0	-54654.9	1624669.0			
	Totali	: -6541.2	-57498.8	437715.5			
	Variazione	: -6541.2	-2843.9	-1186953.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
2	56	20518.5	-48571.0	-77843.5	-3.3497165159e-004	8.2340871650e-004	2.4949100398e-005
	50	-19.9	-7.1	-86.7	7.6816263442e-007	3.2515698957e-007	4.1024922448e-008
	55	-18642.2	-18775.0	-110774.2	4.5078619253e-004	4.9799137588e-004	3.6022783559e-005
	53	-632.7	-10828.4	-94223.6	-2.6139152612e-005	-5.0772857028e-004	-4.9456368949e-005
	51	34.2	13.1	156.1	2.1695318453e-006	9.7814040942e-007	1.2156777895e-007
	54	-314.8	42.3	-149.6	1.2985003942e-005	-1.6900247912e-006	4.5028918246e-008
	49	-3460.1	-1393.9	-13398.7	-5.5745709438e-004	-2.5767402003e-004	-2.7107874305e-005
	52	-79.5	-53.2	-565.2	3.3004631344e-005	2.5677328763e-005	2.9162969816e-006
	Per via statica	: 0.0	-77478.0	-1731721.4			
	Totali	: -27347.9	-54037.9	-168943.8			
	Variazione	: -27347.9	23440.1	1562777.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
8	56	19632.8	-40993.3	-277191.2	-1.9930973665e-004	4.5549685738e-004	1.9460006887e-005
	50	-7014.2	-17178.0	197237.3	1.6833112913e-004	3.7027586480e-004	-2.0763234397e-005
	55	-27244.1	-64144.4	744578.9	4.0966535531e-004	8.6501991676e-004	-4.9225710531e-005
	53	264.6	248.2	-1715.2	6.7974074080e-006	6.0402741361e-006	-1.6595969927e-007
	51	-32.3	-108.1	1497.2	-1.2737521303e-006	-3.7193074914e-006	2.6849728296e-007
	54	15592.9	-16213.1	173504.7	-3.9998976384e-004	3.7704866948e-004	-1.9219012426e-005
	49	0.4	0.9	-8.4	4.0940782964e-008	8.0661385414e-008	-3.5414512912e-009
	52	-81.3	-97.7	609.0	2.0993717833e-005	2.4090164930e-005	-5.6583484299e-007
	Per via statica	: 0.0	-124593.4	3706027.8			
	Totali	: 36871.1	-81555.1	829820.5			
	Variazione	: 36871.1	43038.3	-2876207.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

14	56	1977.3	5853.1	-8051.4	-1.3574261030e-004	-3.9831811067e-004	1.6809154594e-005
	50	743.4	48.6	466.6	-1.2064123199e-004	-8.4686475014e-006	-2.7708268690e-006
	55	-1413.1	-21614.0	6491.9	1.4369112383e-004	2.1962304493e-003	-7.3088740500e-006
	53	-720.1	446.7	-495.0	-1.2509642836e-004	7.7086143159e-005	-2.5027285702e-006
	51	-1005.7	-6783.5	4489.6	-2.6822803833e-004	-1.8030630123e-003	2.9438677640e-005
	54	562.4	-669.1	725.3	-9.7553211583e-005	1.1530870816e-004	-3.6433771122e-006
	49	9.5	-0.1	5.9	6.4137367118e-006	-5.5358411654e-008	1.4241386588e-007
	52	598.1	-317.9	-4135.1	-1.0444887825e-003	6.0970889313e-004	2.6277072552e-004
	Per via statica	: 0.0	-18425.1	-243178.6			
	Totali	: 2552.2	-23203.2	-11589.0			
	Variazione	: 2552.2	-4778.2	231589.7			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
3	56	36304.8	-42068.9	211307.0	-5.9122267610e-004	6.4970822561e-004	-2.8971170367e-005
	50	-30.6	13.4	-121.1	1.1769447684e-006	-4.6090808775e-007	4.4861249926e-008
	55	-19342.2	-26916.8	-69273.4	4.6655388242e-004	6.8273352541e-004	2.7407206740e-005
	53	6390.7	-22163.9	-195702.3	2.6335168693e-004	-1.0380506718e-003	-1.0211551673e-004
	51	52.5	-19.7	224.5	3.3216780876e-006	-1.0750687952e-006	1.4105219253e-007
	54	-582.7	442.0	606.5	2.3977735538e-005	-1.8829893951e-005	-5.2471138900e-007
	49	-7596.1	-2370.5	-23010.1	-1.2208002655e-003	-4.3752726705e-004	-4.6311046211e-005
	52	-106.9	-11.1	-952.4	4.4305072857e-005	1.0021831160e-005	4.4514045504e-006
	Per via statica	: 0.0	-120643.7	-2698209.5			
	Totali	: 41500.2	-55752.5	-295768.3			
	Variazione	: 41500.2	64891.2	2402441.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
9	56	36909.2	566.8	-1300779.8	-3.7488715278e-004	1.3633816161e-004	7.0291770503e-005
	50	-17529.3	-36487.1	425750.6	4.2089245954e-004	7.8510719553e-004	-4.5004575075e-005
	55	-37923.6	-74956.1	811184.3	5.7054059516e-004	1.0208443696e-003	-5.2846276054e-005
	53	506.7	31.4	-418.4	1.3024306141e-005	7.0950578113e-007	-4.8565240376e-008
	51	-105.7	-339.6	3987.8	-4.1728648934e-006	-1.1997592282e-005	6.9369359896e-007
	54	34054.8	-22218.4	231503.8	-8.7401624673e-004	5.1868658308e-004	-2.5500321663e-005
	49	0.9	1.2	-13.4	8.7501854464e-008	1.0477547557e-007	-5.8806070566e-009
	52	-145.3	16.4	-213.8	3.7541663695e-005	-3.7370301360e-006	2.4856164317e-007
	Per via statica	: 0.0	-193430.6	5747671.5			
	Totali	: 63967.4	-87073.3	1582408.4			
	Variazione	: 63967.4	106357.3	-4165263.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

15	56	3412.8	16790.3	-7781.4	-2.3436699542e-004	-1.1508502470e-003	1.0570623932e-005
	50	1273.6	107.0	766.0	-2.0675311181e-004	-1.8324208279e-005	-4.5829610604e-006
	55	-2419.9	-21123.1	5003.1	2.4614432652e-004	2.1481288892e-003	-2.2589803530e-006
	53	-1231.0	520.6	-679.4	-2.1392148013e-004	8.9736403270e-005	-3.5561742144e-006
	51	-1725.2	-11365.3	7542.3	-4.6027009166e-004	-3.0219397453e-003	4.9538986079e-005
	54	957.6	-724.8	949.2	-1.6617129582e-004	1.2473242612e-004	-4.9651976025e-006
	49	16.2	-0.5	10.1	1.0996832949e-005	-2.7311885797e-007	2.4195786306e-007
	52	1026.6	-436.9	-6993.9	-1.7935524626e-003	8.5532267926e-004	4.4333768041e-004
	Per via statica	: 0.0	-28609.1	377590.4			
	Totali	: 4389.8	-28773.8	-13092.5			
	Variazione	: 4389.8	-164.7	-390682.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
16	56	4632.2	8625.6	-405.4	-3.1810440339e-004	-5.9305169959e-004	-3.4052014977e-006
	50	1729.6	179.0	992.3	-2.8077952112e-004	-3.0307646916e-005	-5.9859007000e-006
	55	-3266.8	-5550.2	-369.2	3.3229119299e-004	5.6569977799e-004	5.5409720591e-006
	53	-1667.8	365.7	-638.8	-2.8981407547e-004	6.2821189693e-005	-3.5038160533e-006
	51	-2345.4	-15128.4	10092.1	-6.2573404640e-004	-4.0224118192e-003	6.6443867547e-005
	54	1291.8	-394.2	802.2	-2.2416393409e-004	6.7480436396e-005	-4.4775610958e-006
	49	22.0	-1.0	13.8	1.4941739955e-005	-6.2175932657e-007	3.2897538351e-007
	52	1396.2	-444.1	-9444.2	-2.4393150162e-003	8.9966815164e-004	5.9676152423e-004
	Per via statica	: 0.0	-38799.7	512088.7			
	Totali	: 5947.8	-18123.4	12589.4			
	Variazione	: 5947.8	20676.3	-499499.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
4	56	17768.1	-40573.9	429963.5	-2.8935314462e-004	5.7658592507e-004	-6.8911079496e-005
	50	-11.8	19.7	-383.2	4.5477279119e-007	-5.7040606067e-007	1.5379541336e-007
	55	-5685.4	-21363.2	135504.7	1.3713813937e-004	4.7945160229e-004	-2.9357628112e-005
	53	16463.2	-33225.4	-292592.5	6.7842274753e-004	-1.5556763694e-003	-1.5272092099e-004
	51	21.7	-29.1	668.7	1.3707593480e-006	-1.2944079941e-006	4.4564274515e-007
	54	-482.5	676.3	-1364.6	1.9856373983e-005	-2.7529827328e-005	2.4655349587e-007
	49	-11923.5	-3272.8	-31818.7	-1.9162652528e-003	-6.0417292869e-004	-6.4028195311e-005
	52	-22.5	-16.5	-2105.9	9.3077867504e-006	1.8786129741e-005	9.7979266396e-006
	Per via statica	: 0.0	-163617.3	-3660482.8			
	Totali	: 27038.0	-57586.8	543255.2			
	Variazione	: 27038.0	106030.5	4203738.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,ux}$	$\varphi_{i,uy}$	$\varphi_{i,\theta z}$
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

10	56	17829.6	-34430.1	-1400536.6	-1.8109592022e-004	5.1044307044e-004	7.9513228765e-005
	50	-28266.5	-54391.0	638619.3	6.7870167887e-004	1.1693303209e-003	-6.7593505208e-005
	55	-21449.9	-18268.0	50294.1	3.2270224579e-004	2.7266702333e-004	-1.0707134834e-006
	53	647.5	-430.0	2733.6	1.6641369373e-005	-1.0535123329e-005	2.5516926330e-007
	51	-203.9	-606.2	6685.4	-8.0443653213e-006	-2.1601979738e-005	1.1472595602e-006
	54	55829.4	-24991.6	251621.5	-1.4328618180e-003	5.8585185371e-004	-2.7483454815e-005
	49	1.2	1.1	-15.7	1.2047637107e-007	9.6669474390e-008	-7.1801210798e-009
	52	-163.0	232.8	-1798.7	4.2118780907e-005	-5.6464732733e-005	1.8274156979e-006
	Per via statica	: 0.0	-262331.2	7794244.5			
	Totali	: 67487.1	-73119.1	-1562668.6			
	Variazione	: 67487.1	189212.1	-9356913.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
17	56	5516.8	-8238.8	8274.2	-3.7885385692e-004	5.6243289102e-004	-1.6147472486e-005
	50	2068.8	251.6	1134.8	-3.3585360526e-004	-4.2272394318e-005	-6.9022800162e-006
	55	-3880.4	12935.3	-5808.2	3.9470482349e-004	-1.3133914337e-003	1.1382388831e-005
	53	-1991.2	59.7	-463.6	-3.4601980884e-004	9.7832769338e-006	-2.8082753062e-006
	51	-2808.2	-17723.7	11893.9	-7.4922549345e-004	-4.7123286525e-003	7.8515719099e-005
	54	1537.1	170.2	449.4	-2.6673255100e-004	-3.0165054789e-005	-3.0125283697e-006
	49	26.4	-1.6	16.5	1.7879392060e-005	-1.0247979081e-006	3.9342007519e-007
	52	1672.7	-364.2	-11229.0	-2.9223127239e-003	7.8305508985e-004	7.0741423601e-004
	Per via statica	: 0.0	-48990.3	646586.4			
	Totali	: 7080.8	-23103.1	17783.9			
	Variazione	: 7080.8	25887.2	-628802.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
5	56	-16745.5	-37913.1	537577.1	2.8979193457e-004	5.3780487563e-004	-9.6874428738e-005
	50	44.3	20.6	-632.3	-1.8141040829e-006	-4.9689196984e-007	2.8300471280e-007
	55	10131.0	-8764.7	361577.0	-2.5968674803e-004	9.9510007457e-005	-1.0248126088e-004
	53	25437.5	-42475.2	-342105.2	1.1139459090e-003	-2.1001298100e-003	-1.9658744191e-004
	51	-71.5	-29.7	1085.7	-4.8075126927e-006	-1.0133138131e-006	8.0397787313e-007
	54	130.4	822.2	-3703.8	-5.7036266375e-006	-3.4308725648e-005	1.3452061644e-006
	49	-14875.9	-3944.8	-35109.0	-2.5406049119e-003	-7.6861343081e-004	-7.7698173486e-005
	52	192.7	-35.8	-3086.8	-8.4846286780e-005	3.4934552713e-005	1.5704774417e-005
	Per via statica	: 0.0	-194405.3	-4454816.5			
	Totali	: 34734.5	-58170.4	744671.6			
	Variazione	: 34734.4	136234.9	5199488.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

11	56	-21292.8	-97264.6	-918644.9	2.2820906557e-004	1.1758198006e-003	6.5975784499e-005
	50	-36155.8	-67161.2	747350.6	9.1604826212e-004	1.5287134452e-003	-8.5526996027e-005
	55	5190.7	53939.1	-845297.6	-8.2401320198e-005	-7.2586357268e-004	6.4513097942e-005
	53	613.4	-1105.7	7741.2	1.6636817003e-005	-2.8320122406e-005	8.2422924859e-007
	51	-305.9	-869.0	8773.9	-1.2738451003e-005	-3.2924174779e-005	1.6127413087e-006
	54	74269.3	-24021.0	219238.4	-2.0113397358e-003	5.9895453496e-004	-2.5513161873e-005
	49	1.3	0.6	-12.4	1.3258738301e-007	5.1616118175e-008	-6.5292854265e-009
	52	-114.7	537.7	-4086.8	3.1284270781e-005	-1.3749802437e-004	4.5145782479e-006
	Per via statica	: 0.0	-313904.3	9602455.0			
	Totali	: 84505.9	-131131.6	-1497691.9			
	Variazione	: 84505.9	182772.7	-11100147.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	φ_{i,u_x}	φ_{i,u_y}	φ_{i,θ_z}
6	56	-6072.6	-12051.3	28127.4	8.7728703055e-004	1.7155333815e-003	-1.2273453724e-004
	50	13.7	13.2	-37.0	-4.6894071197e-006	-4.4188747416e-006	3.8802157162e-007
	55	2761.1	-6750.6	24839.7	-5.9083077881e-004	1.4099963278e-003	-1.6627272828e-004
	53	4128.4	-595.1	-19479.5	1.5092112951e-003	-2.6685326544e-004	-2.3757223614e-004
	51	-22.5	-21.8	63.4	-1.2639827755e-005	-1.2006595786e-005	1.0959506798e-006
	54	110.0	177.2	-215.5	-4.0156576830e-005	-6.4224035448e-005	2.1631907399e-006
	49	-2173.9	-6.3	-1896.7	-3.0993143933e-003	-2.7634795807e-005	-8.9707361423e-005
	52	54.7	44.6	-178.6	-2.0103562598e-004	-1.5964623474e-004	2.0635431957e-005
	Per via statica	: 0.0	-28132.2	-376295.8			
	Totali	: -8018.8	-14085.4	43008.9			
	Variazione	: -8018.8	14046.8	419304.7			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	φ_{i,u_x}	φ_{i,u_y}	φ_{i,θ_z}
18	56	3711.7	-12184.5	8262.8	-4.1515478430e-004	1.3580210209e-003	-2.3198244925e-005
	50	1398.1	182.2	734.0	-3.6966240145e-004	-4.9716054472e-005	-7.3809578136e-006
	55	-2610.1	14804.7	-5439.4	4.3242444229e-004	-2.4497595791e-003	1.4185659855e-005
	53	-1344.6	-104.4	-197.2	-3.8056125086e-004	-3.0022093775e-005	-2.2400327660e-006
	51	-1901.9	-11684.5	7842.0	-8.2644940206e-004	-5.0597096789e-003	8.5143625092e-005
	54	1036.1	356.6	111.1	-2.9282927781e-004	-1.0117696450e-004	-1.8917954219e-006
	49	17.8	-1.2	11.0	1.9682572538e-005	-1.2902361156e-006	4.2943528791e-007
	52	1135.3	-178.8	-7429.7	-3.2304296775e-003	6.6816418051e-004	7.6847023596e-004
	Per via statica	: 0.0	-36335.7	479568.1			
	Totali	: 4766.7	-22017.5	13726.9			
	Variazione	: 4766.7	14318.3	-465841.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	φ_{i,u_x}	φ_{i,u_y}	φ_{i,θ_z}
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

12	56	-4596.8	-19484.7	-8931.5	6.4987307697e-004	2.7661551765e-003	5.6364707399e-005
	50	-3265.4	-165.2	9894.2	1.0913087116e-003	3.4472459847e-005	-1.0183766428e-004
	55	1896.6	-2545.8	-17352.2	-3.9716583610e-004	5.5666158706e-004	1.1564416472e-004
	53	49.0	-59.8	118.1	1.7520635657e-005	-2.1151384999e-005	1.1712288567e-006
	51	-29.4	-13.5	120.0	-1.6156023265e-005	-7.0260754840e-006	1.9901376531e-006
	54	7259.9	-509.0	1860.6	-2.5934715374e-003	1.7789035000e-004	-1.9394734505e-005
	49	0.1	-0.1	-0.1	1.4166900454e-007	-9.8985646096e-008	-6.6472658008e-009
	52	-7.0	25.3	-61.7	2.5112274172e-005	-8.9648364031e-005	6.2896355892e-006
	Per via statica	: 0.0	-28747.0	-379649.4			
	Totali	: 9276.2	-19773.4	-22287.1			
	Variazione	: 9276.2	8973.6	357362.3			

- Risultati angolo di ingresso del sisma: 270.00 [°] - SLV

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\Phi_{i,Ux}$	$\Phi_{i,Uy}$	$\Phi_{i,\theta z}$
1	64	6045.7	-33441.9	-153660.7	-8.6682732595e-005	4.5778725792e-004	1.7769695916e-005
	60	-124.9	-203.2	-1523.8	-4.4079747361e-006	-6.5694934272e-006	-4.9472426831e-007
	63	-10549.6	-10551.7	-98672.9	2.1495392188e-004	1.9154682681e-004	1.9201556556e-005
	61	-997.8	-2683.9	-22221.2	3.7876280137e-005	9.2233448383e-005	7.8994728169e-006
	62	-161.5	-223.2	-1691.2	-5.0102708048e-006	-6.3335015551e-006	-4.8342833610e-007
	59	84.6	136.1	1013.0	-4.7068627546e-006	-6.9425478422e-006	-5.1766682221e-007
	57	-1214.2	-1024.7	-9145.1	-1.1963530186e-004	-9.0528063853e-005	-8.5441000560e-006
	58	-25.1	-40.3	-298.5	1.8488007914e-005	2.7252038175e-005	2.0210271420e-006
	Per via statica	: 0.0	-39329.8	-263566.6			
	Totali	: -12010.1	-35726.6	-188709.8			
	Variazione	: -12010.1	3603.2	74856.8			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\Phi_{i,Ux}$	$\Phi_{i,Uy}$	$\Phi_{i,\theta z}$
13	64	-240.9	-7499.8	2051.3	1.6827264579e-005	5.2569531507e-004	-9.0698415079e-006
	60	-154.7	-98.4	338.2	-2.6601125995e-005	-1.7378082091e-005	2.2202520673e-006
	63	160.7	-7526.6	-2693.9	-1.5951989979e-005	7.4620604548e-004	4.0448846411e-006
	61	51.7	94.3	1739.0	-9.5612571260e-006	-1.5060616477e-005	-1.1445170366e-005
	62	-29.4	-185.4	-205.9	-4.4418818418e-006	-2.7826769113e-005	-9.1061667930e-007
	59	256.2	-1939.6	-1542.0	-6.9449651118e-005	5.2347846460e-004	1.1119371067e-005
	57	-1.2	0.5	-1.0	-5.6326687026e-007	2.2194436247e-007	-1.8921696437e-008
	58	-139.8	-49.4	-73.8	5.0255919631e-004	1.7576695525e-004	8.2250005702e-006
	Per via statica	: 0.0	-8073.9	26460.2			
	Totali	: -314.3	-11094.7	-3885.0			
	Variazione	: -314.3	-3020.8	-30345.3			

- Azioni di piano indotte

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
7	64	951.9	-62469.7	367075.3	-9.8218023991e-006	6.9946317818e-004	-2.7170501565e-005
	60	-1135.0	-2776.7	24604.7	-2.8835577025e-005	-7.8826313416e-005	4.0976989679e-006
	63	-6078.2	-6959.3	59819.3	8.9119499213e-005	1.1372939647e-004	-5.7826769052e-006
	61	23.0	176.6	-1304.4	-6.2761824700e-007	-5.3141600331e-006	2.4225082019e-007
	62	3956.5	-6129.2	54925.2	8.8319364693e-005	-1.5303320643e-004	8.0207590877e-006
	59	-8.9	70.1	-433.0	3.5713579369e-007	-3.0553080687e-006	1.2284604586e-007
	57	0.0	0.4	-2.8	2.2889486024e-010	3.1802910555e-008	-1.3801452097e-009
	58	0.8	-26.1	174.4	-4.2711713662e-007	1.5173540760e-005	-6.4410841549e-007
	Per via statica	: 0.0	-54654.9	724201.6			
	Totali	: -7297.8	-63618.7	380273.3			
	Variazione	: -7297.8	-8963.8	-343928.3			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
2	64	34146.2	-32961.9	77860.5	-5.5975739355e-004	5.6668992922e-004	-2.1573706593e-005
	60	-301.6	-291.4	-2529.3	-1.2173982626e-005	-1.0566743218e-005	-9.7749759892e-007
	63	-24804.0	-32273.4	-283360.1	5.7783078487e-004	6.7450732740e-004	6.3319104775e-005
	61	1677.4	-10595.9	-95511.8	-7.2802031117e-005	4.1110785585e-004	3.9929311588e-005
	62	-462.2	-231.4	-2043.7	-1.6393441493e-005	-7.3586064455e-006	-6.9592217916e-007
	59	214.1	177.3	1525.8	-1.3620884414e-005	-1.0147588122e-005	-9.2817212745e-007
	57	-4832.8	-2868.7	-27318.8	-5.4443400273e-004	-2.8665744968e-004	-2.9892731411e-005
	58	-64.5	-50.1	-429.1	5.4420641514e-005	3.8072248602e-005	3.4577153901e-006
	Per via statica	: 0.0	-77478.0	-455232.5			
	Totali	: 41462.0	-48702.6	-307961.3			
	Variazione	: 41462.0	28775.4	147271.2			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
8	64	19914.7	-67881.7	-38940.9	-2.0300868663e-004	7.0276148363e-004	-5.3338051702e-006
	60	-8549.8	-13551.4	133775.7	-2.1460353661e-004	-3.8368383171e-004	2.1537177352e-005
	63	-28579.2	-47854.3	383053.5	4.1401097534e-004	7.6804003168e-004	-3.7003004349e-005
	61	93.9	144.8	-1335.1	-2.5349769190e-006	-4.3820916873e-006	2.3389855956e-007
	62	17544.9	-17510.0	154258.1	3.8695216027e-004	-4.3119917615e-004	2.2268597155e-005
	59	-118.3	-170.6	1773.9	4.6787358532e-006	7.6507366681e-006	-4.4628862751e-007
	57	-0.2	-0.2	2.2	-1.2787263705e-008	-1.4571498864e-008	9.6342337394e-010
	58	21.2	27.5	-299.9	-1.1128266137e-005	-1.6417291251e-005	9.9272789654e-007
	Per via statica	: 0.0	-124593.4	1653288.3			
	Totali	: 38912.5	-88254.0	438563.0			
	Variazione	: 38912.5	36339.5	-1214725.3			

- Azioni di piano indotte

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
14	64	-872.2	12170.5	9433.3	6.0124612555e-005	-8.3540739576e-004	-1.7053908378e-005
	60	-535.1	-144.1	1186.2	-9.0823848078e-005	-2.5999145856e-005	7.3922672222e-006
	63	567.7	-25015.7	-6854.8	-5.5613752793e-005	2.4493223659e-003	5.8378737305e-006
	61	173.7	121.3	5795.4	-3.1704898588e-005	-1.4306677384e-005	-3.7714874532e-005
	62	-100.0	-379.0	-619.0	-1.4911115027e-005	-5.5919092866e-005	-2.8862605811e-006
	59	888.2	-6639.9	-5215.6	-2.3763745647e-004	1.7688847317e-003	3.6774395223e-005
	57	-4.1	1.0	-3.5	-1.9215698350e-006	4.7201148953e-007	-6.2936672585e-008
	58	-483.1	-125.9	-238.1	1.7139335636e-003	4.4100730394e-004	2.6927607938e-005
	Per via statica	: 0.0	-18425.1	60383.5			
	Totali	: -1121.7	-28112.5	13282.0			
	Variazione	: -1121.7	-9687.4	-47101.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
3	64	47388.6	-22195.4	444941.5	-7.7491595935e-004	4.6780874525e-004	-8.5864751077e-005
	60	-339.4	-302.6	-3215.1	-1.3663864376e-005	-1.0626019582e-005	-1.2744991114e-006
	63	-24034.9	-37042.1	-265300.9	5.5852654110e-004	7.9132133330e-004	5.6885069169e-005
	61	10079.1	-22216.6	-202673.5	-4.3635949739e-004	8.5859386141e-004	8.4537809318e-005
	62	-653.7	-62.7	-1219.0	-2.3126195103e-005	-1.6708205832e-006	-4.4957345643e-007
	59	260.8	155.8	1738.1	-1.6554560102e-005	-8.5528692270e-006	-1.0927894923e-006
	57	-10413.1	-4999.0	-47897.7	-1.1701668175e-003	-4.9796525862e-004	-5.2241592812e-005
	58	-80.7	-40.1	-460.9	6.7937542311e-005	2.9049130769e-005	3.8561972034e-006
	Per via statica	: 0.0	-120643.7	-710544.7			
	Totali	: 53844.5	-50018.5	-549155.1			
	Variazione	: 53844.5	70625.2	161389.6			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
9	64	37534.1	-25530.5	-901890.9	-3.8281289270e-004	1.6703672610e-004	4.6178508467e-005
	60	-21018.2	-29109.2	297632.1	-5.2783282874e-004	-8.2739121095e-004	4.7670517113e-005
	63	-39496.0	-65292.7	388291.8	5.7244581222e-004	1.0275112293e-003	-4.0154774217e-005
	61	260.2	123.0	-2665.9	-7.0249271203e-006	-4.1673154583e-006	4.1905932820e-007
	62	37598.9	-26701.5	227214.1	8.2966172870e-004	-6.5598983297e-004	3.3040401227e-005
	59	-268.0	-504.0	4205.9	1.0607620016e-005	2.2176127005e-005	-1.1013354960e-006
	57	-0.3	-1.0	6.1	-2.4463920296e-008	-7.4563762279e-008	3.0172022105e-009
	58	45.2	100.7	-747.7	-2.3715792700e-005	-5.8255588728e-005	2.6590241345e-006
	Per via statica	: 0.0	-193430.6	2560806.3			
	Totali	: 67674.3	-82499.8	1037128.9			
	Variazione	: 67674.3	110930.8	-1523677.1			

- Azioni di piano indotte

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
15	64	-1523.4	24088.8	8122.8	1.0504648005e-004	-1.6594976061e-003	-7.7169311013e-006
	60	-916.0	-63.2	2098.3	-1.5553568148e-004	-1.3395411150e-005	1.2840838502e-005
	63	972.7	-24607.5	-4731.8	-9.5316432712e-005	2.4116749607e-003	-1.3136067797e-006
	61	291.9	12.9	9596.5	-5.3291223921e-005	1.0662520445e-005	-6.2736589330e-005
	62	-167.5	-369.1	-868.6	-2.4986803514e-005	-5.4181851778e-005	-4.2323565456e-006
	59	1523.4	-11206.5	-8807.9	-4.0773969340e-004	2.9864862033e-003	6.2146204578e-005
	57	-7.0	1.1	-6.2	-3.2961608519e-006	5.4605840581e-007	-1.0916763788e-007
	58	-827.6	-172.9	-376.3	2.9368881048e-003	6.0462894725e-004	4.3268306947e-005
	Per via statica	: 0.0	-28609.1	-93759.2			
	Totali	: -1943.4	-35437.4	14674.2			
	Variazione	: -1943.4	-6828.3	108433.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
16	64	-2065.5	11716.2	-1868.7	1.4242860784e-004	-8.1012545465e-004	1.0620165591e-005
	60	-1242.7	175.3	2989.0	-2.1100025354e-004	2.6030922578e-005	1.7957252001e-005
	63	1301.3	-7005.6	1858.0	-1.2752069340e-004	6.8892286311e-004	-1.1624077548e-005
	61	389.1	-259.5	12602.8	-7.1033258323e-005	6.4547891820e-005	-8.2765046785e-005
	62	-221.9	-104.0	-876.6	-3.3110095576e-005	-1.4565422917e-005	-4.5693307977e-006
	59	2070.7	-15036.8	-11862.5	-5.5420721881e-004	4.0071775262e-003	8.3810105459e-005
	57	-9.5	0.7	-8.8	-4.4808862213e-006	3.7088479723e-007	-1.5242880752e-007
	58	-1123.7	-174.9	-462.5	3.9877388511e-003	6.0941364235e-004	5.4178902710e-005
	Per via statica	: 0.0	-38799.7	-127156.4			
	Totali	: -2627.2	-20164.2	15377.1			
	Variazione	: -2627.2	18635.5	142533.5			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
4	64	19746.8	-38516.0	538522.6	-3.2290621569e-004	7.5990509212e-004	-1.0651226589e-004
	60	-24.9	-273.6	-3857.4	-1.0016218344e-006	-9.0901784453e-006	-1.5779947660e-006
	63	-6140.5	-15631.1	27264.5	1.4269399226e-004	3.7787092201e-004	-1.1982200787e-005
	61	20981.9	-33700.7	-307378.2	-9.0837937737e-004	1.3024491470e-003	1.2820731801e-004
	62	-394.5	182.4	-81.9	-1.3958500644e-005	6.6012733336e-006	-1.1991295356e-007
	59	67.4	107.5	1938.8	-4.2800381424e-006	-5.2650737833e-006	-1.2761102256e-006
	57	-16182.4	-6980.7	-66923.8	-1.8184867956e-003	-6.9530006936e-004	-7.2999231771e-005
	58	-25.4	-22.3	-492.8	2.1405592253e-005	1.3448560116e-005	4.3584962068e-006
	Per via statica	: 0.0	-163617.3	-964806.4			
	Totali	: 32713.9	-55011.9	627600.5			
	Variazione	: 32713.9	108605.4	1592406.9			

- Azioni di piano indotte

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
10	64	17041.6	-33889.2	-1192590.0	-1.7380830574e-004	2.2222849133e-004	6.1048348760e-005
	60	-34020.4	-43799.7	454229.1	-8.5436089634e-004	-1.2466746024e-003	7.2582705641e-005
	63	-20801.7	-29831.0	-198568.4	3.0149570201e-004	4.1079245757e-004	1.0671107822e-005
	61	491.9	224.4	-5938.9	-1.3283569351e-005	-7.9175092401e-006	9.1916594406e-007
	62	61072.3	-33615.3	275325.6	1.3476283183e-003	-8.2329871663e-004	4.0335645900e-005
	59	-384.3	-733.5	5129.5	1.5211773958e-005	3.1852413164e-005	-1.3938190981e-006
	57	-0.4	-1.4	3.9	-2.5070178939e-008	-1.0114264049e-007	2.5052734680e-009
	58	58.3	144.3	-754.0	-3.0578410942e-005	-8.1630258568e-005	2.9224086798e-006
	Per via statica	: 0.0	-262331.2	3472206.0			
	Totali	: 73244.9	-73579.8	-1331494.0			
	Variazione	: 73244.9	188751.4	-4803700.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
17	64	-2441.9	-10931.2	-13244.5	1.6838834170e-004	7.4816094278e-004	2.7110643814e-005
	60	-1485.5	486.0	3714.5	-2.5222727959e-004	7.7956341395e-005	2.1977306713e-005
	63	1527.9	14029.2	8497.1	-1.4972789366e-004	-1.3707235197e-003	-1.9606995824e-005
	61	457.8	-602.0	14611.3	-8.3584907064e-005	1.2989906172e-004	-9.6363666167e-005
	62	-260.3	288.4	-738.4	-3.8831668769e-005	4.3916825301e-005	-4.2657355155e-006
	59	2479.1	-17742.8	-14060.6	-6.6352935234e-004	4.7281754322e-003	9.9499224652e-005
	57	-11.3	0.0	-11.0	-5.3638209626e-006	4.6973362771e-008	-1.8632596120e-007
	58	-1343.9	-144.9	-502.2	4.7693712031e-003	5.0165208233e-004	6.0013544181e-005
	Per via statica	: 0.0	-48990.3	-160553.4			
	Totali	: -3107.3	-24725.2	-23454.0			
	Variazione	: -3107.3	24265.1	137099.4			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
5	64	-24011.0	-60957.3	447936.8	4.1724716375e-004	1.1855953459e-003	-1.0343446037e-004
	60	548.2	-192.1	-3808.1	2.3455026326e-005	-6.0905535666e-006	-1.7422725425e-006
	63	13866.0	14777.2	376554.3	-3.4241639422e-004	-2.4172122056e-004	-1.0087838391e-004
	61	30106.6	-42935.4	-370036.4	-1.3851192776e-003	1.7720014216e-003	1.6649558658e-004
	62	241.9	466.0	1333.6	9.0944130363e-006	1.7119964910e-005	3.2750546693e-007
	59	-311.6	28.1	1761.3	2.1017060452e-005	-2.7687882607e-007	-1.3272062283e-006
	57	-20060.9	-8381.3	-75864.7	-2.3956355287e-003	-8.9181632850e-004	-8.9302144366e-005
	58	86.2	4.2	-423.7	-7.7127452227e-005	-9.0588534857e-006	4.3696416859e-006
	Per via statica	: 0.0	-194405.3	-1251891.1			
	Totali	: 44416.8	-76250.4	710408.1			
	Variazione	: 44416.8	118154.9	1962299.1			

- Azioni di piano indotte

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
11	64	-27435.2	-67360.8	-1000831.3	2.9525879384e-004	6.2110983827e-004	5.1362536062e-005
	60	-43763.5	-54944.4	522860.8	-1.1597072656e-003	-1.6434307487e-003	9.2722239340e-005
	63	10591.3	23771.9	-875653.4	-1.6198185572e-004	-5.2119102019e-004	7.7975294292e-005
	61	663.2	296.0	-8124.2	-1.8896553936e-005	-1.1205980487e-005	1.3717701851e-006
	62	80830.6	-36837.4	263500.8	1.8820724494e-003	-9.4553104052e-004	4.3435175704e-005
	59	-474.5	-912.8	5024.4	1.9818820869e-005	4.1329533046e-005	-1.5838343151e-006
	57	-0.4	-1.7	0.9	-2.8098578941e-008	-1.2890631813e-007	1.7589268780e-009
	58	69.0	178.9	-604.1	-3.8244032825e-005	-1.0507470972e-004	2.9525934764e-006
	Per via statica	: 0.0	-313904.3	4430725.0			
	Totali	: 94652.2	-97745.5	-1483046.0			
	Variazione	: 94652.1	216158.8	-5913771.0			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
6	64	-7751.2	-17705.1	17974.4	1.1244144531e-003	2.5899656483e-003	-1.0410898219e-004
	60	141.7	43.5	-151.1	5.0603596548e-005	1.5939347358e-005	-1.8959125590e-006
	63	3588.4	-4520.0	24905.4	-7.3975104059e-004	9.6844218524e-004	-1.7661892044e-004
	61	4730.5	-675.8	-16020.5	-1.8168091519e-003	2.1760573116e-004	2.0219287430e-004
	62	114.1	65.0	84.6	3.5817652893e-005	2.0255281738e-005	7.4036010691e-007
	59	-87.8	-32.4	66.9	4.9460852174e-005	1.8536388055e-005	-1.3751815129e-006
	57	-2920.5	-63.9	-3153.2	-2.9114013754e-003	-4.2182663639e-005	-1.0377047486e-004
	58	25.2	10.0	-15.6	-1.8849374770e-004	-7.5661327004e-005	4.3810114643e-006
	Per via statica	: 0.0	-28132.2	87196.0			
	Totali	: -9980.9	-18511.8	35470.1			
	Variazione	: -9980.9	9620.4	-51725.9			

- Azioni di piano indotte

Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
18	64	-1629.0	-16097.4	-12268.8	1.8295980555e-004	1.8004153551e-003	3.6269053318e-005
	60	-1005.0	427.3	2516.7	-2.7793565172e-004	1.1312615155e-004	2.4286236603e-005
	63	1018.3	16451.1	7510.0	-1.6252982338e-004	-2.6207872899e-003	-2.3647052853e-005
	61	302.1	-509.7	9530.2	-8.9827082751e-005	1.7305850976e-004	-1.0363180976e-004
	62	-173.9	344.6	-377.6	-4.2251766282e-005	8.4545841034e-005	-3.9469432959e-006
	59	1680.0	-11744.6	-9297.9	-7.3233771196e-004	5.0972841954e-003	1.0817279272e-004
	57	-7.7	-0.3	-7.4	-5.9048132914e-006	-1.9054947779e-007	-2.0576451926e-007
	58	-908.2	-72.6	-314.8	5.2497527064e-003	4.0674842870e-004	6.2667962497e-005
	Per via statica	: 0.0	-36335.7	-119081.2			
	Totali	: -2077.8	-25238.2	-18233.5			
	Variazione	: -2077.8	11097.5	100847.7			

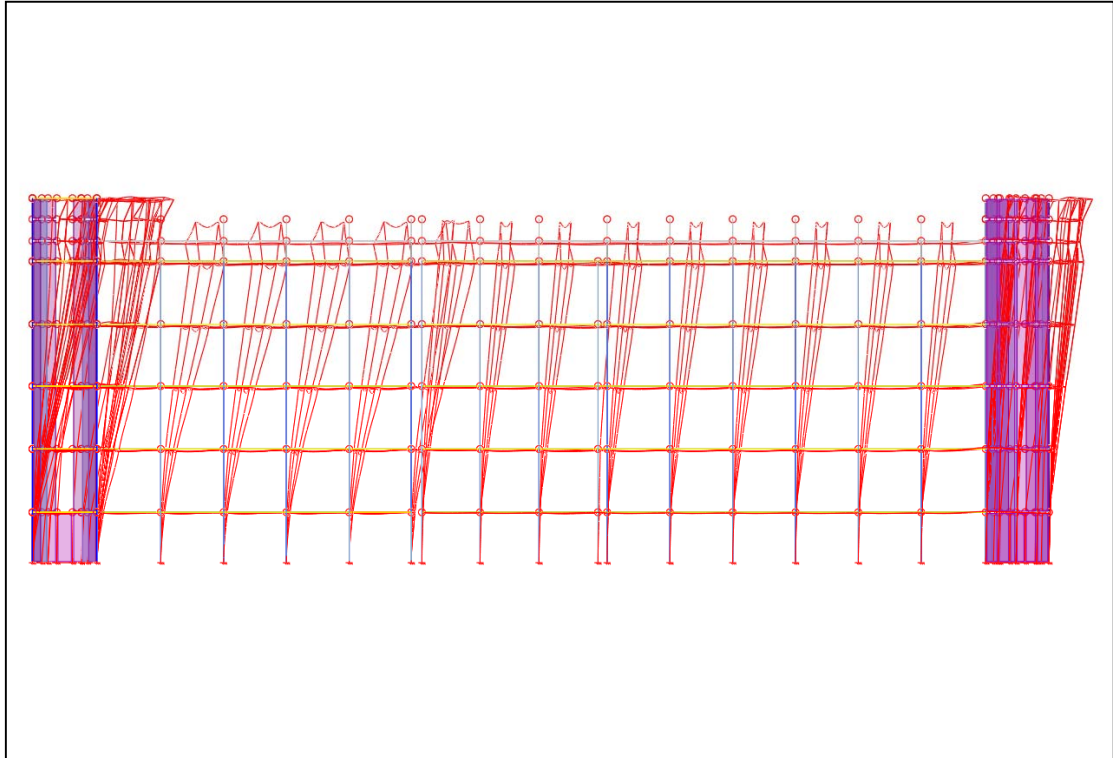
- Azioni di piano indotte

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

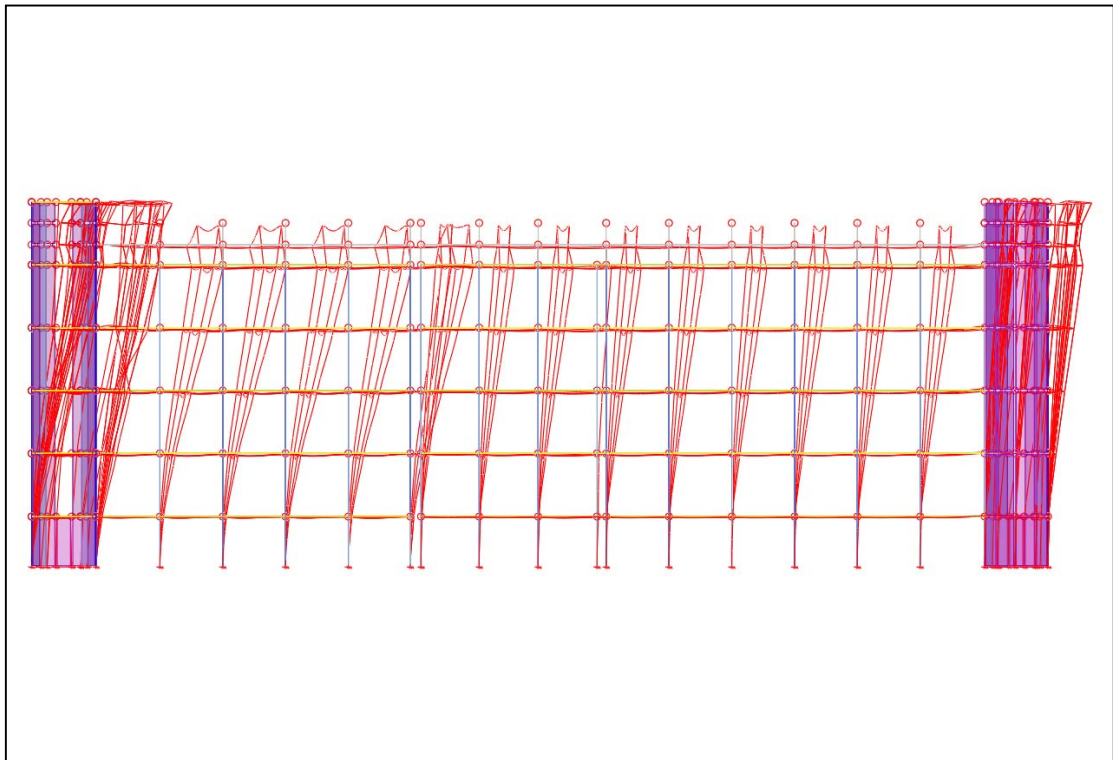
Solaio	Modo	Fx [kg]	Fy [kg]	Mt [kgm]	$\varphi_{i,Ux}$	$\varphi_{i,Uy}$	$\varphi_{i,\theta z}$
12	64	-5555.5	-12536.8	-11905.7	7.8867238996e-004	1.7713888070e-003	4.1023695791e-005
	60	-3995.3	9.6	10310.3	-1.3965640326e-003	-1.9342338995e-005	1.1135063727e-004
	63	2663.8	-5526.7	-22416.4	-5.3740266301e-004	1.0879039607e-003	1.3272847919e-004
	61	62.1	-47.8	-163.4	-2.3328255887e-005	1.7601954004e-005	1.7842934072e-006
	62	7925.7	-695.9	4228.8	2.4342966246e-003	-2.2220225296e-004	4.1482744962e-005
	59	-42.5	-32.9	97.3	2.3421674827e-005	1.8468060536e-005	-1.7699452804e-006
	57	-0.0	-0.1	0.0	-3.1043470408e-008	-1.3427664488e-007	1.1601225353e-009
	58	6.1	9.9	-11.4	-4.4386246795e-005	-7.2814161438e-005	3.0248697383e-006
	Per via statica	: 0.0	-28747.0	93971.5			
	Totali	: 10601.8	-13983.9	-28183.8			
	Variazione	: 10601.8	14763.1	-122155.3			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

DEFORMATA QUALITATIVA 1° MODO DI VIBRARE DIR. 0+

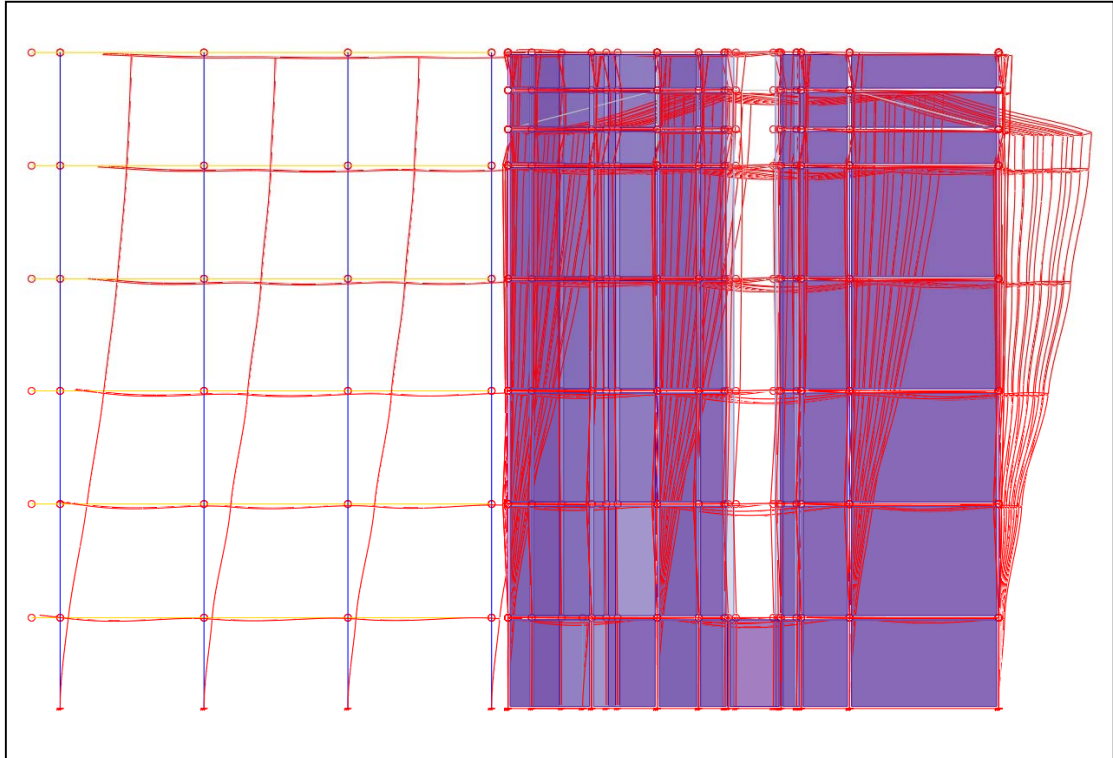


DEFORMATA QUALITATIVA 1° MODO DI VIBRARE DIR. 0-

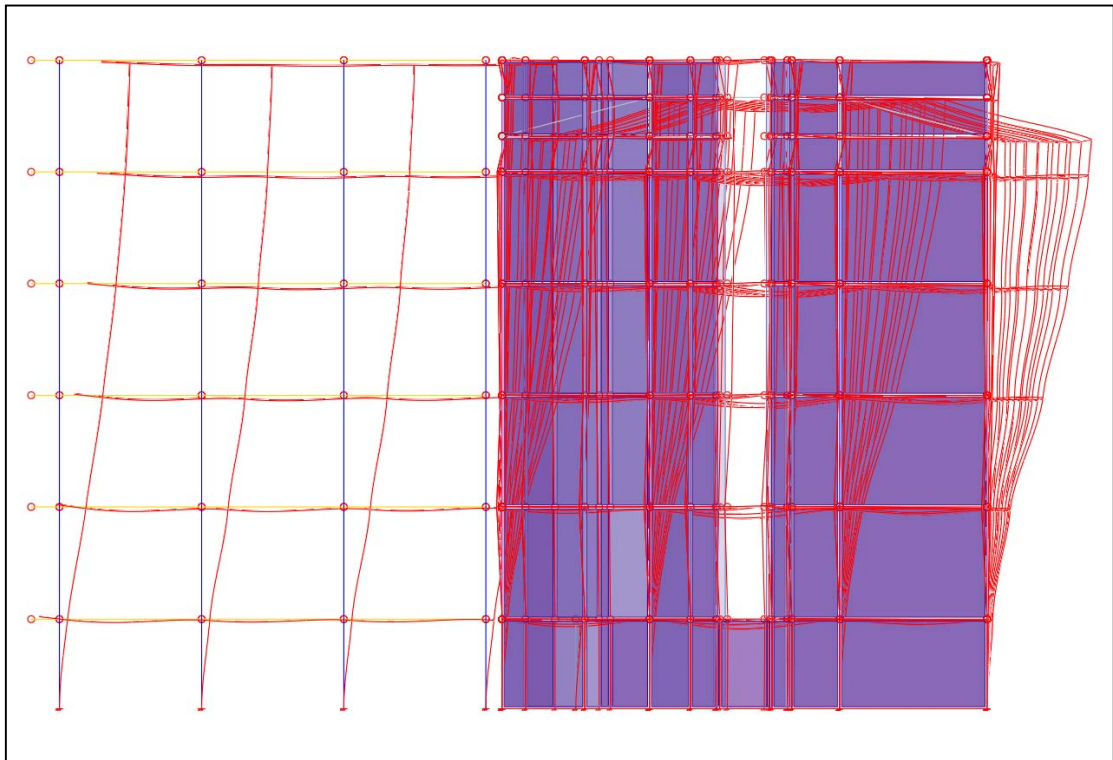


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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

DEFORMATA QUALITATIVA 1° MODO DI VIBRARE DIR. 90+

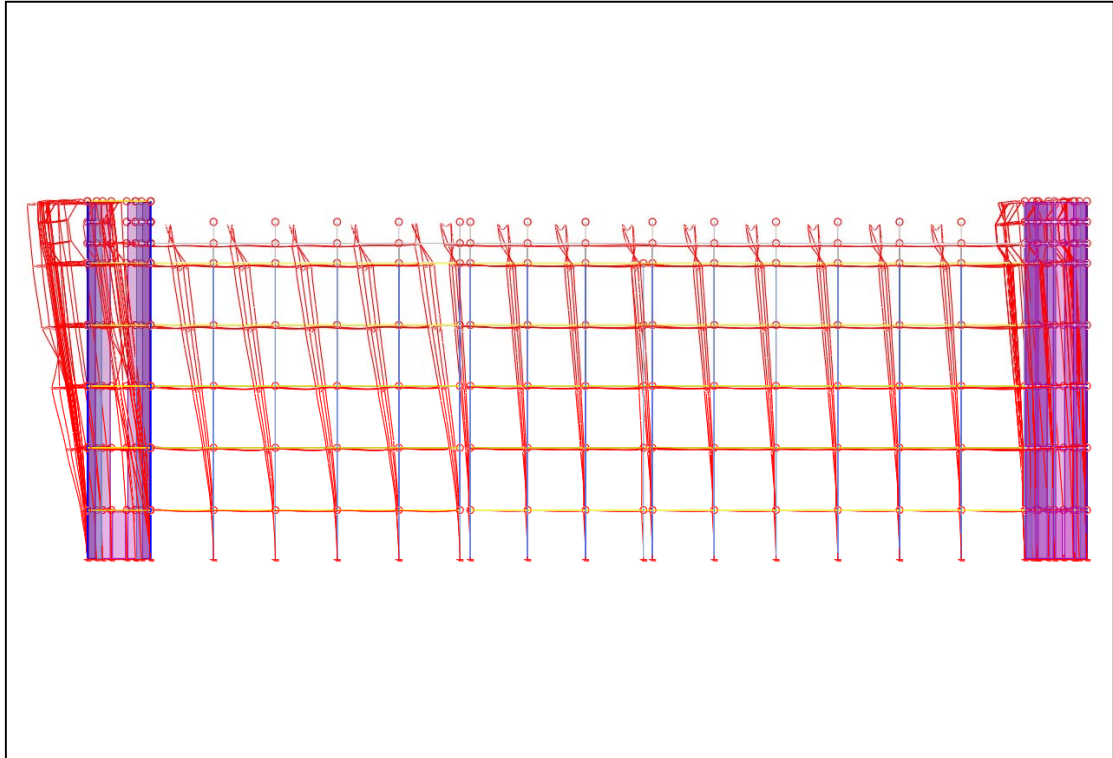


DEFORMATA QUALITATIVA 1° MODO DI VIBRARE DIR. 90-

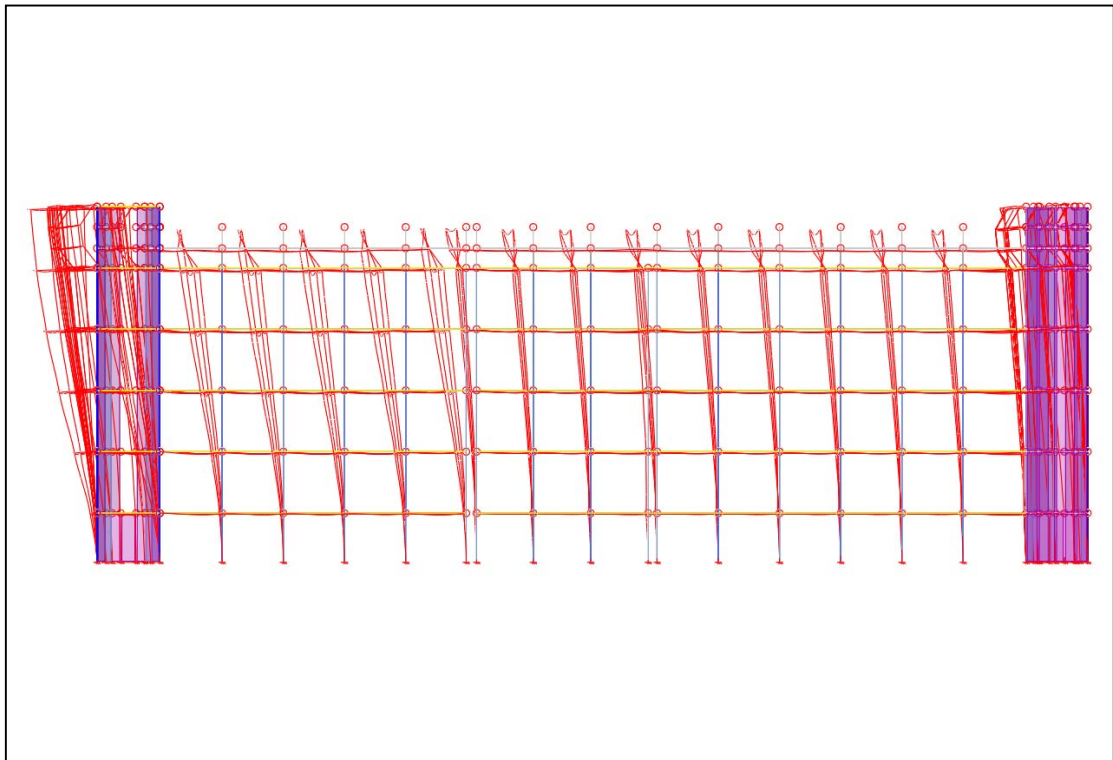


COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

DEFORMATA QUALITATIVA 1° MODO DI VIBRARE DIR. 180+

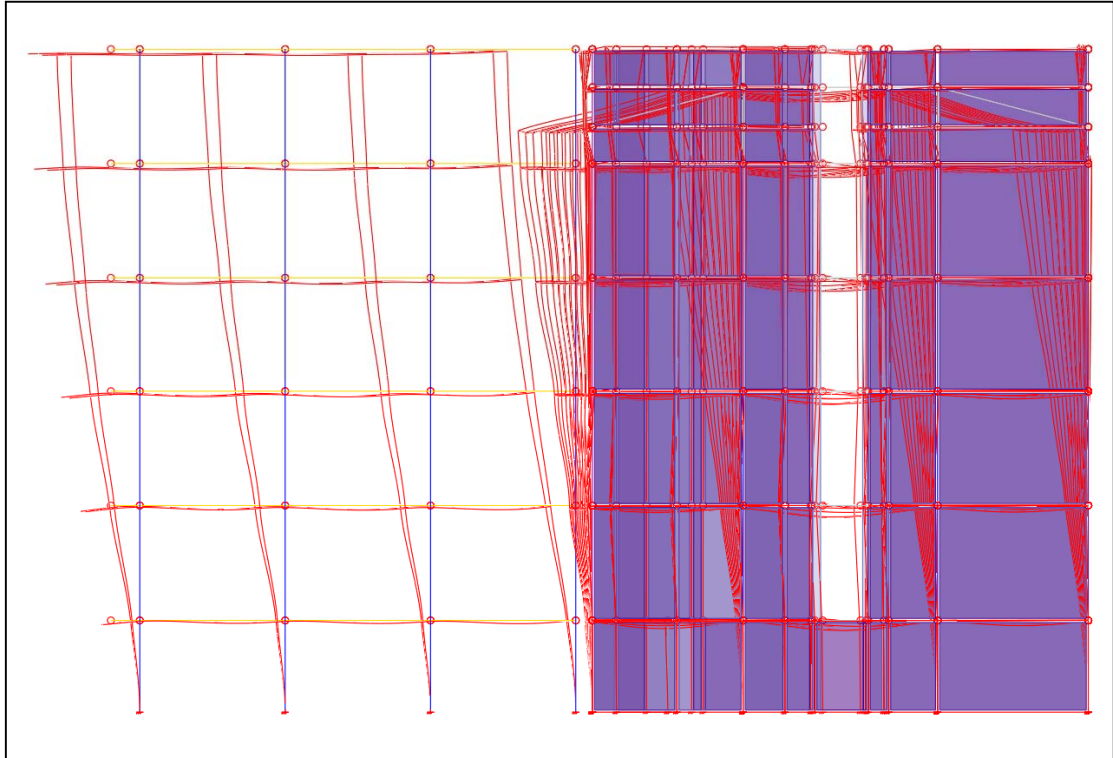


DEFORMATA QUALITATIVA 1° MODO DI VIBRARE DIR. 180-

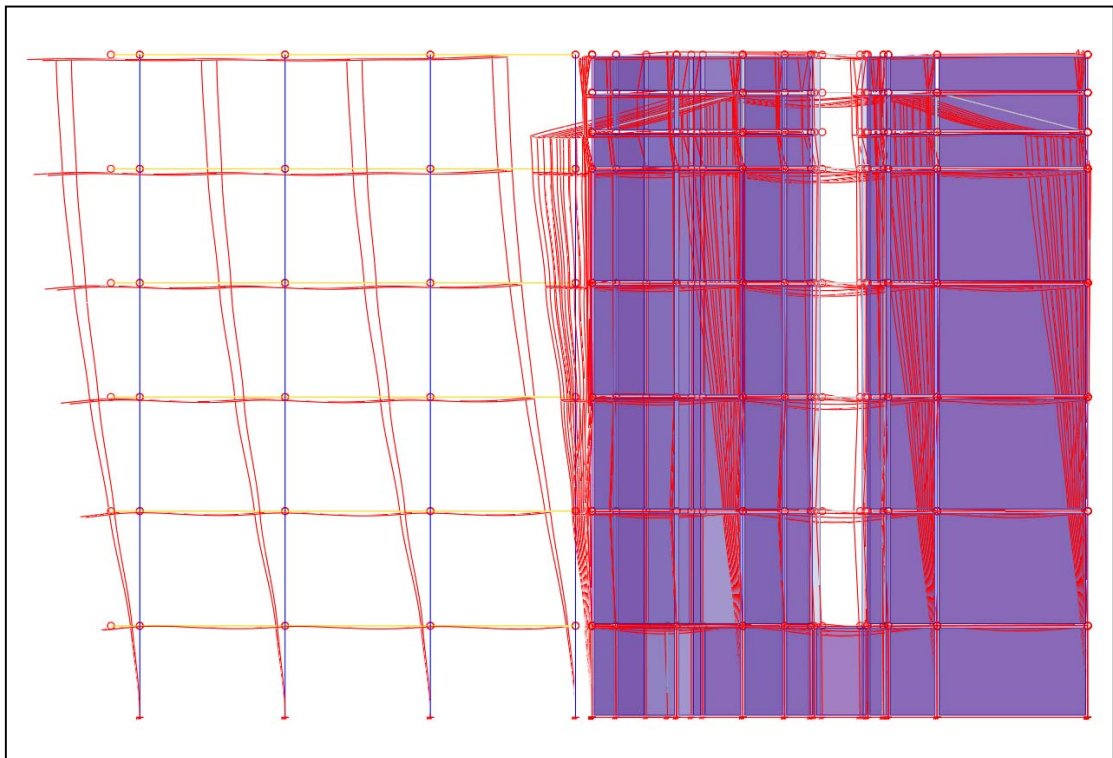


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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

DEFORMATA QUALITATIVA 1° MODO DI VIBRARE DIR. 270+



DEFORMATA QUALITATIVA 1° MODO DI VIBRARE DIR. 270-



9 CRITERI DI VERIFICA AGLI STATI LIMITE

9.1 STATI LIMITE ULTIMI

Le verifiche nei confronti degli stati limite ultimi degli elementi strutturali, degli elementi non strutturali e degli impianti sono state effettuate in termini di resistenza e di duttilità.

9.1.1 Verifiche degli elementi strutturali in termini di resistenza

Per tutti gli elementi strutturali, inclusi nodi e connessioni tra elementi, si è verificato che il valore di progetto di ciascuna sollecitazione, calcolato comprendendo gli effetti delle regole di gerarchia delle resistenze, fosse inferiore al corrispondente valore della resistenza di progetto.

La resistenza di progetto delle membrature e dei collegamenti è stata valutata in accordo con le regole di progettazione definite dalle NTC 2008 ai capitoli 4 e 7.

9.1.2 Verifiche degli elementi strutturali in termini di duttilità e capacità di deformazione

La condizione che i singoli elementi strutturali e la struttura nel suo insieme possiedano una duttilità coerente con il fattore di struttura adottato ($q = 3,3$ per le due parti dell'edificio principale, $q = 3,6$ per il tunnel) è stata ritenuta soddisfatta avendo applicato le regole di progetto specifiche e di gerarchia delle resistenze indicate dalle NTC 2008 per le diverse tipologie costruttive.

9.1.3 Verifiche degli elementi non strutturali e degli impianti

La struttura è tamponata esternamente sui due lati lunghi con pannelli prefabbricati in c.a., che vengono fissati ai pilastri mediante appositi dispositivi metallici.

In particolare, ogni pannello va da un pilastro al pilastro adiacente ed è fissato ad essi attraverso 2 mensole (in basso), che forniscono il supporto verticale, e 2 profili incavi (in alto), che forniscono un ritegno orizzontale che ne impedisce l'espulsione in caso di sisma.

La tipologia ricorrente di attacco di questi pannelli ai pilastri è riportata nell'apposito allegato grafico.

Essendo elementi non strutturali, non si devono applicare ad essi le verifiche sismiche agli SLV, in quanto allo stato limite di salvaguardia della vita la costruzione può subire rotture e crolli dei componenti non strutturali ed impiantistici. Si devono invece condurre le verifiche agli SLD, in quanto allo stato limite di danno la costruzione nel suo complesso, includendo gli

elementi non strutturali, deve subire danni tali da non mettere a rischio gli utenti (quali il distacco di un pannello esterno).

Gli effetti dell'azione sismica su elementi non strutturali possono essere determinati applicando a questi elementi una forza orizzontale F_a definita dalla (7.2.1) delle NTC 2008:

$$F_a = \frac{S_a \cdot W_a}{q_a}$$

Il fattore di struttura dell'elemento può essere desunto dalla Tabella 7.2.I: in questo caso, trattandosi di parete esterna, esso è assunto pari a 2,0.

Il valore di S_a (accelerazione massima, adimensionalizzata rispetto a quella di gravità, che l'elemento subisce corrispondente allo stato limite in esame) è definito in normativa dalla (7.2.2):

$$S_a = \alpha \cdot S \cdot \left[\frac{3 \cdot (1 + Z/H)}{1 + (1 - T_a/T_1)^2} - 0,5 \right]$$

Dalla formula si nota che S_a cresce all'aumentare di Z : di conseguenza, per massimizzare il valore di S_a , a favore di sicurezza si prende il pannello (di altezza intera) posto a quota maggiore, ovvero quello applicato in corrispondenza del 4° solaio.

Si procede alla verifica del singolo pannello soggetto alla più sfavorevole azione sismica ortogonale al suo piano, agli SLD. Dato che le mensole ed i profili incavi non sono in grado di trasmettere momento, il pannello può essere considerato come una trave verticale vincolata alla base ed in sommità attraverso due cerniere.

Il pannello, di spessore pari a 10 cm, presenta una larghezza massima di 4,39 metri per un'altezza di 2,45 metri.

La massa del pannello è pari a:

$$m = 0.1 \cdot 4.39 \cdot 2.45 \cdot 2500 = 2700 \text{ kg}$$

Il momento d'inerzia del pannello è pari a:

$$J = \frac{b \cdot s^3}{12} = \frac{4.39 \cdot 0.1^3}{12} = 366 \cdot 10^{-6} \text{ m}^4$$

Il modulo elastico considerato è quello del calcestruzzo di classe C28/35:

$$E = 3.259 \cdot 10^9 \text{ kg/m}^2$$

Si calcola il periodo T_a dell'elemento, considerato come trave semplicemente appoggiata alle sue estremità con peso distribuito lungo l'altezza:

$$\omega_1 = \frac{\pi^2}{L^2} \cdot \sqrt{\frac{E \cdot J}{\rho \cdot A}} = \frac{\pi^2}{2.45^2} \cdot \sqrt{\frac{3.259 \cdot 10^9 \cdot 9.81 \cdot 366 \cdot 10^{-6}}{2500 \cdot 0.1 \cdot 4.39}} = 170 \text{ s}^{-1}$$

$$T_a = \frac{2\pi}{\omega_1} = \frac{2\pi}{170} = 0.037 \text{ s}$$

Il pannello in corrispondenza del 4° solaio ha il baricentro posto ad una quota $Z=15,48$ m, mentre l'altezza dell'ultimo solaio dell'edificio è a quota $H=19,64$ m (entrambi misurati a partire dal piano di fondazione).

L'accelerazione massima che l'elemento subisce, corrispondente allo SLD, è:

$$S_a(SLD) = \alpha(SLD) \cdot S \cdot \left[\frac{3 \cdot (1 + Z/H)}{1 + (1 - T_a/T_1)^2} - 0,5 \right]$$
$$S_a(SLD) = 0,082 \cdot 1,5 \cdot \left[\frac{3 \cdot \left(1 + \frac{15,48}{19,64}\right)}{1 + \left(1 - \frac{0,037}{0,9}\right)^2} - 0,5 \right] = 0,283 \text{ g}$$

La forza orizzontale F_a agente sul baricentro dell'elemento è quindi:

$$F_a = \frac{S_a \cdot W_a}{q_a} = \frac{0,283 \text{ g} \cdot 2700}{2,0} = 382 \text{ kg}$$

Dato che la mensola fornisce solo una reazione verticale, la forza orizzontale deve essere ripartita tra i due profili incavi posti superiormente: ognuno dei due profili deve quindi garantire uno sforzo a trazione pari a circa 200 kg.

Questo sforzo è ampiamente garantito dal profilo Edilmatic tipo "C" 35x18x2.5 – P1 (o qualsiasi altro profilo di equivalente tipologia e portata), che è dimensionato per un carico puntuale di trazione di 600 kg.

9.2 STATI LIMITE DI ESERCIZIO

Le verifiche nei confronti degli stati limite di esercizio degli elementi strutturali, degli elementi non strutturali e degli impianti sono state effettuate rispettivamente in termini di resistenza, di contenimento del danno e di mantenimento della funzionalità.

9.2.1 Verifiche degli elementi strutturali in termini di resistenza

Appartenendo la struttura in oggetto alla Classe d'Uso IV, al fine di limitare i danneggiamenti strutturali, per tutti gli elementi strutturali, inclusi nodi e connessioni tra elementi, si è verificato che

il valore di progetto di ciascuna sollecitazione, calcolato in presenza delle azioni sismiche corrispondenti allo SLD ed attribuendo ad h il valore di $2/3$, fosse inferiore al corrispondente valore della resistenza di progetto, calcolato secondo le regole specifiche indicate nel capitolo 4 delle NTC 2008 con riferimento alle situazioni eccezionali.

9.2.2 Verifiche degli elementi strutturali in termini di contenimento del danno agli elementi non strutturali

Appartenendo la struttura in oggetto alla Classe d'Uso IV, si è verificato che l'azione sismica di progetto non producesse danni agli elementi non strutturali tali da rendere temporaneamente non operativa la costruzione. Questa condizione è stata ritenuta soddisfatta verificando che gli spostamenti di interpiano ottenuti dall'analisi in presenza dell'azione sismica di progetto relativa allo SLO fossero inferiori a $2/3 \cdot 0,005$ volte l'altezza di interpiano (considerando i tamponamenti collegati rigidamente alla struttura che interferiscono con la deformabilità della stessa), come mostrato nella seguente tabella dei massimi spostamenti differenziali:

Comb.	Ux		Uy		Uz		Uxyz		$\frac{2}{3} \cdot 0,005 \cdot h$
	Nodi	Ux [cm]	Nodi	Uy [cm]	Nodi	Uz [cm]	Nodi	Uxyz [cm]	
74	1374-1474	1.08	220-320	0.83	1171-1271	0.14	305-405	1.35	1.35
75	1374-1474	1.04	250-350	0.85	1171-1271	0.15	305-405	1.31	1.35
76	160-260	1.05	220-320	0.44	1113-1213	0.15	159-259	1.10	1.35
77	160-260	1.06	220-320	0.43	1113-1213	0.16	159-259	1.11	1.35
78	1374-1474	1.08	250-350	0.90	1171-1271	0.15	305-405	1.30	1.35
79	1374-1474	1.04	250-350	0.95	1171-1271	0.15	305-405	1.26	1.35
80	1374-1474	0.87	420-520	-0.60	1113-1213	0.16	415-515	0.99	1.35
81	1307-1407	0.90	420-520	-0.61	1112-1212	-0.17	415-515	1.02	1.35
82	1374-1474	0.69	250-350	0.99	1171-1271	0.16	250-350	1.14	1.35
83	1374-1474	0.69	250-350	1.02	1171-1271	0.16	250-350	1.17	1.35
84	1314-1414	-0.73	165-265	0.76	1113-1213	-0.17	420-520	1.00	1.35
85	1314-1414	-0.71	165-265	0.77	1113-1213	-0.17	159-259	0.88	1.35
86	1372-1472	0.64	250-350	1.13	1171-1271	0.17	250-350	1.29	1.35
87	1372-1472	0.64	250-350	1.16	1171-1271	0.17	250-350	1.32	1.35
88	1314-1414	-0.65	165-265	0.79	1113-1213	-0.16	420-520	0.93	1.35
89	1314-1414	-0.64	165-265	0.80	1113-1213	-0.15	159-259	0.90	1.35
90	1307-1407	-0.90	420-520	0.61	1112-1212	0.17	415-515	1.02	1.35
91	1374-1474	-0.87	420-520	0.60	1113-1213	-0.16	415-515	0.99	1.35
92	1374-1474	-1.04	250-350	-0.95	1171-1271	-0.15	305-405	1.26	1.35
93	1374-1474	-1.08	250-350	-0.90	1171-1271	-0.15	305-405	1.30	1.35
94	160-260	-1.06	220-320	-0.43	1113-1213	-0.16	159-259	1.11	1.35
95	160-260	-1.05	220-320	-0.44	1113-1213	-0.15	159-259	1.10	1.35

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96	1374-1474	-1.04	250-350	-0.85	1171-1271	-0.15	305-405	1.31	1.35
97	1374-1474	-1.08	220-320	-0.83	1171-1271	-0.14	305-405	1.35	1.35
98	1314-1414	0.64	165-265	-0.80	1113-1213	0.15	159-259	0.90	1.35
99	1314-1414	0.65	165-265	-0.79	1113-1213	0.16	420-520	0.93	1.35
100	1372-1472	-0.64	250-350	-1.16	1171-1271	-0.17	250-350	1.32	1.35
101	1372-1472	-0.64	250-350	-1.13	1171-1271	-0.17	250-350	1.29	1.35
102	1314-1414	0.71	165-265	-0.77	1113-1213	0.17	159-259	0.88	1.35
103	1314-1414	0.73	165-265	-0.76	1113-1213	0.17	420-520	1.00	1.35
104	1374-1474	-0.69	250-350	-1.02	1171-1271	-0.16	250-350	1.17	1.35
105	1374-1474	-0.69	250-350	-0.99	1171-1271	-0.16	250-350	1.14	1.35

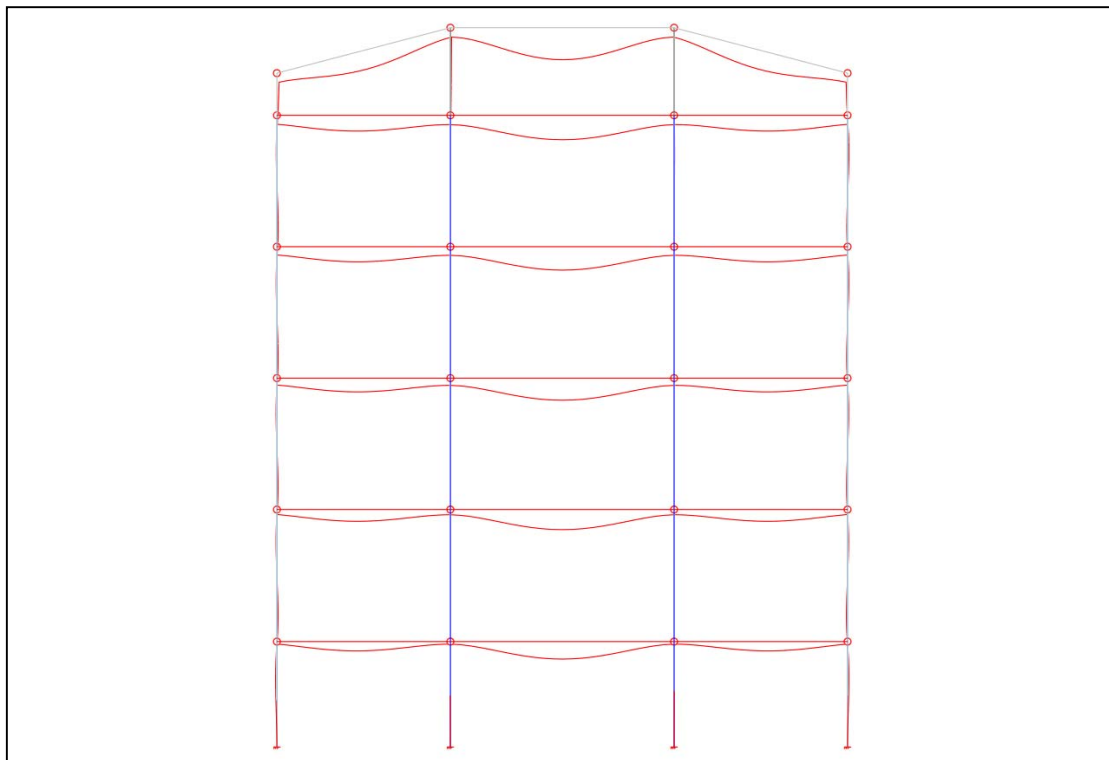
10 RISULTATI DELL'ANALISI

10.1 CONFIGURAZIONI DEFORMATE DELLE STRUTTURE PIU' SIGNIFICATIVE

Sono di seguito riportati i principali risultati in termini di stati di deformazione per i carichi statici variabili di categoria "C" e per i carichi sismici SLV in direzione 0° e 90°.

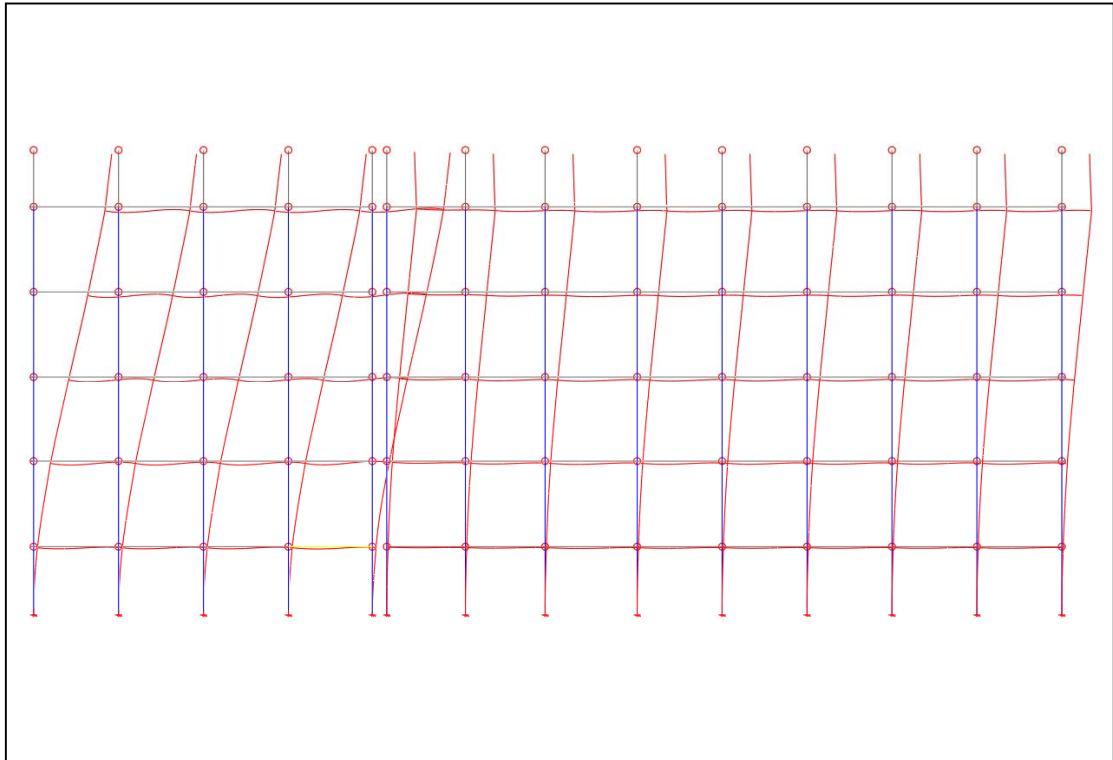
Essi sono rappresentati per semplicità solo per due telai tipo orditi nelle due direzioni principali.

DEFORMATA CARICHI VARIABILI CAT. C - TELAIO TIPO TRASVERSALE

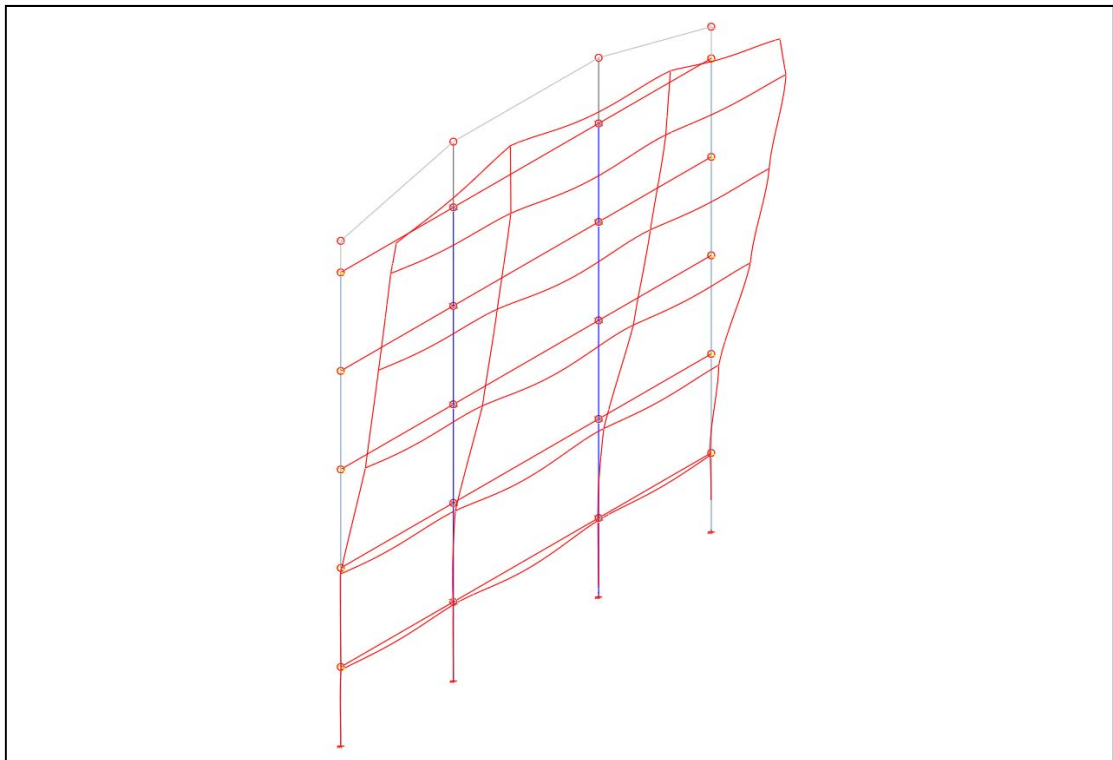


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DEFORMATA SISMA SLV 0° - TELAIO TIPO LONGITUDINALE

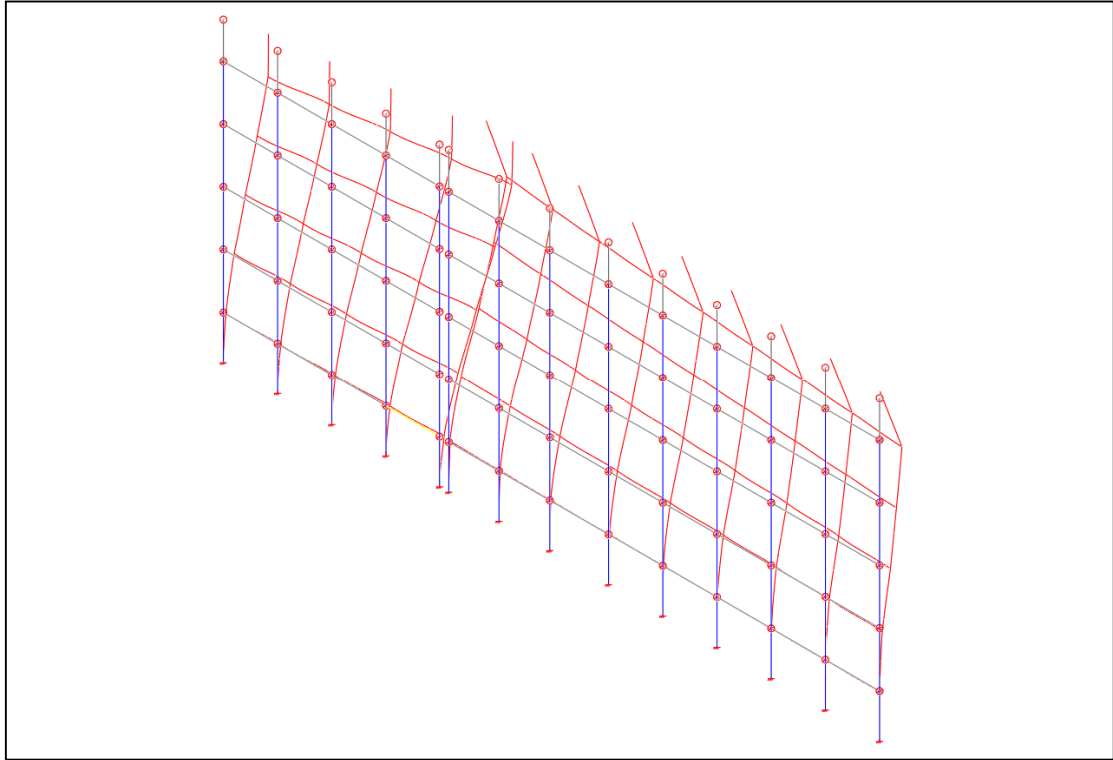


DEFORMATA SISMA SLV 0° - TELAIO TIPO TRASVERSALE

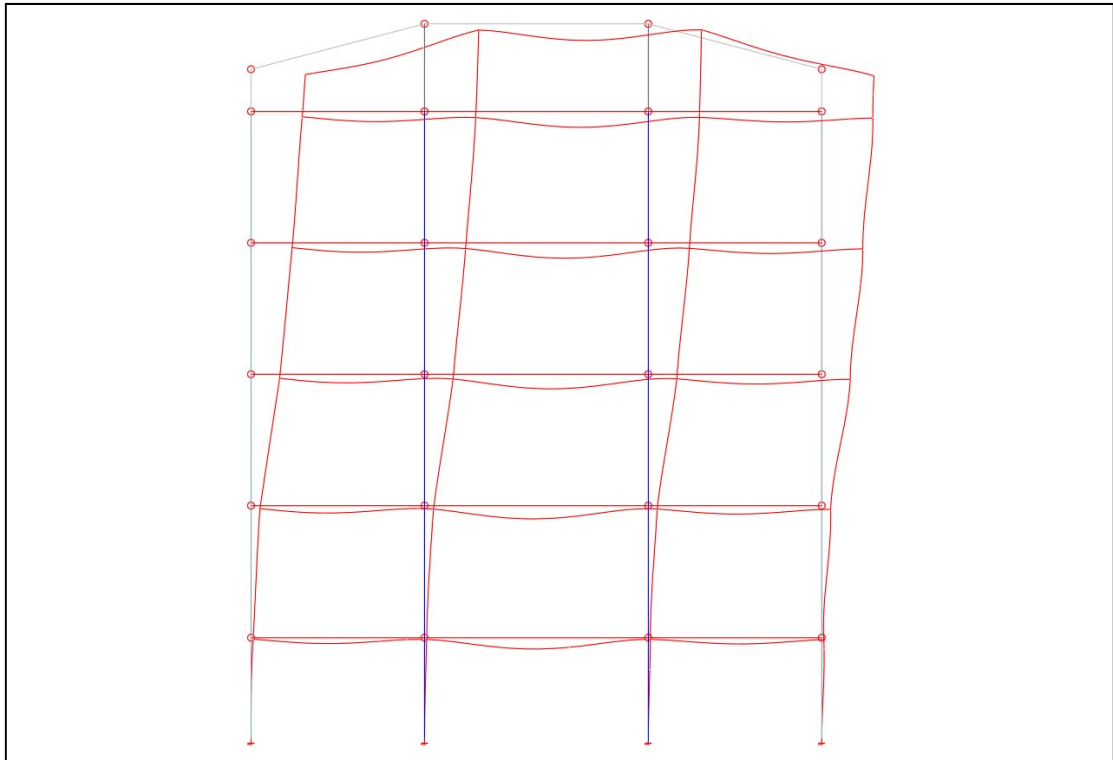


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DEFORMATA SISMA SLV 90° - TELAIO TIPO LONGITUDINALE



DEFORMATA SISMA SLV 90° - TELAIO TIPO TRASVERSALE

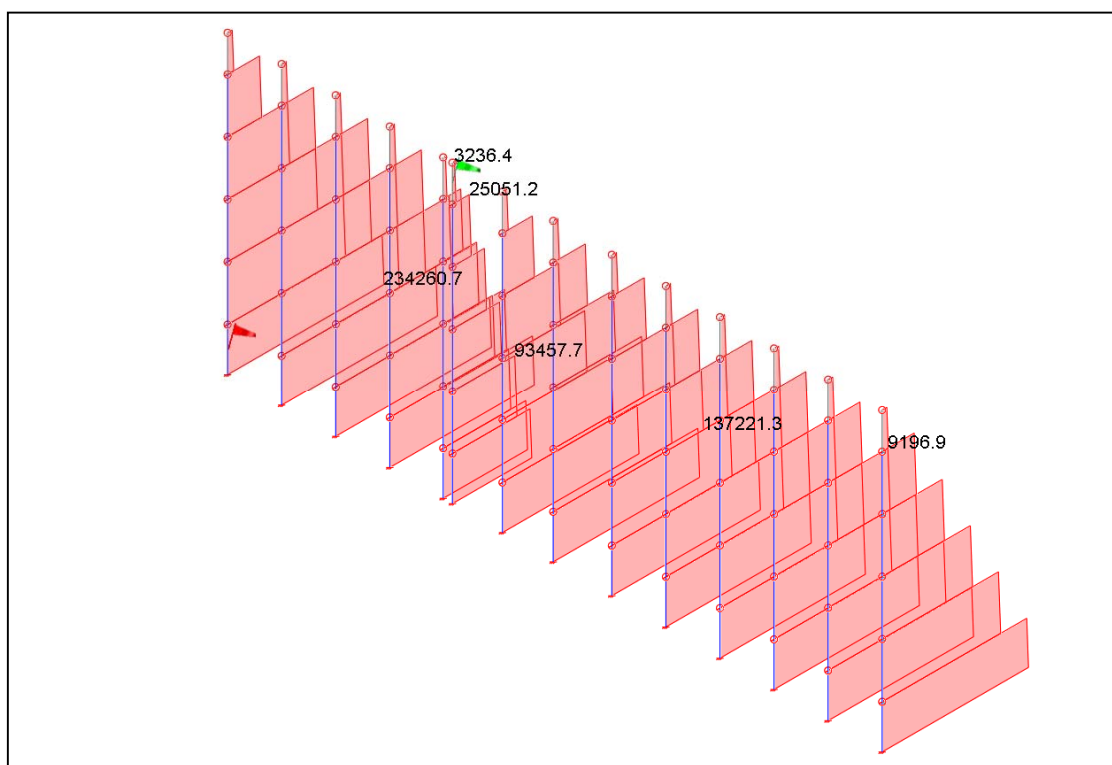


10.2 CARATTERISTICHE DI SOLLECITAZIONE DELLE STRUTTURE PIU' SIGNIFICATIVE

Sono di seguito riportati i principali risultati in termini di stati di sollecitazione per i carichi statici variabili di categoria "C" e per i carichi sismici SLV in direzione 0° e 90°. Essi sono rappresentati per semplicità solo per due telai tipo orditi nelle due direzioni principali.

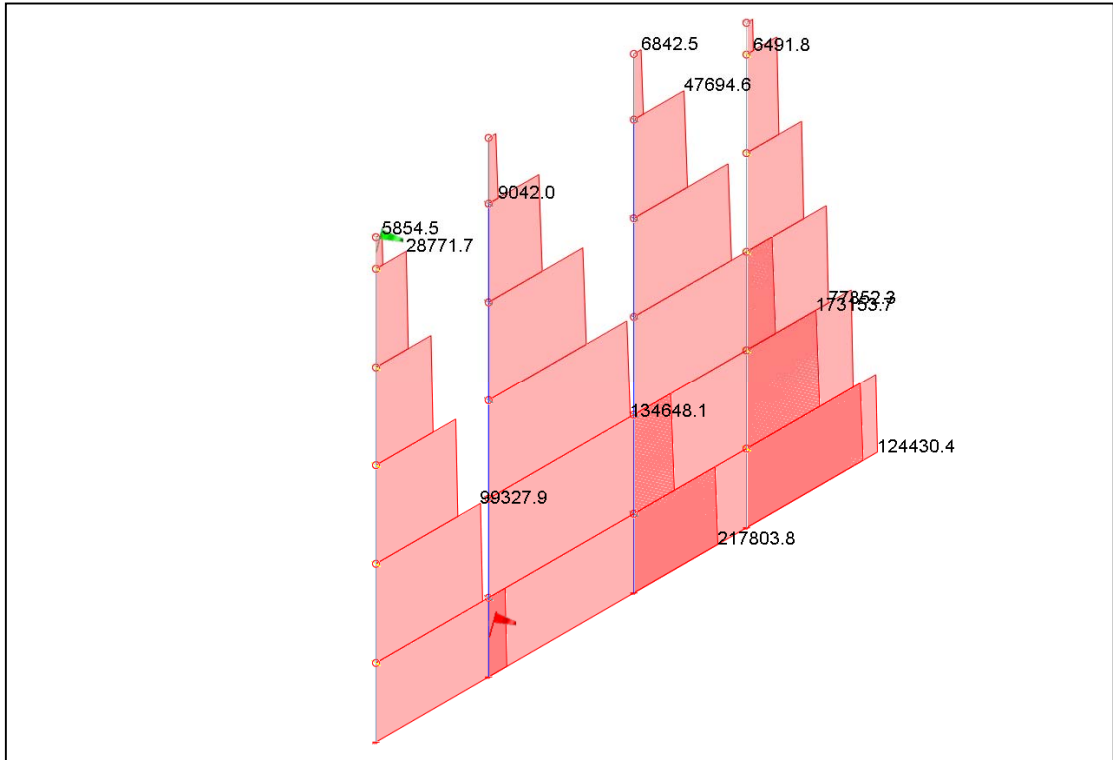
Sono analogamente riportate le sollecitazioni della fondazione, oltre a quelle relative ai nuclei in c.a. costituenti i vani scala.

INVILUPPO SLU+SLV SFORZO NORMALE- PILASTRI TELAIO TIPO LONGITUDINALE

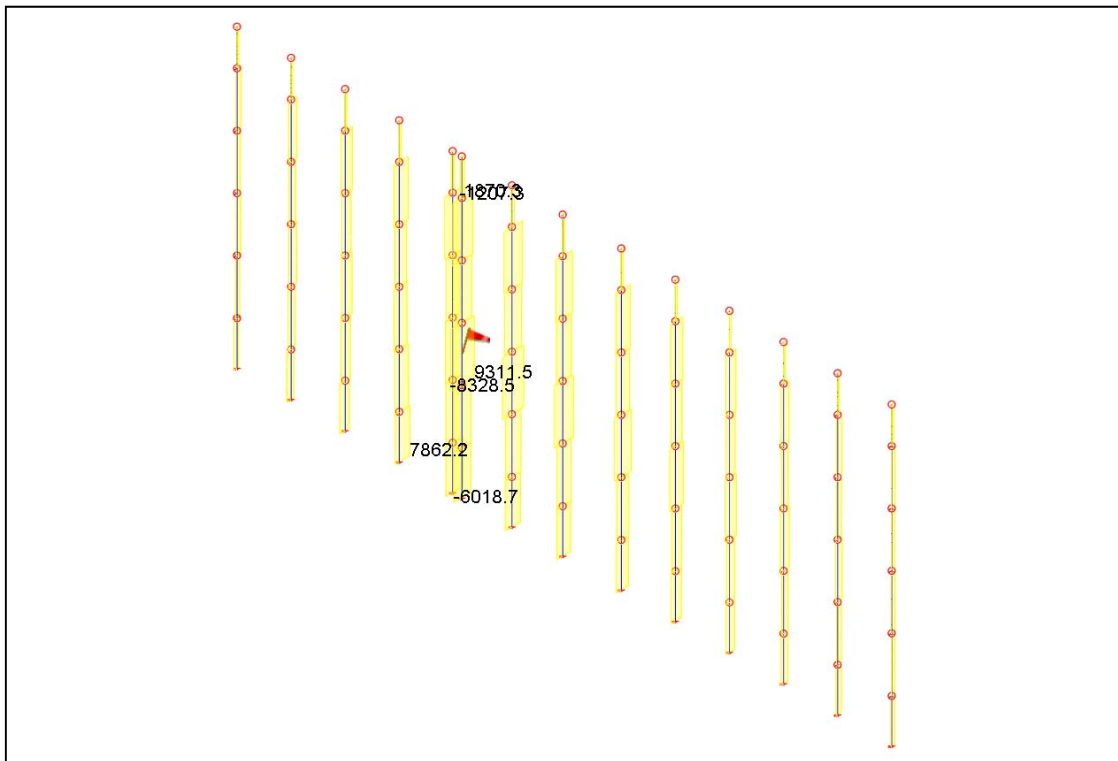


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INVILUPPO SLU+SLV SFORZO NORMALE- PILASTRI TELAIO TIPO TRASVERSALE

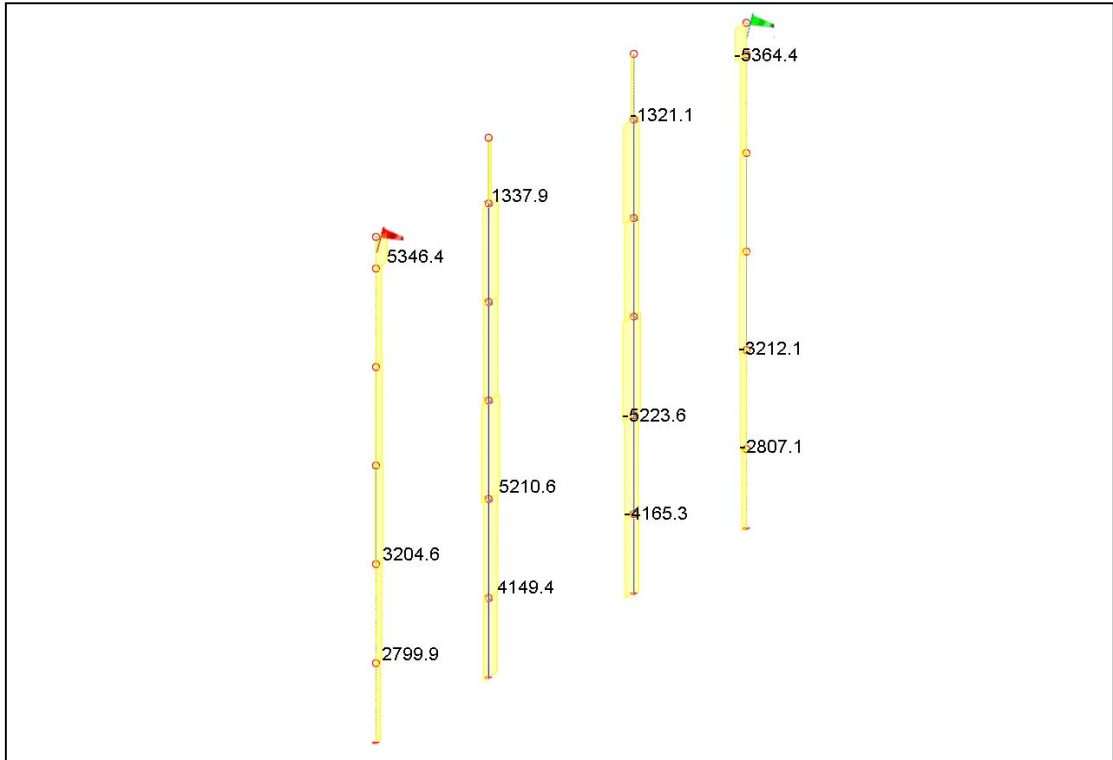


INVILUPPO SLU+SLV TAGLIO PIANO LOCALE 1-2- PILASTRI TELAIO TIPO LONGITUDINALE

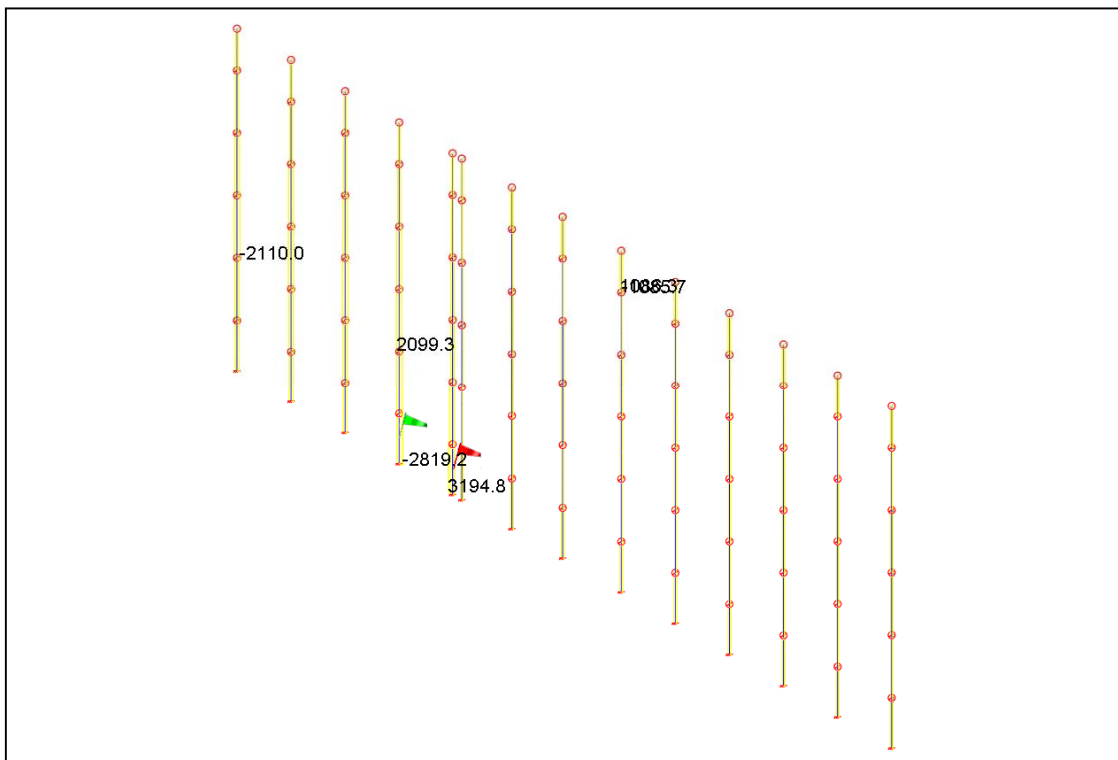


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**INVILUPPO SLU+SLV TAGLIO PIANO LOCALE 1-2- PILASTRI TELAIO TIPO
TRASVERSALE**

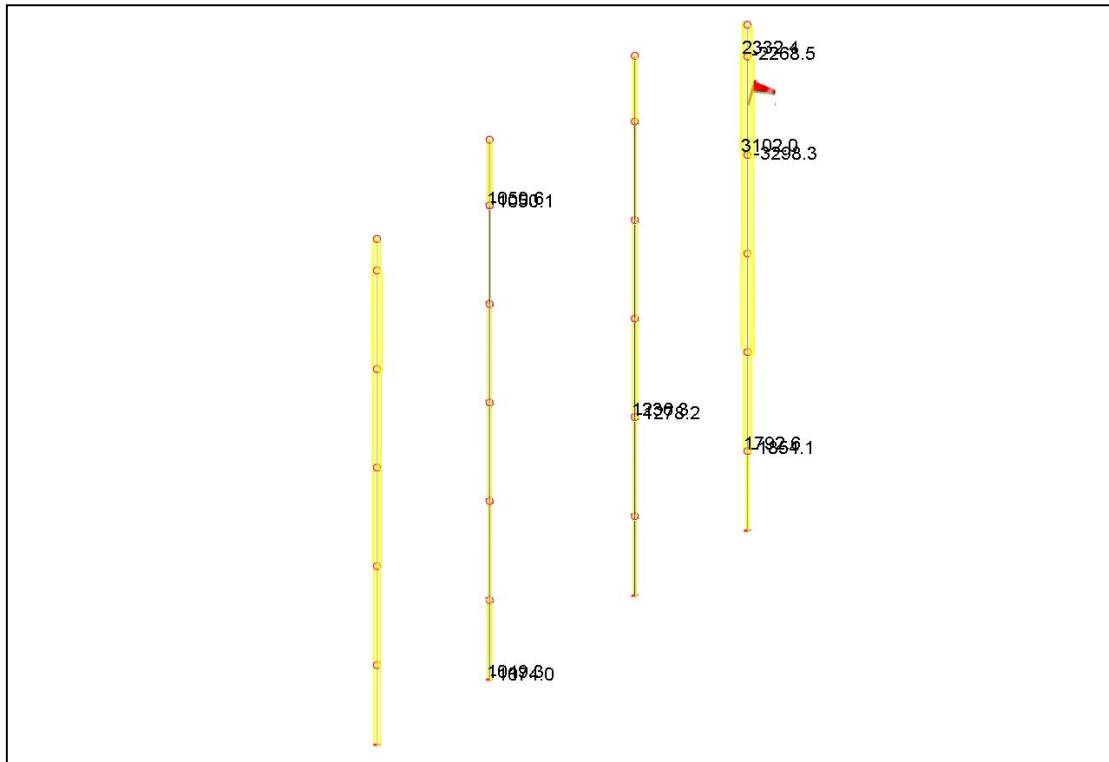


**INVILUPPO SLU+SLV TAGLIO PIANO LOCALE 1-3- PILASTRI TELAIO TIPO
LONGITUDINALE**

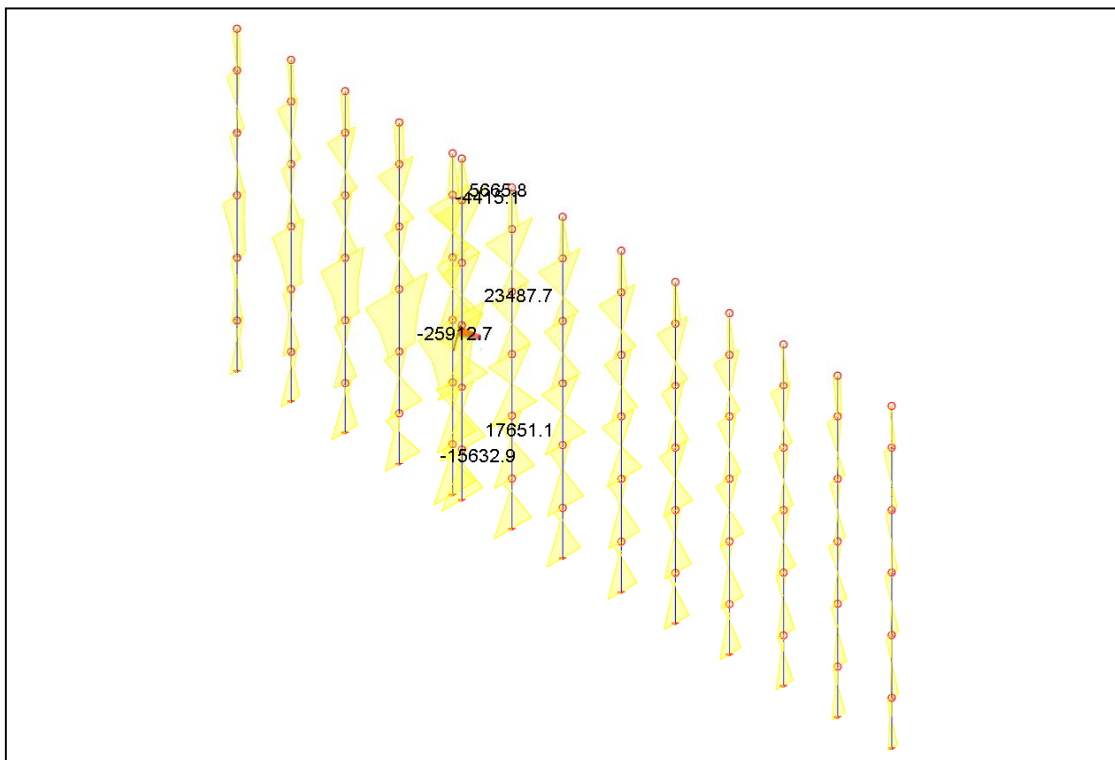


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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

**INVILUPPO SLU+SLV TAGLIO PIANO LOCALE 1-3- PILASTRI TELAIO TIPO
TRASVERSALE**

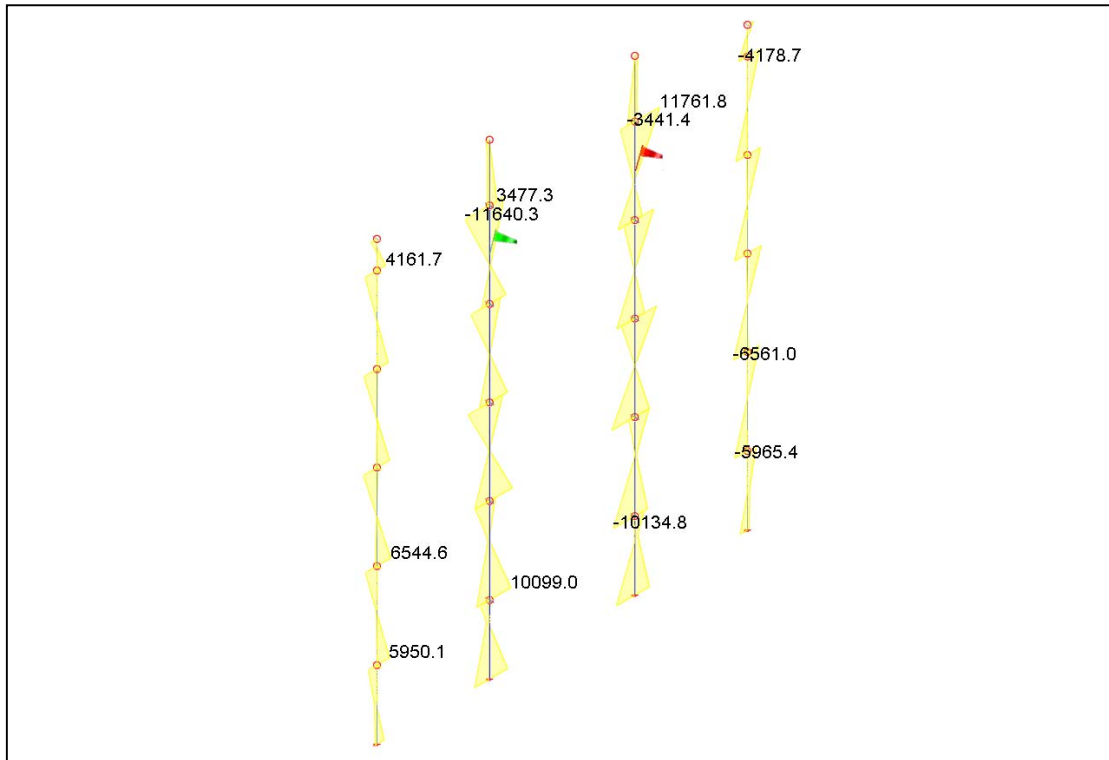


**INVILUPPO SLU+SLV MOMENTO PIANO LOCALE 1-2- PILASTRI TELAIO TIPO
LONGITUDINALE**

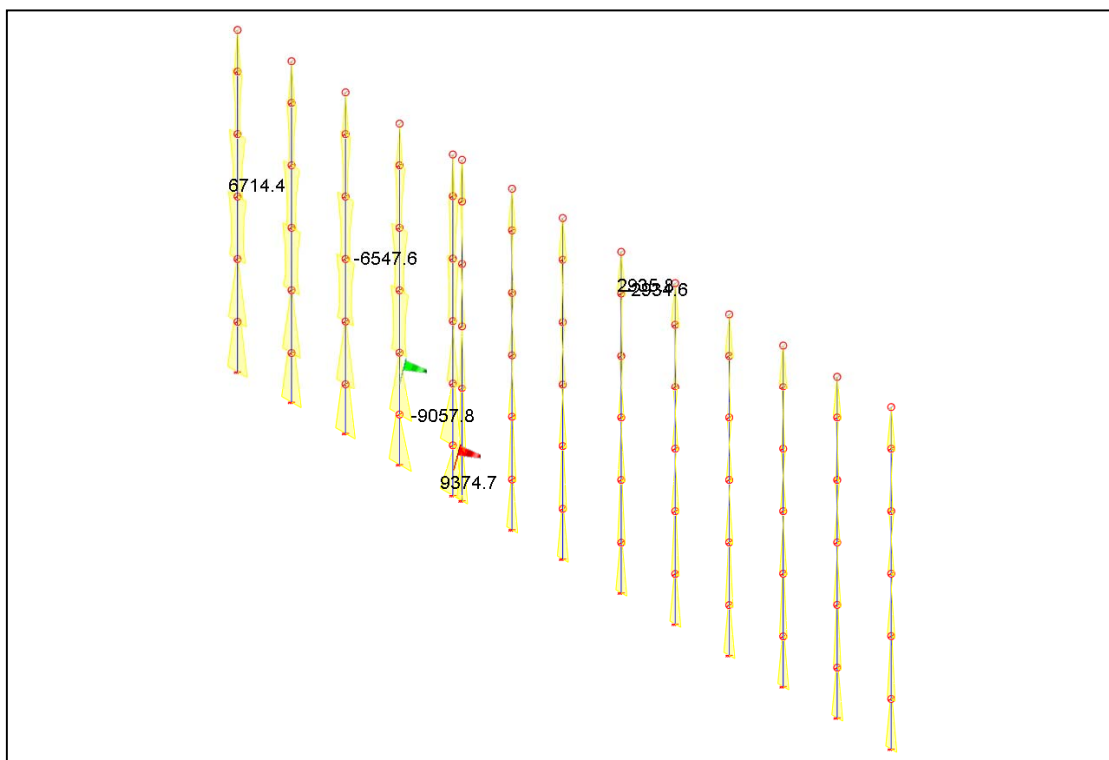


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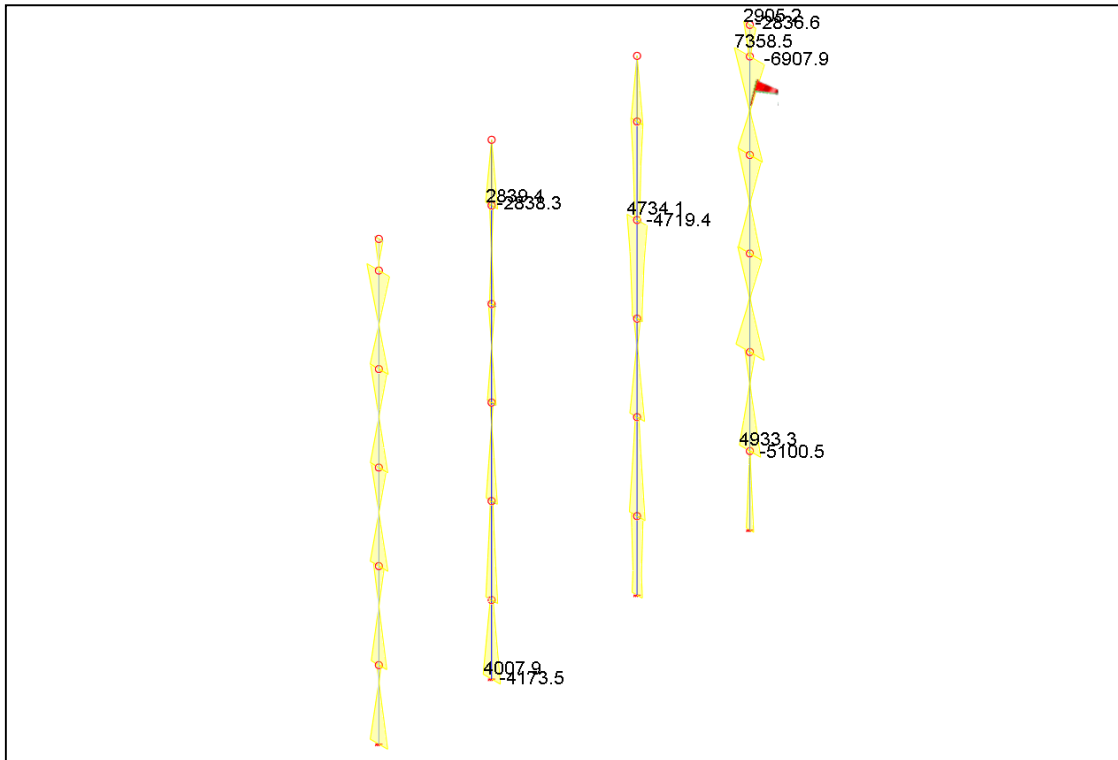
**INVILUPPO SLU+SLV MOMENTO PIANO LOCALE 1-2- PILASTRI TELAIO TIPO
TRASVERSALE**



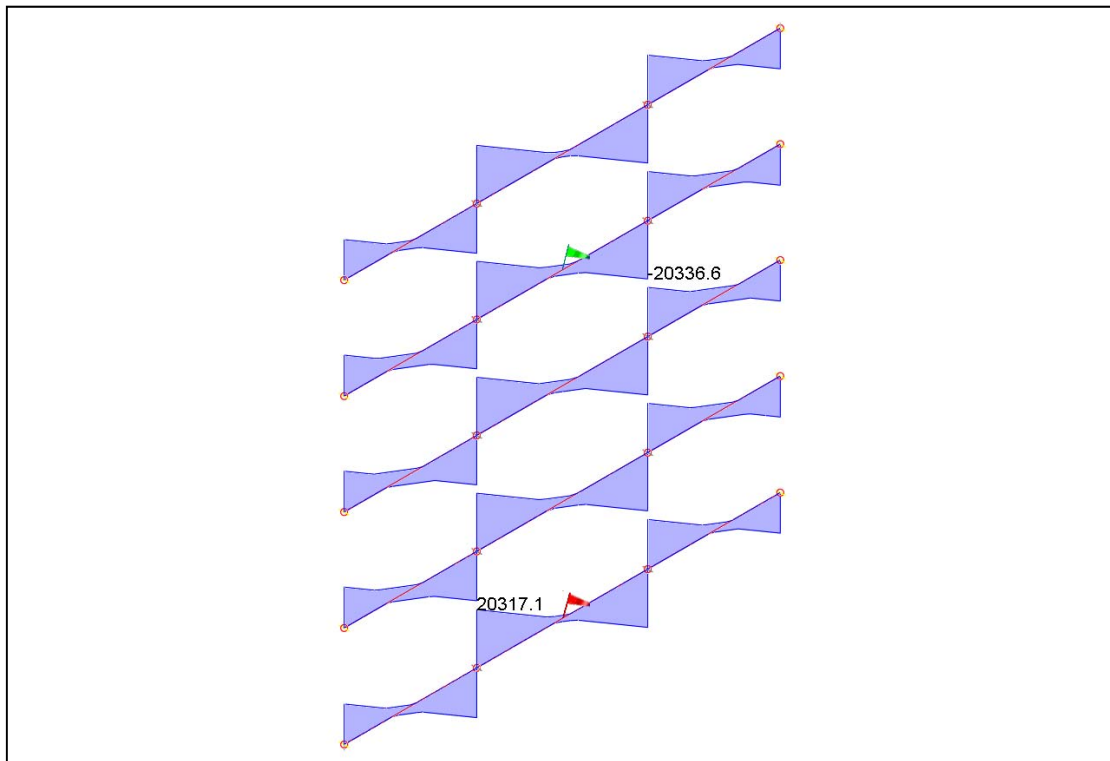
**INVILUPPO SLU+SLV MOMENTO PIANO LOCALE 1-3- PILASTRI TELAIO TIPO
LONGITUDINALE**



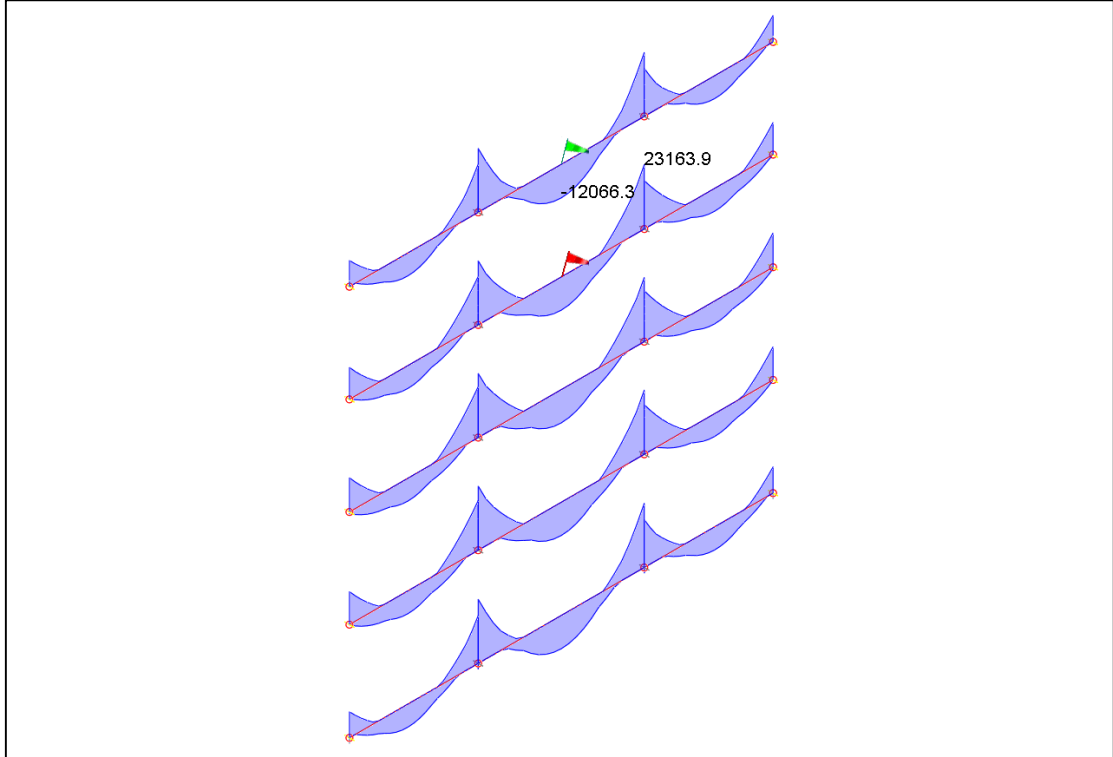
**INVILUPPO SLU+SLV MOMENTO PIANO LOCALE 1-3- PILASTRI TELAIIO TIPO
TRASVERSALE**



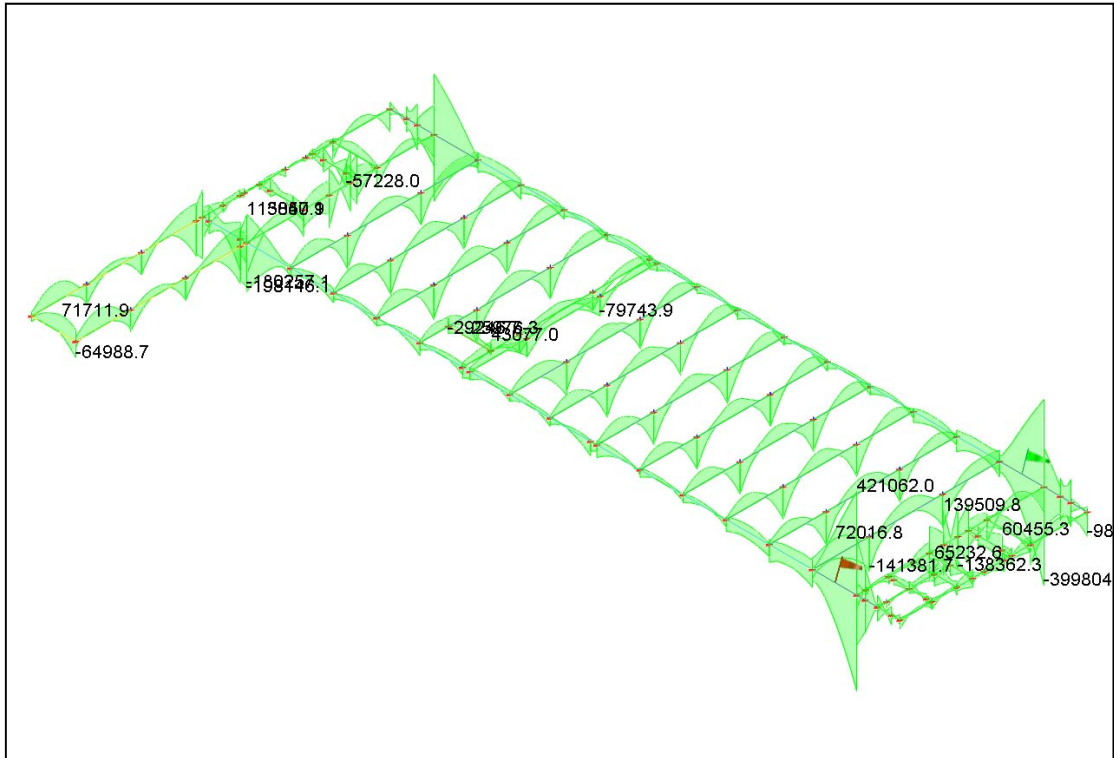
INVILUPPO SLU+SLV TAGLIO PIANO LOCALE 1-2- TRAVI TELAIIO TIPO TRASVERSALE



**INVILUPPO SLU+SLV MOMENTO PIANO LOCALE 1-2- TRAVI TELAIO TIPO
TRASVERSALE**

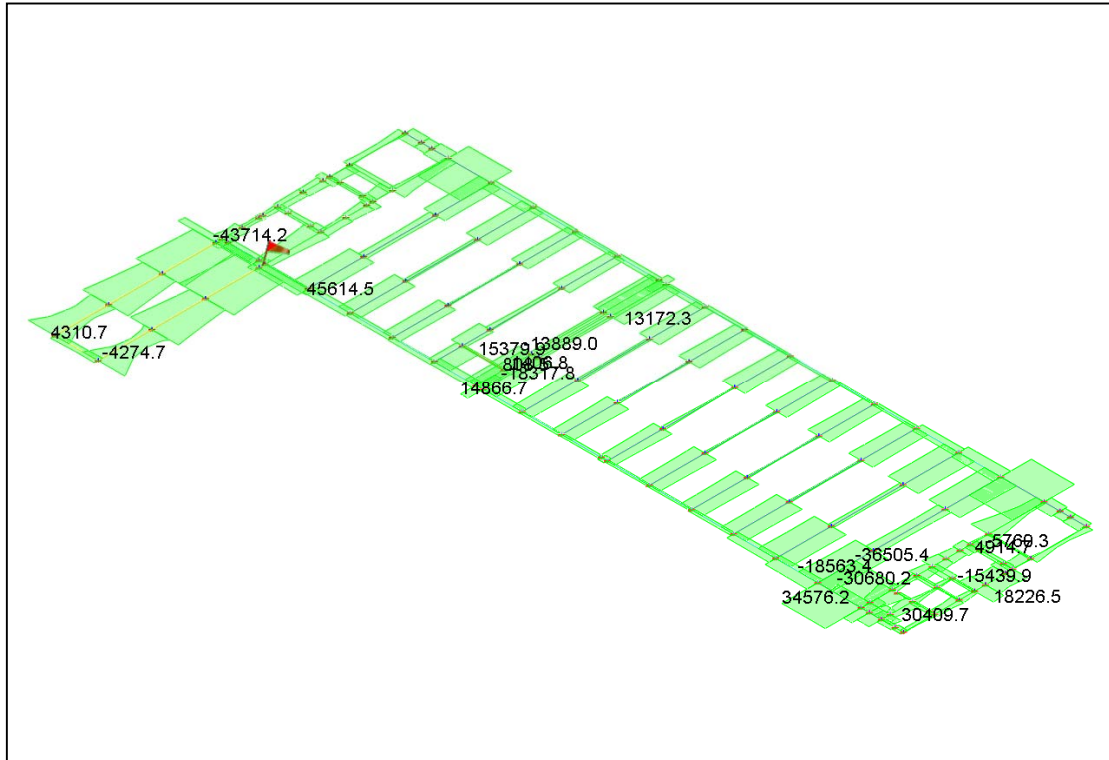


INVILUPPO SLU+SLV MOMENTO FLETTENTE – TRAVI ROVESCE DI FONDAZIONE

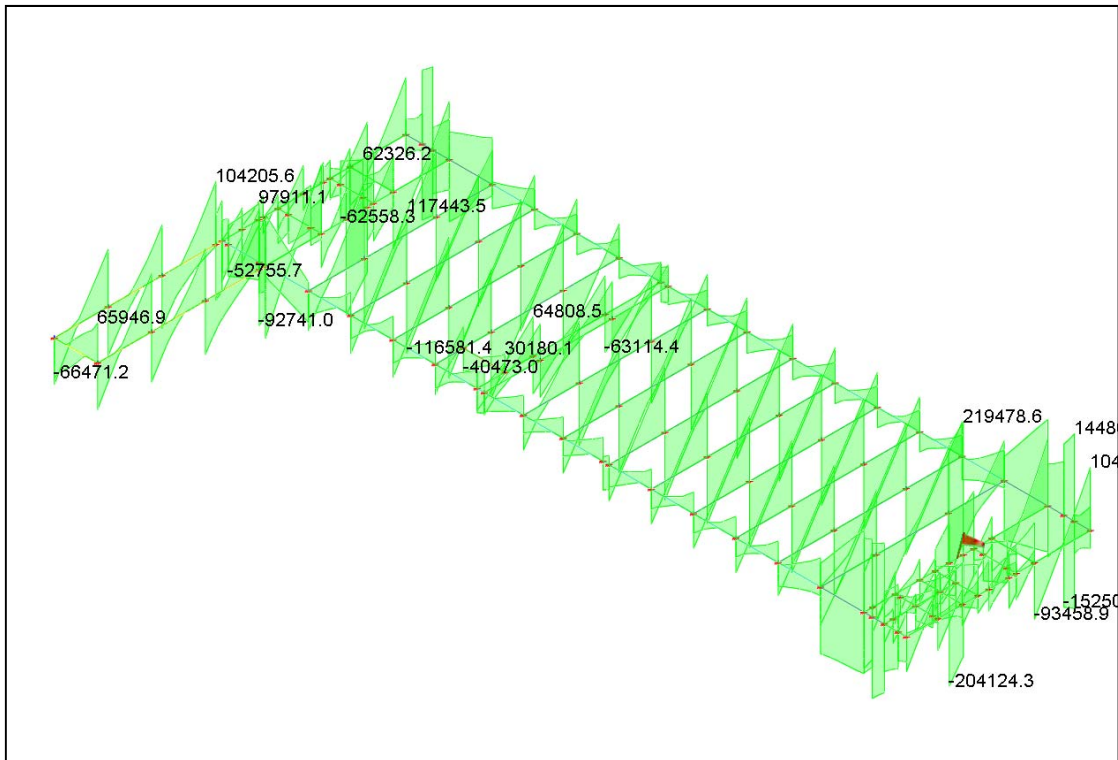


COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

INVILUPPO SLU+SLV MOMENTO TORCENTE - TRAVI ROVESCE DI FONDAZIONE

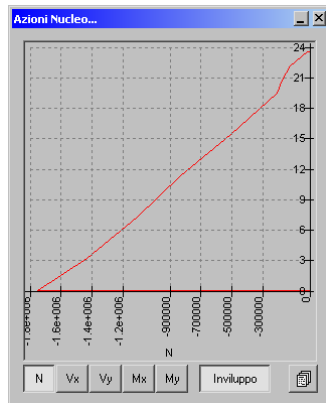


INVILUPPO SLU+SLV TAGLIO - TRAVI ROVESCE DI FONDAZIONE

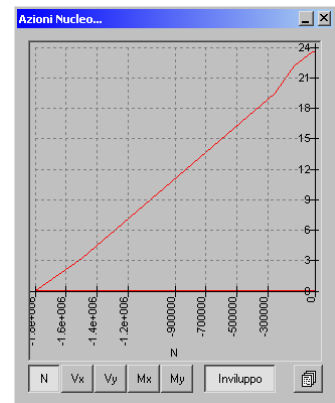


INVILUPPO SLU+SLV SFORZO NORMALE

VANO SCALA 1

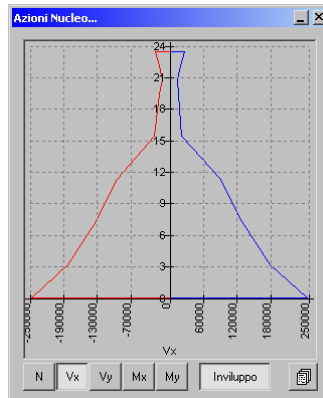


VANO SCALA 2

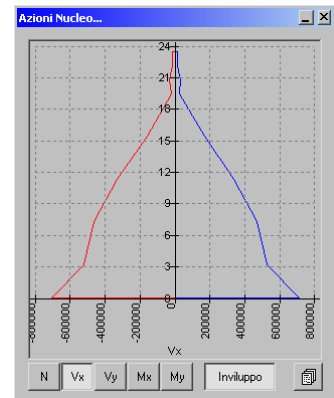


INVILUPPO SLU+SLV TAGLIO Vx

VANO SCALA 1

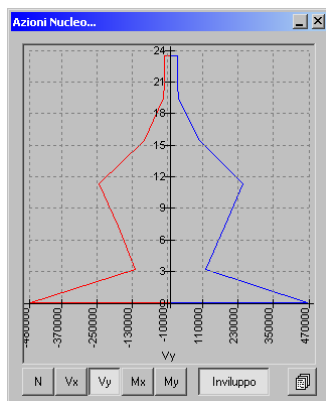


VANO SCALA 2

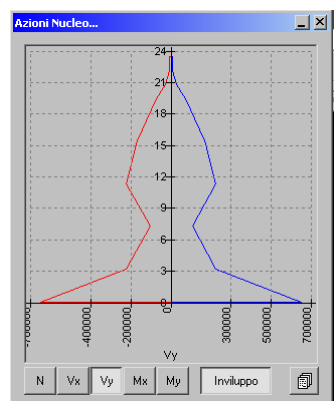


INVILUPPO SLU+SLV TAGLIO Vy

VANO SCALA 1

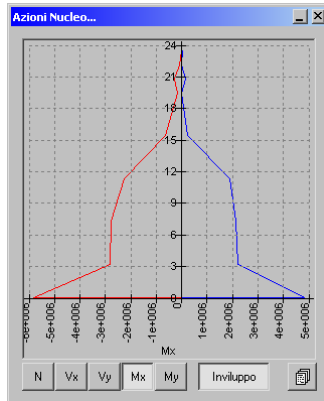


VANO SCALA 2

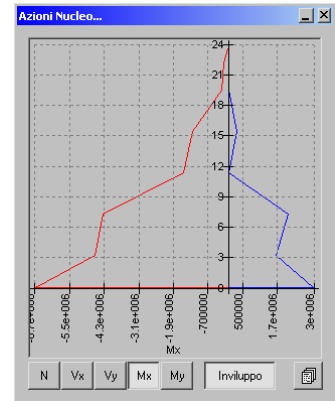


INVILUPPO SLU+SLV MOMENTO M_x

VANO SCALA 1

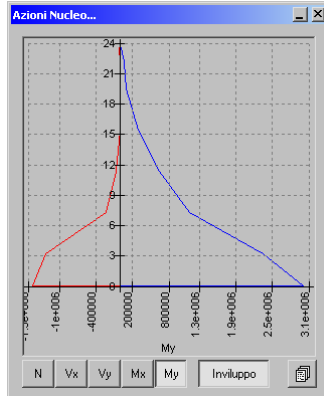


VANO SCALA 2

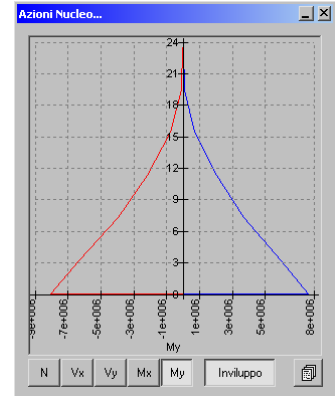


INVILUPPO SLU+SLV MOMENTO M_y

VANO SCALA 1



VANO SCALA 2



10.3 SINTESI DELLE VERIFICHE DI SICUREZZA

Sono di seguito riportate le principali verifiche di sicurezza condotte su specifici aspetti strutturali, in quanto ritenute significative per la comprensione della sicurezza della struttura globale.

10.3.1 ANCORAGGI IN FONDAZIONE

Si fa riferimento alle sperimentazioni effettuate presso il DISTART (Università di Bologna) nell'anno 2005, esposte nella relazione "*Studio sperimentale dell'aderenza tra barre d'armatura e la malta di inghisaggio all'interno degli scatolari di fondazione*", elaborato dal prof. Claudio Ceccoli.

ADERENZA EMACO-SCATOLARE METALLICO

Nel § 5.3 si illustra come in nessun caso nelle prove eseguite si sia riscontrata crisi di aderenza tra barre ed emaco, ma la crisi di aderenza per un inghisaggio minimo di 15 cm è avvenuta fra emaco e scatolare contestualmente al raggiungimento dello snervamento della barra; quindi è nei confronti di questo meccanismo di effettivo cedimento che si effettuano le verifiche.

A conclusione delle prove sperimentali è stata rilevata una tensione tangenziale di aderenza ultima τ_m , per una barra $\phi 26$ all'interno di uno scatolare 80x80 mm, pari a:

$$\tau_m = 61 \pm 4 \text{ kg/cm}^2$$
$$\tau_{bd} = \frac{\tau_m}{\gamma_c} \cdot 0.7 = \frac{61}{1.5} \cdot 0.7 = 28.5 \text{ kg/cm}^2$$

Facendo una verifica comparativa della lunghezza di ancoraggio di 2 barre $\phi 20$ ($A_s = 6.28 \text{ cm}^2$) in uno scatolare 80x80 mm (nei pilastri 50x50 cm e 50x30 cm in progetto), e mantenendo la stessa tensione tangenziale di aderenza τ_{bd} di cui sopra, imponendo l'uguaglianza tra la forza di snervamento di progetto della barra e la forza di aderenza corrispondente si ricava un valore di lunghezza d'ancoraggio pari a:

$$l_{bd} = \frac{F_{yd}}{2 \cdot (a + b) \cdot \tau_{bd}} = \frac{2 \cdot 3.14 \cdot 3913}{2 \cdot (8 + 8) \cdot 28.5} = 26.9 \text{ cm}$$

La lunghezza di ancoraggio limite necessaria per 2 barre $\phi 20$ accostati all'interno di uno scatolare 80x80 mm è circa 27 cm. Ovviamente per barre singole $\phi 20$ la lunghezza di ancoraggio limite emaco-scatolare sarà più corta.

Per la singola barra $\phi 20$ in scatolare 60x60 mm (nei pilastri 50x50 cm e 50x30 cm in progetto) la lunghezza di ancoraggio limite necessaria è pari a:

$$l_{bd} = \frac{F_{yd}}{2 \cdot (a + b) \cdot \tau_{bd}} = \frac{3.14 \cdot 3913}{2 \cdot (6 + 6) \cdot 28.5} = 18.0 \text{ cm}$$

La lunghezza di ancoraggio adottata in fondazione è stata fissata in **70 cm** per tutte le barre $\phi 20$ (singole e accoppiate) sporgenti dal piede del pilastro, e risulta quindi verificata con un margine superiore al 10% come la progettazione in gerarchia delle resistenze richiede ($\gamma_{Rd} = 1.1$) fra pilastro e fondazione per strutture in Classe di Duttilità Bassa (§ 7.2.5 DM. 14.01/2008 – Circ. n° 617 C.S.LL.PP. § C7.4).

ADERENZA BARRA -EMACO

Volendo verificare anche la situazione dei valori di aderenza fra 2 barre $\phi 20$ e l'emaco stesso, si parte dai valori delle aderenze sviluppate nelle prove (senza mai peraltro arrivare alla rottura della stessa).

Si possono considerare 2 valori:

1. Rottura della barra $\phi 26$ per 32 ton con inghisaggio minimo $l_{bd} = 20 \text{ cm}$:

$$\tau_{m(sp)} = \frac{32000}{2.6 \cdot \pi \cdot 20} = 195 \text{ kg/cm}^2$$

che riportato per equivalenza ad una barra $\phi 20$ diventa:

$$\tau_{m(sp)} = 195 \cdot \frac{2.0}{2.6} = 150 \text{ kg/cm}^2$$

2. Sfilamento del blocco emaco - barra $\phi 26$ con raggiungimento dello snervamento della stessa per $F=27 \text{ ton}$, per una lunghezza di ancoraggio $l_{bd} = 15 \text{ cm}$:

$$\tau_{m(sp)} = \frac{27000}{2.6 \cdot \pi \cdot 15} = 220 \text{ kg/cm}^2$$

Va comunque specificato che in nessuno dei due casi si è avuta la rottura dell'aderenza barra - emaco.

Adottando il valore minore tra i due, si ottiene:

$$\tau_{bd(sp)} = \frac{\tau_m}{\gamma_c} \cdot 0.7 = \frac{150}{1.5} \cdot 0.7 = 70 \text{ kg/cm}^2$$

Se si effettua un confronto con la classe di resistenza massima di calcestruzzo prevista dalla normativa (C90/105), si ha:

$$\tau_{bd} = 52.4 \text{ kg/cm}^2$$

Il valore sperimentale più alto può essere giustificato dall'effetto espansivo che ha l'emaco all'interno dello scatolare.

Nel caso di barre addensate, si divide il valore $\tau_{bd(sp)}$ ottenuto per un coefficiente di addensamento pari a 1.5:

$$\tau_{bd(sp,add)} = \frac{70}{1.5} = 46.7 \text{ kg/cm}^2$$

Adottando quindi quest'ultimo valore sperimentale, lo si confronta con la τ_{bd} necessaria per ottenere l'uguaglianza tra forza di snervamento di progetto e forza di aderenza corrispondente per 2 barre $\phi 20$ con lunghezza di ancoraggio di 70 cm, la cui forza di aderenza è calcolata utilizzando il diametro equivalente ϕ_n per gruppi di barre come previsto dall'EC2 al § 8.9.1(2):

$$\tau_{bd} = \frac{A_s \cdot f_{yd}}{\pi \cdot \phi_n \cdot l_{bd}} = \frac{2 \cdot 3.14 \cdot 3913}{\pi \cdot \sqrt{2} \cdot 2.0 \cdot 70} = 39.5 \text{ kg/cm}^2 < \tau_{bd(sp,add)} = 46.7 \text{ kg/cm}^2$$

Nella peggiore delle ipotesi in progetto (2 barre $\phi 20$ in scatolari 80x80 cm) abbiamo una τ_{bd} necessaria per garantire l'aderenza tra le barre e l'emaco che risulta essere inferiore ai valori precedentemente calcolati da rilevanzze sperimentali, a dimostrazione che questo non rappresenta il meccanismo più debole del sistema. Il calcolo della singola barra $\phi 20$ è omissso in quanto meno gravoso di quello delle 2 barre $\phi 20$ accoppiate.

ADERENZA SCATOLARE METALLICO – CALCESTRUZZO DI FONDAZIONE

Per questo tipo di verifica, nel caso di semplice scatolare liscio, partiamo dal calcolo della tensione di aderenza previsto dall'EC2 (versione approvata dal CEN il 27 dicembre 1991) al § 5.2.2.2(2) in condizioni di buona aderenza, per calcestruzzo di classe C25/30 con barre lisce:

$$\tau_{bd} = f_{bd} = 0.36 \cdot \frac{\sqrt{f_{ck}}}{\gamma_c} = 0.36 \cdot \frac{\sqrt{0.83 \cdot 30}}{1.5} = 1.20 \text{ MPa} = 12.0 \text{ kg/cm}^2$$

La validità di questa formula, così come l'ipotesi di buona aderenza, è confermata dai valori ottenuti sperimentalmente per 1 barra $\phi 26$ all'interno di uno scatolare 80x80 con lunghezza $l_{bd} = 70 \text{ cm}$ in calcestruzzo di fondazione C20/25. Questa prova ha mostrato il raggiungimento della rottura della barra senza sfilamento dello scatolare della fondazione, per cui al raggiungimento della rottura della barra lo scatolare sviluppava col calcestruzzo di fondazione una tensione di aderenza almeno pari a:

$$\tau_{bd} = \frac{F_{yd}}{4a \cdot l_{bd}} = \frac{5.31 \cdot 3913}{4 \cdot 8 \cdot 70} = 9.3 \text{ kg/cm}^2$$

Questo valore può esser confrontato con quello ottenuto per la stessa classe di calcestruzzo secondo la formula dell'EC2 sia per condizioni di buona aderenza sia per condizioni di cattiva aderenza:

$$f_{bd, \frac{C20}{25}, buona ad.} = 0.36 \cdot \frac{\sqrt{f_{ck}}}{\gamma_c} = 10.9 \text{ kg/cm}^2$$
$$f_{bd, \frac{C20}{25}, cattiva ad.} = 0.7 \cdot 0.36 \cdot \frac{\sqrt{f_{ck}}}{\gamma_c} = 7.6 \text{ kg/cm}^2$$

Si nota quindi che, alla rottura della barra, lo scatolare sviluppava col calcestruzzo di fondazione una tensione di aderenza già maggiore di quella calcolata per condizioni di cattiva aderenza: di conseguenza è validata l'ipotesi di condizioni di buona aderenza.

Inoltre, anche se non adeguatamente documentato, nelle prove di estrazione delle barre su plinti di altezza 45 cm si sono usati scatolari 80x80 mm di lunghezza 30 cm con elementi angolari saldati, allo scopo di aumentare l'aderenza fra lo stesso scatolare e il calcestruzzo del plinto. Questo dettaglio è visibile alle pag. 16-17 nelle figure riportate.

In nessuna di queste prove, con questi accorgimenti tecnologici, si è verificata la crisi di aderenza fra scatolare e plinto, così come evidenziato anche nelle prove con i plinti maggiori e scatolari di lunghezza 55 cm (pag. 5 fig. b); anche con un solo ordine di angolari saldati alla base non si è avuta crisi di aderenza, ma si è sempre raggiunta la rottura della barra.

Da questi risultati, ripetutamente confermati, si desume che con un adeguato rinforzo degli scatolari attraverso la saldatura di angolari si possono ottenere valori di aderenza molto elevati.

Nel nostro caso avremo la situazione di progetto più critica con 2 barre di armatura $\phi 20$, uno scatolare 80x80 mm e lunghezza $l_{bd} = 70 \text{ cm}$:

$$\tau_{bd} = \frac{F_{yd}}{2 \cdot (a + b) \cdot l_{bd}} = \frac{2 \cdot 3.14 \cdot 3913}{2 \cdot (8 + 8) \cdot 70} = 10.9 \text{ kg/cm}^2$$

Per quanto riguarda il caso della singola barra di armatura $\phi 20$ in uno scatolare 60x60 mm e lunghezza $l_{bd} = 70 \text{ cm}$, avremo:

$$\tau_{bd} = \frac{F_{yd}}{2 \cdot (a + b) \cdot l_{bd}} = \frac{3.14 \cdot 3913}{2 \cdot (6 + 6) \cdot 70} = 7.3 \text{ kg/cm}^2$$

Dato che la tensione tangenziale di aderenza necessaria risulta essere inferiore a quella di progetto del calcestruzzo di classe C25/30 per l'aderenza di barre lisce in condizioni di buona aderenza, non si rende necessario saldare alcun angolare agli scatolari del trespole di fondazione.

CONCLUSIONI

Da quanto illustrato, i margini tenuti nel dimensionamento delle lunghezze di ancoraggio risultano compatibili anche con sovra-resistenze maggiori del 10% richieste dalla gerarchia delle

resistenze fra pilastro e fondazione prevista nel D.M. 14/01/2008 per edifici progettati in Classe di Duttilità Bassa.

Si ritiene in conclusione che i criteri utilizzati per il dimensionamento delle aderenze alla base dei pilastri siano stati largamente comprovati dalle verifiche effettuate, tutte con esito positivo.

I dettagli degli inserti di fondazione sono illustrati negli elaborati grafici allegati al progetto.

10.3.2 VERIFICA A ESPULSIONE DEI PANNELLI IN C.A.

Come calcolato in precedenza, la forza orizzontale F_a derivante dall'azione sismica allo SLD, agente sul baricentro dell'elemento, è pari a:

$$F_a = \frac{S_a \cdot W_a}{q_a} = \frac{0,283g \cdot 2700}{2,0} = 382 \text{ kg}$$

Un secondo tipo di verifica da condurre (indipendente dalla presenza del sisma) riguarda l'espulsione del pannello legata alla depressione del vento, calcolata in precedenza come pari a 36 kg/m².

Date le dimensioni del pannello, questa depressione genera una forza totale, applicata al baricentro del pannello, pari a:

$$H = 36 \cdot 2,45 \cdot 4,39 = 387 \text{ kg}$$

che equivale sostanzialmente al valore di forza orizzontale legato alla presenza del sisma.

Dato che la mensola fornisce solo una reazione verticale, la forza orizzontale deve essere ripartita tra i due profili incavi posti superiormente: ognuno dei due profili deve quindi garantire uno sforzo a trazione pari a circa 200 kg.

Questo sforzo è ampiamente garantito dal profilo Edilmatic tipo "C" 35x18x2.5 – P1 (o qualsiasi altro profilo di equivalente tipologia e portata), che è dimensionato per un carico puntuale di trazione di 600 kg.

Le mensole devono invece sopportare il solo carico verticale del pannello, pari a 2700 kg. Ognuna delle due mensole deve quindi avere una portata minima superiore a 1350 kg.

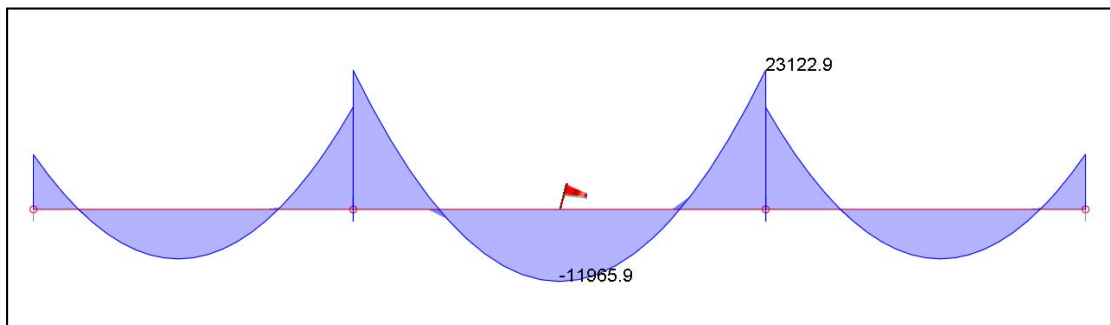
Questa portata è ampiamente garantita dalla mensola Edilmatic tipo MT2 (o qualsiasi altra mensola di equivalente tipologia e portata), che è dimensionata per una portata utile di 2000 kg, garantendo quindi anche un eventuale incremento di carico legato alla presenza di sisma verticale.

10.4 GIUDIZIO MOTIVATO DI ACCETTABILITA' DEI RISULTATI

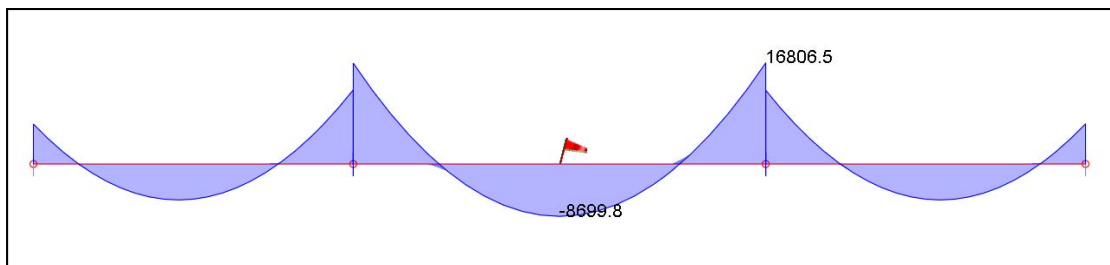
L'accettabilità dei risultati viene mostrata attraverso alcuni confronti tra i risultati ottenuti dall'analisi tramite il codice di calcolo e semplici risoluzioni manuali.

Trave centrale della travata trasversale tipica:

- diagramma dei momenti agli SLU come ottenuti dal codice di calcolo ($M^- = 23123 \text{ kgm}$, $M^+ = 11966 \text{ kgm}$)



- diagramma dei momenti agli SLE (comb. rara) come ottenuti dal codice di calcolo ($M^- = 16806 \text{ kgm}$, $M^+ = 8700 \text{ kgm}$)



Risoluzione manuale (trave appoggio-incastro):

$$q_k = (2500 \cdot 0,7 \cdot 0,34) + (375 \cdot 3,35) + [(300 + 300) \cdot 4,05] = 4281 \text{ kg/m}$$

$$M_{rara}^- = \frac{q_k \cdot 6,9^2}{12} = 16985 \text{ kg} \cdot \text{m}$$

$$M_{rara}^+ = \frac{q_k \cdot 6,9^2}{24} = 8493 \text{ kg} \cdot \text{m}$$

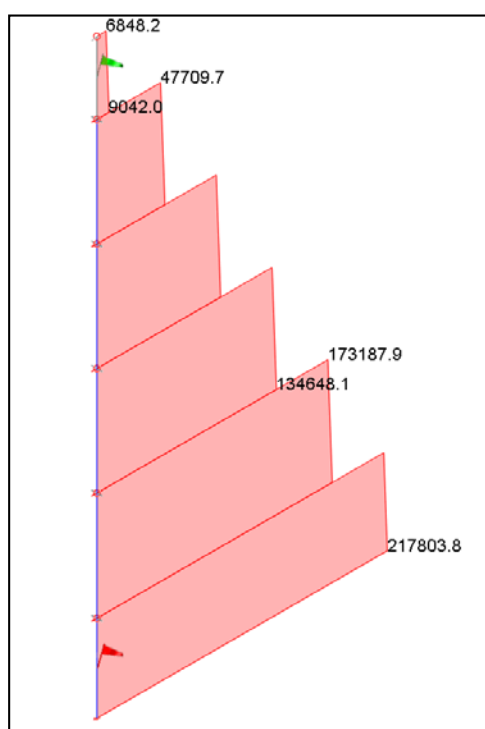
$$M_{SLU}^- = \frac{(q_k \cdot 1,4) \cdot 6,9^2}{12} = 23779 \text{ kg} \cdot \text{m}$$

$$M_{SLU}^+ = \frac{(q_k \cdot 1,4) \cdot 6,9^2}{24} = 11889 \text{ kg} \cdot \text{m}$$

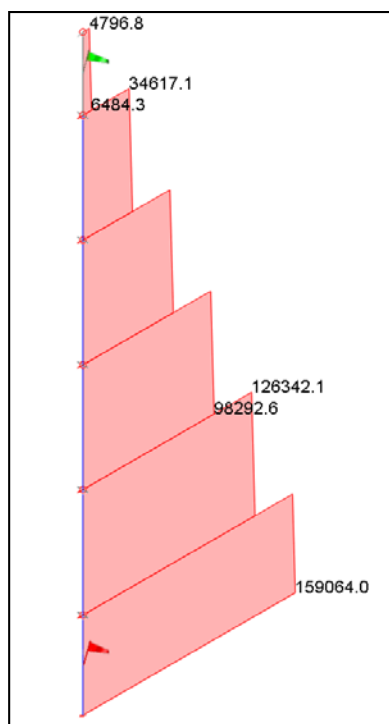
Si può notare come l'ordine di grandezza dei risultati sia lo stesso: la leggera differenza (nell'ordine del 3%) è legata al fatto di considerare nella risoluzione manuale un incastro perfetto sul pilastro, mentre nella realtà la trave ha continuità strutturale oltre di esso (schema strutturale analogo ad una molla rotazionale), quindi il momento reale negativo risulterà leggermente inferiore ed aumenterà di conseguenza quello positivo in campata. Il modello rimane comunque a favore di sicurezza, in quanto l'armatura inferiore della trave in campata è sempre calcolata con un momento minimo di plafond assunto pari a $M_{plafond}^+ = \frac{q \cdot l^2}{16}$.

Pilastro 37:

- diagramma degli sforzi normali agli SLU come ottenuti dal codice di calcolo (Nmax = 217804 kg)



- diagramma degli sforzi normali agli SLE (comb. rara) come ottenuti dal codice di calcolo (Nmax = 159064 kg)



Risoluzione manuale:

- peso proprio pilastro: $P_1 = 2500 \cdot 0.5^2 \cdot 22.5 = 14062 \text{ kg}$
- peso travi afferenti: $P_2 = 2500 \cdot 0.7 \cdot 0.34 \cdot \frac{(5.35+6.9)}{2} \cdot 5 = 18222 \text{ kg}$
- peso proprio solaio: $P_3 = 3.35 \cdot \frac{(5.35+6.9)}{2} \cdot 375 \cdot 5 = 38473 \text{ kg}$
- peso perm. + acc.: $P_4 = 4.05 \cdot \frac{(5.35+6.9)}{2} \cdot [(300 + 300) \cdot 5 + 220] = 79876 \text{ kg}$

Sforzo normale alla base: $P_{tot} = 14062 + 18222 + 38473 + 79876 = 150633 \text{ kg}$

Si può notare come l'ordine di grandezza dei risultati sia lo stesso: la leggera differenza (nell'ordine del 5,5%) è legata a una sovrastima delle travi armate su solaio effettuate nel modello, nell'ottica di lavorare a favore di sicurezza.

Spettro di risposta:

Si confronta il primo periodo di vibrazione e la relativa azione sismica valutata tramite il programma di calcolo con quella ottenuta inserendo il periodo approssimato della struttura calcolato con la formula 7.3.5 delle NTC 2008 (per analisi lineare statica) nello spettro fornito dal foglio Excel scaricabile dal sito del CSLLPP.

Come già visto in precedenza, l'analisi modale condotta con il codice di calcolo forniva agli SLV un periodo principale $T_1 \cong 0.55 \text{ sec}$ con una relativa azione sismica $S_d(T_1) = 0.168 g$.

Il periodo approssimato della struttura, calcolato con la formula 7.3.5 delle NTC 2008 (per analisi lineare statica) per una struttura mista telaio-pareti equivalente a pareti di altezza pari a circa 22 m, vale:

$$T_1 = C_1 \cdot H^{3/4} = 0.05 \cdot 22^{3/4} = 0.51 \text{ sec}$$

Utilizzando lo spettro fornito dal foglio Excel scaricabile dal sito del CSLLPP, si ha una relativa azione sismica pari a:

INTRO

D.M. 14 gennaio 2008 - Approvazione delle Nuove Norme Tecniche per le Costruzioni

Spettri di risposta

ver. 1.0.3

Il documento Excel SPETTRI-NTC fornisce gli spettri di risposta rappresentativi delle componenti (orizzontali e verticale) delle azioni sismiche di progetto per il generico sito del territorio nazionale. La definizione degli spettri di risposta relativi ad uno Stato Limite è articolata in 3 fasi, ciascuna delle quali prevede la scelta dei valori di alcuni parametri da parte dell'utente:

FASE 1. Individuazione della pericolosità del sito (sulla base dei risultati del progetto S1 - INGV);
FASE 2. Scelta della strategia di progettazione;
FASE 3. Determinazione dell'azione di progetto.

La schermata relativa a ciascuna fase è suddivisa in sotto-schermate: l'utente può intervenire nelle sotto-schermate con sfondo grigio scuro mentre quelle con sfondo grigio chiaro consentono un immediato controllo grafico delle scelte effettuate. In ogni singola fase l'utente può visualizzare e stampare i risultati delle elaborazioni -in forma sia grafica che numerica- nonché i relativi riferimenti alle Nuove Norme Tecniche per le Costruzioni di cui al D.M. 14.01.2008 pubblicate nella G.U. n.29 del 04.02.2008 Suppl. Ord. n.30 e scaricabile dal sito www.cslp.it

Programma ottimizzato per una visualizzazione schermo 1024 x 768

La verifica dell' idoneità del programma, l'utilizzo dei risultati da esso ottenuti sono onere e responsabilità esclusiva dell'utente. Il Consiglio Superiore dei Lavori Pubblici non potrà essere ritenuto responsabile dei danni risultanti dall'utilizzo dello stesso.

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FASE 1. INDIVIDUAZIONE DELLA PERICOLOSITÀ DEL SITO


Ricerca per coordinate LONGITUDINE: 10.04130 LATTITUDINE: 44.84710

Ricerca per comune REGIONE: Emilia-Romagna PROVINCIA: Parma COMUNE: Fidenza

Elaborazioni grafiche:
 Grafici spettri di risposta
 Variabilità dei parametri

Elaborazioni numeriche:
 Tabella parametri

Nodi del reticolo intorno al sito



Controllo sul reticolo:
 Sito esterno al reticolo
 Interpolazione su 3 nodi
 Interpolazione corretta

Interpolazione:
 superficie rigata

La "Ricerca per comune" utilizza le ... coordinate ISTAT del comune per identificare il sito. Si sottolinea che ... all'interno del territorio comunale le azioni sismiche possono essere significativamente diverse da quelle così individuate e si consiglia, quindi, la "Ricerca per coordinate".

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FASE 2. SCELTA DELLA STRATEGIA DI PROGETTAZIONE

Vita nominale della costruzione (in anni) - V_n : 50 info

Coefficiente d'uso della costruzione - c_u : 2 info

Valori di progetto

Periodo di riferimento per la costruzione (in anni) - V_R : 100 info

Periodi di ritorno per la definizione dell'azione sismica (in anni) - T_R : info

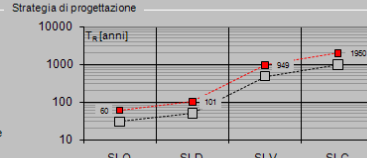
Stati limite di esercizio - SLE

SLO - $P_{1\%} = 81\%$	60
SLD - $P_{10\%} = 63\%$	101
SLV - $P_{10\%} = 10\%$	949
SLC - $P_{1\%} = 5\%$	1950

Stati limite ultimi - SLU

Elaborazioni:
 Grafici parametri azione
 Grafici spettri di risposta
 Tabella parametrizzazione

Strategia di progettazione



LEGENDA GRAFICO:
 - - - - - Strategia per costruzioni ordinarie
 - - - - - Strategia scelta

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FASE 3. DETERMINAZIONE DELL'AZIONE DI PROGETTO

Stato Limite
 Stato Limite considerato: SLV info

Risposta sismica locale

Categoria di sottosuolo: C info $S_B = 1.418$ info $C_0 = 1.593$ info

Categoria topografica: T1 info $h/H = 0.000$ info $S_T = 1.000$ info
(= quota sito - altezza riferimento topografico)

Compon. orizzontale

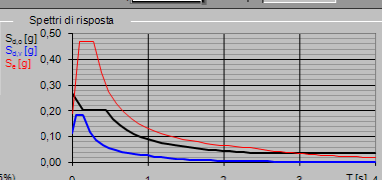
Spettro di progetto elastico (SLE) Smorzamento ξ (%): 5 $\eta = 1.000$ info

Spettro di progetto inelastico (SLU) Fattore q_d : 3.3 Regol. in altezza: si info

Compon. verticale

Spettro di progetto Fattore q_v : 1.5 $\eta = 0.667$ info

Elaborazioni:
 Grafici spettri di risposta
 Parametri e punti spettri di risposta



INTRO
FASE 1
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Parametri e punti dello spettro di risposta orizzontale per lo stato limite:SLV

Parametri indipendenti

STATO LIMITE	SLV
a_g	0,191 g
F_0	2,467
T_c	0,283 s
S_s	1,418
C_c	1,593
S_T	1,000
q	3,300

Parametri dipendenti

S	1,418
η	0,303
T_B	0,150 s
T_C	0,451 s
T_D	2,363 s

Espressioni dei parametri dipendenti

$$S = S_s \cdot S_T \quad (\text{NTC-08 Eq. 3.2.5})$$

$$\eta = \sqrt{10 \cdot (S + 1)} \geq 0,55; \eta = 1/q \quad (\text{NTC-08 Eq. 3.2.6; §. 3.2.3.5})$$

$$T_B = T_C / 3 \quad (\text{NTC-07 Eq. 3.2.8})$$

$$T_C = C_c \cdot T_c^2 \quad (\text{NTC-07 Eq. 3.2.7})$$

$$T_D = 4,0 \cdot a_g / g + 1,6 \quad (\text{NTC-07 Eq. 3.2.9})$$

Espressioni dello spettro di risposta (NTC-08 Eq. 3.2.4)

$$0 \leq T < T_B \quad S_c(T) = a_g \cdot S \cdot \eta \cdot F_0 \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_0} \left(1 - \frac{T}{T_B} \right) \right]$$

$$T_B \leq T < T_C \quad S_c(T) = a_g \cdot S \cdot \eta \cdot F_0$$

$$T_C \leq T < T_D \quad S_c(T) = a_g \cdot S \cdot \eta \cdot F_0 \cdot \left(\frac{T_C}{T} \right)$$

$$T_D \leq T \quad S_c(T) = a_g \cdot S \cdot \eta \cdot F_0 \cdot \left(\frac{T_C \cdot T_D}{T^2} \right)$$

Lo spettro di progetto $S_d(T)$ per le verifiche agli Stati Limite Ultimi è ottenuto dalle espressioni dello spettro elastico $S_c(T)$ sostituendo q con $1/q$, dove q è il fattore di struttura. (NTC-08 § 3.2.3.5)

Punti dello spettro di risposta

	T [s]	Se [g]
	0,000	0,270
T_B	0,150	0,202
T_C	0,451	0,202
	0,542	0,168
	0,633	0,144
	0,724	0,126
	0,815	0,112
	0,906	0,101
	0,997	0,091
	1,088	0,084
	1,179	0,077
	1,270	0,072
	1,361	0,067
	1,452	0,063
	1,544	0,059
	1,635	0,056
	1,726	0,053
	1,817	0,050
	1,908	0,048
	1,999	0,046
	2,090	0,044
	2,181	0,042
	2,272	0,040
T_D	2,363	0,039
	2,441	0,038
	2,519	0,038
	2,597	0,038
	2,675	0,038
	2,753	0,038
	2,831	0,038
	2,909	0,038
	2,987	0,038
	3,065	0,038
	3,143	0,038
	3,221	0,038
	3,299	0,038
	3,376	0,038
	3,454	0,038
	3,532	0,038
	3,610	0,038
	3,688	0,038
	3,766	0,038
	3,844	0,038
	3,922	0,038
	4,000	0,038

La verifica dell' idoneità del programma, l'utilizzo dei risultati da esso ottenuti sono onere e responsabilità esclusiva dell'utente. Il Consiglio Superiore dei Lavori Pubblici non potrà essere ritenuto responsabile dei danni risultanti dall'utilizzo dell

$$S_d(T_1) = a_g \cdot S \cdot \eta \cdot F_0 \cdot \left(\frac{T_C}{T_1} \right) = 0,191g \cdot 1,418 \cdot 0,303 \cdot 2,467 \cdot \left(\frac{0,451}{0,55} \right) = 0,166 g$$

Si può notare come l'ordine di grandezza dei risultati sia lo stesso: la differenza nell'azione sismica (nell'ordine dell'1%) è trascurabile, ed è legata alla differenza che si ha nel calcolo dei due periodi principali. In realtà, quello fornito dalla formula 7.3.5 delle NTC 2008 (per analisi lineare statica) è un periodo approssimato per tipologia di struttura, meno attendibile di quello valutato ad hoc per la struttura modellata tridimensionalmente secondo le reali geometrie e i reali materiali. Inoltre,

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procedendo mediante analisi lineare statica, le NTC 2008 permettono di moltiplicare le forze sismiche per un coefficiente riduttivo $\lambda = 0.85$ (sotto ipotesi di validità comunque rispettate dalla struttura in oggetto), che equivale circa a considerare nell'analisi modale solo i primi modi relativi a una massa partecipante pari all'85% del totale. Dato che l'analisi modale da noi condotta ha sempre considerato i modi relativi a masse partecipanti superiori ad almeno l'86% della massa totale, si è lavorato con un'azione sismica sicuramente a favore di sicurezza.

11 CARATTERISTICHE E AFFIDABILITA' DEL CODICE DI CALCOLO

CODICE DI CALCOLO PER STRUTTURE IN CALCESTRUZZO

Il codice di calcolo utilizzato per l'analisi strutturale con calcolo automatico è il seguente:

WinStrand Structural Analysis & Design

Ditta produttrice **ENEXSYS S.r.L.** Via Tizzano 46/2 Casalecchio di Reno (Bologna)

Sigla WinStrand 2005

Piattaforma Software Windows XP e successive

Documentazione in uso Manuale teorico - Manuale d'uso

Campo di applicazione Analisi statica e dinamica di strutture in campo elastico lineare.

11.1 CARATTERISTICHE DEL CODICE DI CALCOLO

Modellazione Strutturale con Elementi Finiti Tipo

- Truss.
- Beam (Modellazione di Travi e Pilastrini).
- Travi su suolo elastico alla Winckler.
- Plinti su suolo elastico alla Winckler.
- Elementi Shear Wall per la modellazione di pareti di taglio.
- Elementi shell (lastra/piastra) equivalenti.
- Elementi Isoparametrici a 8 Nodi Shell (lastra/piastra).

Schemi di Carico

- Carichi nodali concentrati.
- Carichi applicati direttamente agli elementi.
- Carichi Superficiali.

Tipo di Risoluzione

- Analisi statica e/o dinamica in campo lineare con il metodo dell'equilibrio.
- Fattorizzazione LDL^T.
- Analisi Statica:
 - .1. modellazione generale 6 gradi di libertà per nodo.

- .2. ipotesi di solai infinitamente rigidi nel proprio piano (3 gradi di libertà per nodo + 3 per impalcato).
- Analisi dinamica (nel caso di analisi modale gli autovettori ed autovalori possono essere calcolati mediante *subspace iteration* oppure tramite il *metodo dei vettori di Ritz*):
 - .1. Via statica equivalente.
 - .2. Modale con il metodo dello spettro di risposta.

11.2 AFFIDABILITA' DEL CODICE DI CALCOLO

Il codice di calcolo utilizzato è ritenuto dallo scrivente affidabile e idoneo all'uso nelle calcolazioni eseguite per il caso in oggetto.

Il giudizio di affidabilità si basa sull'analisi sia della documentazione fornita dal produttore (costituita da manuali teorici e d'uso, esempi svolti e commentati, nonché numerosi test risolti e confrontati di casistiche note in letteratura) , sia da test eseguiti in proprio su casistiche ricorrenti e su esempi tratti da letteratura specifica.

Inoltre si sottolinea l'utilizzo pregresso nella progettazione strutturale di decine di edifici a varia destinazione e dalle diverse configurazioni. In tutti i casi il codice di calcolo ha dimostrato affidabilità nei risultati, flessibilità nell'uso e trasparenza nell'analisi dei risultati.

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Nodo	Comb.	x [m]	y [m]	z [m]	σ [kg/cm ²]
1	I1-	16.14	17.09	0.00	2.1
	I1+				2.2
	I2-				1.1
	I2+				1.8
	I3-				1.5
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
	41				1.5
2	I1-	20.19	17.09	0.00	2.0
	I1+				2.2
	I2-				1.3
	I2+				1.6
	I3-				1.5
	I3+				1.6
	I4-				1.4
	I4+				1.5
	41				1.4
	41				1.4
3	I1-	24.24	17.09	0.00	2.0
	I1+				2.2
	I2-				1.2
	I2+				1.6
	I3-				1.5
	I3+				1.6
	I4-				1.4
	I4+				1.4
	41				1.4
	41				1.4
4	I1-	28.29	17.09	0.00	2.0
	I1+				2.1
	I2-				1.2
	I2+				1.6
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
	41				1.4
5	I1-	32.28	17.09	0.00	1.9
	I1+				2.0
	I2-				1.1
	I2+				1.6
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
	41				1.3

6	I1-	16.14	22.44	0.00	2.1
	I1+				2.2
	I2-				1.4
	I2+				1.5
	I3-				1.5
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
	41				1.5
7	I1-	20.19	22.44	0.00	2.1
	I1+				2.2
	I2-				1.4
	I2+				1.5
	I3-				1.5
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.4
	41				1.4
8	I1-	24.24	22.44	0.00	2.0
	I1+				2.2
	I2-				1.4
	I2+				1.5
	I3-				1.5
	I3+				1.6
	I4-				1.4
	I4+				1.5
	41				1.4
	41				1.4
9	I1-	28.29	22.44	0.00	2.0
	I1+				2.2
	I2-				1.4
	I2+				1.5
	I3-				1.5
	I3+				1.6
	I4-				1.4
	I4+				1.5
	41				1.4
	41				1.4
10	I1-	32.28	22.44	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
	41				1.4
11	I1-	16.14	29.34	0.00	1.9
	I1+				2.1

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	I2-				1.3
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
12	I1-	20.19	29.34	0.00	2.0
	I1+				2.1
	I2-				1.4
	I2+				1.4
	I3-				1.5
	I3+				1.6
	I4-				1.4
	I4+				1.4
	41				1.4
13	I1-	24.24	29.34	0.00	2.0
	I1+				2.1
	I2-				1.4
	I2+				1.4
	I3-				1.5
	I3+				1.6
	I4-				1.4
	I4+				1.4
	41				1.4
14	I1-	28.29	29.34	0.00	1.9
	I1+				2.1
	I2-				1.3
	I2+				1.4
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
15	I1-	32.28	29.34	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
16	I1-	16.14	34.69	0.00	1.7
	I1+				1.8
	I2-				0.8
	I2+				1.6

	I3-				1.3
	I3+				1.3
	I4-				1.2
	I4+				1.3
	41				1.2
17	I1-	20.19	34.69	0.00	1.8
	I1+				1.9
	I2-				1.1
	I2+				1.5
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
18	I1-	24.24	34.69	0.00	1.9
	I1+				1.9
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
19	I1-	28.29	34.69	0.00	1.8
	I1+				1.9
	I2-				1.1
	I2+				1.5
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
20	I1-	32.28	34.69	0.00	1.8
	I1+				1.9
	I2-				1.1
	I2+				1.6
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
21	I1-	28.29	19.76	0.00	1.9
	I1+				2.1
	I2-				1.3
	I2+				1.5
	I3-				1.4
	I3+				1.5

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	I4-				1.4
	I4+				1.4
	41				1.4
22	I1-	32.98	17.09	0.00	1.9
	I1+				2.0
	I2-				1.1
	I2+				1.6
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.4
	41				1.3
23	I1-	36.73	17.09	0.00	1.9
	I1+				2.0
	I2-				1.1
	I2+				1.6
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
24	I1-	40.53	17.09	0.00	1.9
	I1+				2.0
	I2-				1.1
	I2+				1.6
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
25	I1-	44.33	17.09	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.6
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
26	I1-	44.92	17.09	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.6
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4

	41				1.4
27	I1-	48.97	17.09	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
28	I1-	53.02	17.09	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.4
	41				1.3
29	I1-	57.07	17.09	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.4
	41				1.3
30	I1-	61.12	17.09	0.00	1.8
	I1+				1.9
	I2-				1.1
	I2+				1.5
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
31	I1-	65.17	17.09	0.00	1.6
	I1+				1.7
	I2-				0.6
	I2+				1.8
	I3-				1.2
	I3+				1.3
	I4-				1.2
	I4+				1.2
	41				1.2
32	I1-	32.98	22.44	0.00	1.8

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	I1+				2.0
	I2-				1.2
	I2+				1.4
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.4
	41				1.3
33	I1-	36.73	22.44	0.00	1.9
	I1+				2.0
	I2-				1.3
	I2+				1.4
	I3-				1.4
	I3+				1.5
	I4-				1.3
	I4+				1.4
	41				1.3
34	I1-	40.53	22.44	0.00	2.0
	I1+				2.1
	I2-				1.4
	I2+				1.4
	I3-				1.5
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
35	I1-	44.92	22.44	0.00	2.0
	I1+				2.1
	I2-				1.4
	I2+				1.5
	I3-				1.5
	I3+				1.6
	I4-				1.4
	I4+				1.5
	41				1.4
36	I1-	48.97	22.44	0.00	2.0
	I1+				2.1
	I2-				1.4
	I2+				1.4
	I3-				1.5
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
37	I1-	53.02	22.44	0.00	2.0
	I1+				2.1
	I2-				1.4

	I2+				1.4
	I3-				1.5
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
38	I1-	57.07	22.44	0.00	2.0
	I1+				2.1
	I2-				1.4
	I2+				1.4
	I3-				1.5
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
39	I1-	61.12	22.44	0.00	2.0
	I1+				2.1
	I2-				1.3
	I2+				1.4
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
40	I1-	65.17	22.44	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
41	I1-	32.98	29.34	0.00	1.8
	I1+				1.9
	I2-				1.2
	I2+				1.4
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
42	I1-	36.73	29.34	0.00	1.9
	I1+				2.0
	I2-				1.3
	I2+				1.4
	I3-				1.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	I 3+				1.5
	I 4-				1.3
	I 4+				1.4
	41				1.3
43	I 1-	40.53	29.34	0.00	2.0
	I 1+				2.1
	I 2-				1.4
	I 2+				1.4
	I 3-				1.5
	I 3+				1.5
	I 4-				1.4
	I 4+				1.4
	41				1.4
44	I 1-	44.92	29.34	0.00	2.0
	I 1+				2.1
	I 2-				1.4
	I 2+				1.5
	I 3-				1.5
	I 3+				1.6
	I 4-				1.4
	I 4+				1.5
	41				1.4
45	I 1-	48.97	29.34	0.00	2.0
	I 1+				2.1
	I 2-				1.4
	I 2+				1.4
	I 3-				1.5
	I 3+				1.5
	I 4-				1.4
	I 4+				1.4
	41				1.4
46	I 1-	53.02	29.34	0.00	2.0
	I 1+				2.1
	I 2-				1.4
	I 2+				1.4
	I 3-				1.5
	I 3+				1.5
	I 4-				1.4
	I 4+				1.4
	41				1.4
47	I 1-	57.07	29.34	0.00	2.0
	I 1+				2.1
	I 2-				1.4
	I 2+				1.4
	I 3-				1.5
	I 3+				1.5
	I 4-				1.4
	I 4+				1.4
	41				1.4

	I 4+				1.4
	41				1.4
48	I 1-	61.12	29.34	0.00	2.0
	I 1+				2.1
	I 2-				1.4
	I 2+				1.4
	I 3-				1.5
	I 3+				1.5
	I 4-				1.4
	I 4+				1.4
	41				1.4
49	I 1-	65.17	29.34	0.00	1.9
	I 1+				2.1
	I 2-				1.2
	I 2+				1.5
	I 3-				1.4
	I 3+				1.5
	I 4-				1.4
	I 4+				1.4
	41				1.4
50	I 1-	32.98	34.69	0.00	1.8
	I 1+				1.9
	I 2-				1.1
	I 2+				1.6
	I 3-				1.4
	I 3+				1.4
	I 4-				1.3
	I 4+				1.3
	41				1.3
51	I 1-	36.73	34.69	0.00	1.9
	I 1+				1.9
	I 2-				1.1
	I 2+				1.6
	I 3-				1.4
	I 3+				1.4
	I 4-				1.3
	I 4+				1.3
	41				1.3
52	I 1-	40.53	34.69	0.00	1.9
	I 1+				2.0
	I 2-				1.1
	I 2+				1.6
	I 3-				1.4
	I 3+				1.4
	I 4-				1.3
	I 4+				1.4
	41				1.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

53	I1-	44.92	34.69	0.00	1.9
	I1+				2.0
	I2-				1.1
	I2+				1.6
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
54	I1-	48.97	34.69	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
55	I1-	53.02	34.69	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
56	I1-	57.07	34.69	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.3
57	I1-	61.12	34.69	0.00	1.9
	I1+				2.0
	I2-				1.1
	I2+				1.6
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
58	I1-	65.17	34.69	0.00	1.8
	I1+				1.9

	I2-				0.7
	I2+				1.9
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
59	I1-	7.86	1.02	0.00	2.0
	I1+				2.1
	I2-				0.7
	I2+				2.2
	I3-				1.5
	I3+				1.5
	I4-				1.5
	I4+				1.5
	41				1.5
60	I1-	12.01	1.03	0.00	2.1
	I1+				2.1
	I2-				0.7
	I2+				2.2
	I3-				1.5
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
61	I1-	7.86	6.19	0.00	2.0
	I1+				2.1
	I2-				1.0
	I2+				2.0
	I3-				1.5
	I3+				1.5
	I4-				1.5
	I4+				1.5
	41				1.5
62	I1-	12.01	6.19	0.00	2.1
	I1+				2.1
	I2-				1.0
	I2+				2.0
	I3-				1.5
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
63	I1-	7.86	11.35	0.00	2.1
	I1+				2.1
	I2-				1.0
	I2+				2.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	I3-				1.5
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
64	I1-	12.01	11.35	0.00	2.1
	I1+				2.2
	I2-				1.1
	I2+				1.9
	I3-				1.6
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
65	I1-	7.86	16.50	0.00	2.0
	I1+				2.1
	I2-				0.8
	I2+				2.1
	I3-				1.5
	I3+				1.5
	I4-				1.4
	I4+				1.5
	41				1.4
66	I1-	12.01	16.50	0.00	2.1
	I1+				2.2
	I2-				1.0
	I2+				2.0
	I3-				1.6
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
67	I1-	32.28	19.76	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.5
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
1001	I1-	7.86	17.09	0.00	2.0
	I1+				2.1
	I2-				0.8
	I2+				2.1
	I3-				1.5
	I3+				1.5

	I4-				1.4
	I4+				1.5
	41				1.4
1002	I1-	7.86	19.01	0.00	1.9
	I1+				2.0
	I2-				0.9
	I2+				2.0
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
1003	I1-	7.86	21.02	0.00	1.9
	I1+				1.9
	I2-				0.8
	I2+				1.9
	I3-				1.4
	I3+				1.4
	I4-				1.4
	I4+				1.4
	41				1.4
1004	I1-	7.86	22.44	0.00	1.8
	I1+				1.9
	I2-				0.8
	I2+				1.9
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.4
	41				1.3
1005	I1-	8.86	22.44	0.00	1.8
	I1+				1.9
	I2-				1.0
	I2+				1.7
	I3-				1.4
	I3+				1.4
	I4-				1.3
	I4+				1.4
	41				1.3
1006	I1-	7.86	24.88	0.00	1.8
	I1+				1.8
	I2-				0.7
	I2+				1.9
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	41				1.3
1007	I1-	7.86	26.79	0.00	1.7
	I1+				1.8
	I2-				0.7
	I2+				1.9
	I3-				1.3
	I3+				1.3
	I4-				1.3
	I4+				1.3
	41				1.3
1008	I1-	7.86	27.44	0.00	1.7
	I1+				1.8
	I2-				0.6
	I2+				1.9
	I3-				1.3
	I3+				1.3
	I4-				1.3
	I4+				1.3
	41				1.3
1009	I1-	8.86	27.44	0.00	1.7
	I1+				1.8
	I2-				0.8
	I2+				1.7
	I3-				1.3
	I3+				1.3
	I4-				1.3
	I4+				1.3
	41				1.3
1010	I1-	7.86	29.34	0.00	1.7
	I1+				1.7
	I2-				0.5
	I2+				1.9
	I3-				1.2
	I3+				1.3
	I4-				1.2
	I4+				1.2
	41				1.2
1011	I1-	7.86	34.69	0.00	1.5
	I1+				1.6
	I2-				0.2
	I2+				2.1
	I3-				1.2
	I3+				1.2
	I4-				1.1
	I4+				1.2
	41				1.1
1012	I1-	9.43	34.69	0.00	1.6

	I1+				1.7
	I2-				0.4
	I2+				2.0
	I3-				1.2
	I3+				1.2
	I4-				1.2
	I4+				1.2
	41				1.2
1013	I1-	10.44	34.69	0.00	1.6
	I1+				1.7
	I2-				0.5
	I2+				1.9
	I3-				1.2
	I3+				1.3
	I4-				1.2
	I4+				1.2
	41				1.2
1014	I1-	12.01	34.69	0.00	1.6
	I1+				1.7
	I2-				0.5
	I2+				1.8
	I3-				1.2
	I3+				1.3
	I4-				1.2
	I4+				1.2
	41				1.2
1015	I1-	12.01	29.34	0.00	1.7
	I1+				1.8
	I2-				1.0
	I2+				1.6
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
1016	I1-	12.01	27.44	0.00	1.8
	I1+				1.9
	I2-				1.1
	I2+				1.5
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
1017	I1-	11.01	27.44	0.00	1.8
	I1+				1.9
	I2-				1.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	I2+				1.4
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
1018	I1-	12.01	26.84	0.00	1.8
	I1+				1.9
	I2-				1.1
	I2+				1.5
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
1019	I1-	12.01	24.85	0.00	1.9
	I1+				2.0
	I2-				1.2
	I2+				1.6
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
1020	I1-	12.01	22.44	0.00	2.0
	I1+				2.1
	I2-				1.2
	I2+				1.7
	I3-				1.5
	I3+				1.6
	I4-				1.4
	I4+				1.5
	41				1.4
1021	I1-	11.01	22.44	0.00	1.9
	I1+				2.0
	I2-				1.3
	I2+				1.5
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
1022	I1-	12.01	17.09	0.00	2.1
	I1+				2.2
	I2-				1.0
	I2+				2.0
	I3-				1.6

	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
1051	I1-	69.33	17.09	0.00	1.4
	I1+				1.5
	I2-				0.3
	I2+				1.8
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1052	I1-	71.28	17.09	0.00	1.4
	I1+				1.4
	I2-				0.2
	I2+				1.9
	I3-				1.1
	I3+				1.1
	I4-				1.0
	I4+				1.0
	41				1.0
1053	I1-	73.41	17.09	0.00	1.4
	I1+				1.4
	I2-				-0.1
	I2+				2.1
	I3-				1.0
	I3+				1.1
	I4-				1.0
	I4+				1.0
	41				1.0
1054	I1-	69.33	20.09	0.00	1.5
	I1+				1.5
	I2-				0.6
	I2+				1.6
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1055	I1-	71.28	20.09	0.00	1.4
	I1+				1.5
	I2-				0.6
	I2+				1.5
	I3-				1.1
	I3+				1.1
	I4-				1.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	I4+				1.1
	41				1.1
1056	I1-	73.41	20.09	0.00	1.4
	I1+				1.4
	I2-				0.1
	I2+				2.0
	I3-				1.1
	I3+				1.1
	I4-				1.0
	I4+				1.1
	41				1.0
1057	I1-	69.33	22.44	0.00	1.5
	I1+				1.6
	I2-				0.7
	I2+				1.5
	I3-				1.1
	I3+				1.2
	I4-				1.1
	I4+				1.1
	41				1.1
1058	I1-	71.28	22.44	0.00	1.4
	I1+				1.5
	I2-				0.8
	I2+				1.3
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1059	I1-	73.41	22.44	0.00	1.4
	I1+				1.5
	I2-				0.1
	I2+				2.0
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1060	I1-	69.33	23.93	0.00	1.5
	I1+				1.6
	I2-				0.7
	I2+				1.5
	I3-				1.1
	I3+				1.2
	I4-				1.1
	I4+				1.1
	41				1.1

1061	I1-	71.28	23.93	0.00	1.5
	I1+				1.5
	I2-				0.9
	I2+				1.3
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1062	I1-	73.41	23.93	0.00	1.5
	I1+				1.5
	I2-				0.2
	I2+				2.0
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1063	I1-	69.33	25.26	0.00	1.5
	I1+				1.6
	I2-				0.7
	I2+				1.5
	I3-				1.2
	I3+				1.2
	I4-				1.1
	I4+				1.1
	41				1.1
1064	I1-	73.41	24.99	0.00	1.5
	I1+				1.5
	I2-				0.2
	I2+				2.0
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1065	I1-	69.33	26.60	0.00	1.6
	I1+				1.6
	I2-				0.8
	I2+				1.5
	I3-				1.2
	I3+				1.2
	I4-				1.2
	I4+				1.2
	41				1.1
1066	I1-	73.41	26.89	0.00	1.5
	I1+				1.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	I2-				0.2
	I2+				2.0
	I3-				1.1
	I3+				1.2
	I4-				1.1
	I4+				1.1
	41				1.1
1067	I1-	69.33	29.34	0.00	1.6
	I1+				1.7
	I2-				0.8
	I2+				1.6
	I3-				1.2
	I3+				1.3
	I4-				1.2
	I4+				1.2
	41				1.2
1068	I1-	73.41	29.34	0.00	1.5
	I1+				1.6
	I2-				0.2
	I2+				2.0
	I3-				1.2
	I3+				1.2
	I4-				1.1
	I4+				1.2
	41				1.1
1069	I1-	69.33	34.69	0.00	1.7
	I1+				1.8
	I2-				0.4
	I2+				2.2
	I3-				1.3
	I3+				1.4
	I4-				1.3
	I4+				1.3
	41				1.3
1070	I1-	70.87	34.69	0.00	1.7
	I1+				1.8
	I2-				0.3
	I2+				2.2
	I3-				1.3
	I3+				1.3
	I4-				1.2
	I4+				1.3
	41				1.2
1071	I1-	71.87	34.69	0.00	1.7
	I1+				1.8
	I2-				0.3
	I2+				2.2

	I3-				1.3
	I3+				1.3
	I4-				1.2
	I4+				1.3
	41				1.2
1072	I1-	73.41	34.69	0.00	1.7
	I1+				1.7
	I2-				0.1
	I2+				2.3
	I3-				1.2
	I3+				1.3
	I4-				1.2
	I4+				1.2
	41				1.2
1073	I1-	8.46	17.09	0.00	2.0
	I1+				2.1
	I2-				0.9
	I2+				2.0
	I3-				1.5
	I3+				1.5
	I4-				1.5
	I4+				1.5
	41				1.5
1074	I1-	11.41	17.09	0.00	2.1
	I1+				2.2
	I2-				1.0
	I2+				2.0
	I3-				1.5
	I3+				1.6
	I4-				1.5
	I4+				1.5
	41				1.5
1075	I1-	69.33	27.60	0.00	1.6
	I1+				1.7
	I2-				0.8
	I2+				1.5
	I3-				1.2
	I3+				1.2
	I4-				1.2
	I4+				1.2
	41				1.2
1076	I1-	70.23	27.60	0.00	1.6
	I1+				1.6
	I2-				1.0
	I2+				1.3
	I3-				1.2
	I3+				1.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

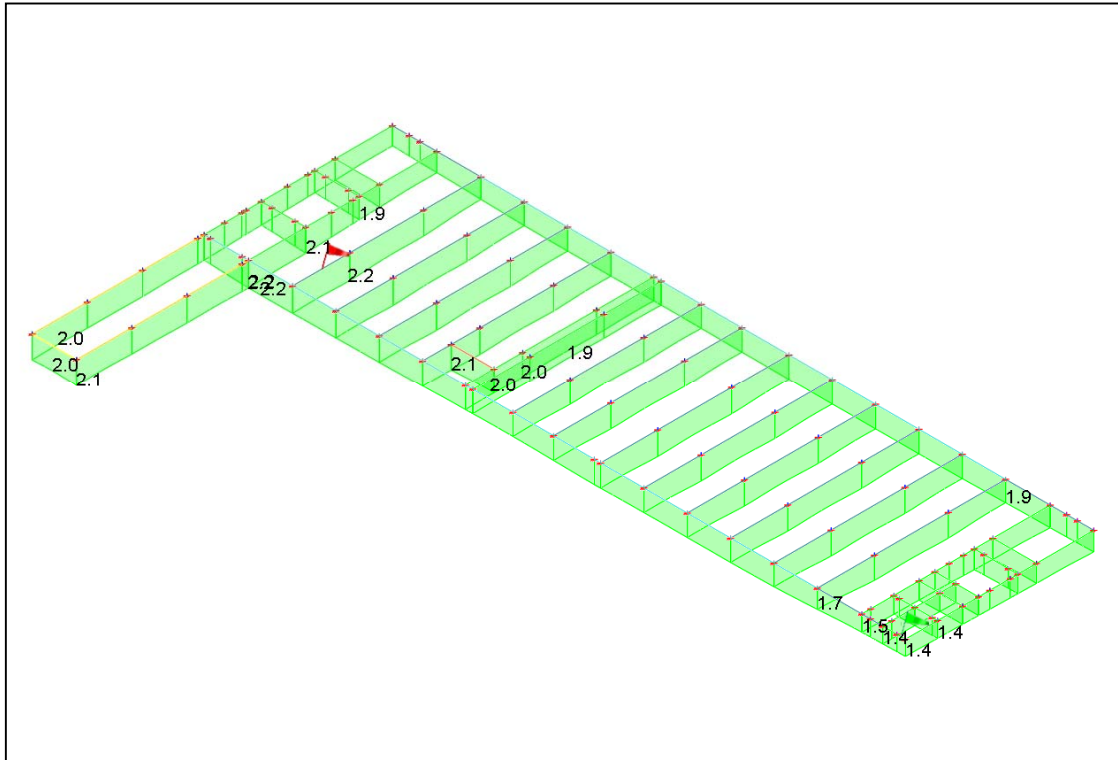
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	I4-				1.2
	I4+				1.2
	41				1.2
1077	I1-	72.51	27.60	0.00	1.5
	I1+				1.6
	I2-				0.5
	I2+				1.7
	I3-				1.1
	I3+				1.2
	I4-				1.1
	I4+				1.1
	41				1.1
1078	I1-	73.41	27.60	0.00	1.5
	I1+				1.6
	I2-				0.2
	I2+				2.0
	I3-				1.1
	I3+				1.2
	I4-				1.1
	I4+				1.1
	41				1.1
1079	I1-	69.83	20.09	0.00	1.5
	I1+				1.5
	I2-				0.6
	I2+				1.5
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1080	I1-	72.91	20.09	0.00	1.4
	I1+				1.4
	I2-				0.2
	I2+				1.9
	I3-				1.1
	I3+				1.1
	I4-				1.0
	I4+				1.1
	41				1.0
1081	I1-	69.33	17.94	0.00	1.4
	I1+				1.5
	I2-				0.4
	I2+				1.8
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1

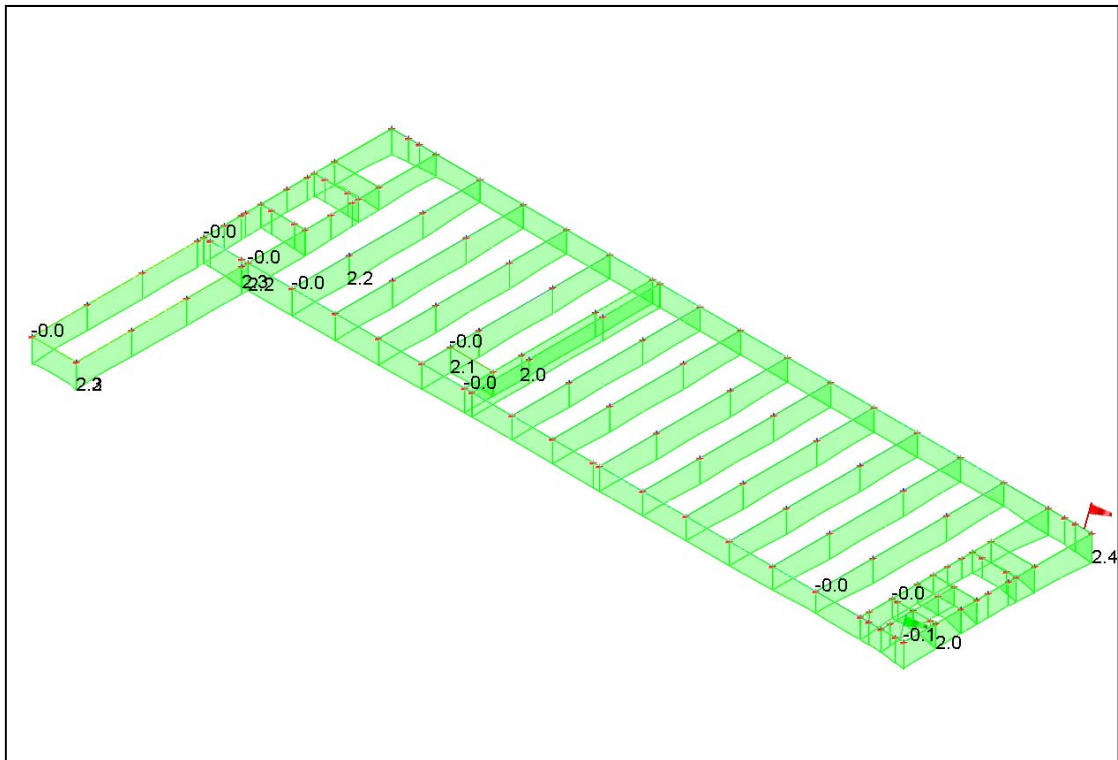
	41				1.1
1082	I1-	71.28	17.94	0.00	1.4
	I1+				1.4
	I2-				0.3
	I2+				1.8
	I3-				1.1
	I3+				1.1
	I4-				1.0
	I4+				1.1
	41				1.0
1083	I1-	7.86	20.61	0.00	1.9
	I1+				1.9
	I2-				0.8
	I2+				1.9
	I3-				1.4
	I3+				1.5
	I4-				1.4
	I4+				1.4
	41				1.4
1084	I1-	70.13	17.09	0.00	1.4
	I1+				1.5
	I2-				0.3
	I2+				1.8
	I3-				1.1
	I3+				1.1
	I4-				1.1
	I4+				1.1
	41				1.1
1085	I1-	72.61	17.09	0.00	1.4
	I1+				1.4
	I2-				0.0
	I2+				2.0
	I3-				1.0
	I3+				1.1
	I4-				1.0
	I4+				1.0
	41				1.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

COMBINAZIONE SLU - PRESSIONI – TRAVI ROVESCE DI FONDAZIONE



INVILUPPO SLU+SLV PRESSIONI - TRAVI ROVESCE DI FONDAZIONE



12.2 CEDIMENTI E SPOSTAMENTI ASSOLUTI / DIFFERENZIALI

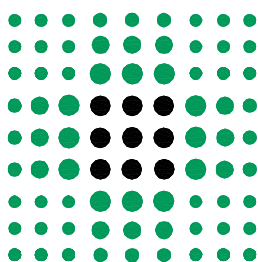
Vedasi la relazione geologica e geotecnica allegata.

12.3 DISTORSIONI ANGOLARI

Vedasi la relazione geologica e geotecnica allegata.

12.4 VERIFICHE DI STABILITA' TERRENO - FONDAZIONE

Vedasi la relazione geologica e geotecnica allegata.



GRUPPO DI LAVORO:

geom. Giuliano Bastasini
geom. Lara Biavardi
per. ind. Giuseppe Carlassare
ing. Federica Ceresa
per. ind. Paolo Crovini
ing. Elisa Degiovanni
ing. jr. Roberto Degiovanni
geom. Laura Del Bono
ing. Vincenzo Facchino
geom. Roberto Gallarotti
arch. Andrea Mambriani
per. ind. Paolo Mazzina
geom. Roberto Mellini
per. ind. Paolo Robuschi
ing. Renato Maria Saviano
geom. Pier Paolo Taddei
geom. Michele Tagliavini
geom. Roberta Tagliavini

DIPARTIMENTO TECNICO E DELLE TECNOLOGIE
SERVIZIO ATTIVITA' TECNICHE

Via Spalato n°2 - 43125 Parma - Tel. 0521/393400 - Fax 0521/286311 - Pec. serv_attivita_tecniche@pec.ausl.pr.it

OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 1
REAZIONI VINCOLARI IN FONDAZIONE**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
Via Aristotele n. 5
Tel. 3356030441 - 0522 865441
42122 - Reggio Emilia

ELABORATO

RS. 02

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Condizioni di carico:

Condizione	
1	P.proprio
2	II° fase
3	Sol.gettato
4	Perm.port. 2/3
5	Perm.port. 1/3
6	Tampon.
7	Var. C
8	Neve
9	Sisma 0SLV
10	Sisma 0SLV
11	Sisma 90SLV
12	Sisma 90SLV
13	Sisma 180SLV
14	Sisma 180SLV
15	Sisma 270SLV
16	Sisma 270SLV
17	Sisma 0SLD
18	Sisma 0SLD
19	Sisma 90SLD
20	Sisma 90SLD
21	Sisma 180SLD
22	Sisma 180SLD
23	Sisma 270SLD
24	Sisma 270SLD
25	Sisma 0SLO
26	Sisma 0SLO
27	Sisma 90SLO
28	Sisma 90SLO
29	Sisma 180SLO
30	Sisma 180SLO
31	Sisma 270SLO
32	Sisma 270SLO

- Combinazioni di carico:

- Combinazioni agli Stati Limite Ultimi

Combinazione di carico numero	
1	SLU
2	SLU - Var. C
3	SLU - Var. Neve

Comb.\Cond	P	S	P	P	T	V	N
------------	---	---	---	---	---	---	---

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

. o e e a a e
p l r r m r a r v
r . g . m . p . a . e
o p e t . p . o . C
r i t t o r o .
o t a t . .
o .
2 1
/ /
3 3

1	1.3	1.3	1.3	1.5	1.5	1.5	1.5
2	1.3	1.3	1.3	1.5	1.5	1.5	0.75
3	1.3	1.3	1.3	1.5	1.5	1.05	1.5

- Combinazioni agli Stati Limite di Salvaguardia della Vita

Combinazione di carico numero

4	Sisma 0+ / 90+
5	Sisma 0+ / 90-
6	Sisma 0+ / 270+
7	Sisma 0+ / 270-
8	Sisma 0- / 90+
9	Sisma 0- / 90-
10	Sisma 0- / 270+
11	Sisma 0- / 270-
12	Sisma 90+ / 0+
13	Sisma 90+ / 0-
14	Sisma 90+ / 180+
15	Sisma 90+ / 180-
16	Sisma 90- / 0+
17	Sisma 90- / 0-
18	Sisma 90- / 180+
19	Sisma 90- / 180-
20	Sisma 180+ / 90+
21	Sisma 180+ / 90-
22	Sisma 180+ / 270+
23	Sisma 180+ / 270-
24	Sisma 180- / 90+
25	Sisma 180- / 90-
26	Sisma 180- / 270+
27	Sisma 180- / 270-
28	Sisma 270+ / 0+
29	Sisma 270+ / 0-
30	Sisma 270+ / 180+

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

31	Sisma 270+ / 180-
32	Sisma 270- / 0+
33	Sisma 270- / 0-
34	Sisma 270- / 180+
35	Sisma 270- / 180-

Comb.\Cond	P	S	P	P	T	V	S	S	S	S	S	S	S	S
	.	o	e	e	a	a	i	i	i	i	i	i	i	i
	p	l	r	r	m	r	s	s	s	s	s	s	s	s
	r	.	m	m	p	.	m	m	m	m	m	m	m	m
	o	g	.	.	o		a	a	a	a	a	a	a	a
	p	e	p	p	n	C								
	r	t	o	o	.		0	0	9	9	1	1	2	2
	i	t	r	r			S	S	0	0	8	8	7	7
	o	a	t	t			L	L	S	S	0	0	0	0
	t	.	.	.			V	V	L	L	S	S	S	S
o								V	V	L	L	L	L	
		2	1							V	V	V	V	
		/	/											
		3	3											

4	1	1	1	1	1	0.6	1		0.3					
5	1	1	1	1	1	0.6	1			0.3				
6	1	1	1	1	1	0.6	1						0.3	
7	1	1	1	1	1	0.6	1							0.3
8	1	1	1	1	1	0.6		1	0.3					
9	1	1	1	1	1	0.6		1		0.3				
10	1	1	1	1	1	0.6		1					0.3	
11	1	1	1	1	1	0.6		1						0.3
12	1	1	1	1	1	0.6	0.3		1					
13	1	1	1	1	1	0.6		0.3	1					
14	1	1	1	1	1	0.6			1		0.3			
15	1	1	1	1	1	0.6			1			0.3		
16	1	1	1	1	1	0.6	0.3			1				
17	1	1	1	1	1	0.6		0.3		1				
18	1	1	1	1	1	0.6				1	0.3			
19	1	1	1	1	1	0.6				1		0.3		
20	1	1	1	1	1	0.6			0.3		1			
21	1	1	1	1	1	0.6				0.3	1			
22	1	1	1	1	1	0.6					1		0.3	
23	1	1	1	1	1	0.6					1			0.3
24	1	1	1	1	1	0.6			0.3			1		
25	1	1	1	1	1	0.6				0.3		1		
26	1	1	1	1	1	0.6						1	0.3	
27	1	1	1	1	1	0.6						1		0.3
28	1	1	1	1	1	0.6	0.3						1	
29	1	1	1	1	1	0.6		0.3					1	
30	1	1	1	1	1	0.6					0.3		1	
31	1	1	1	1	1	0.6						0.3	1	
32	1	1	1	1	1	0.6	0.3							1
33	1	1	1	1	1	0.6		0.3						1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

34	1	1	1	1	1	0.6					0.3			1
35	1	1	1	1	1	0.6						0.3		1

- Combinazioni RARE Stati Limite di Esercizio

Combinazione di carico numero

36	RARE
37	RARE - Var. C
38	RARE - Var. Neve

Comb.\Cond	P	S	P	P	T	V	N
	.	o	e	e	a	a	e
	p	l	r	r	m	r	v
	r	.	m	m	p	.	e
	o	g	.	.	o		
	p	e	p	p	n	C	
	r	t	o	o	.		
	i	t	r	r			
	o	a	t	t			
		t	.	.			
	o		2	1			
			/	/			
			3	3			

36	1	1	1	1	1	1	1
37	1	1	1	1	1	1	0.5
38	1	1	1	1	1	0.7	1

- Combinazioni FREQUENTI Stati Limite di Esercizio

Combinazione di carico numero

39	FREQ - Var. C
40	FREQ - Var. Neve

Comb.\Cond	P	S	P	P	T	V	N
	.	o	e	e	a	a	e
	p	l	r	r	m	r	v
	r	.	m	m	p	.	e
	o	g	.	.	o		
	p	e	p	p	n	C	
	r	t	o	o	.		
	i	t	r	r			
	o	a	t	t			
		t	.	.			
	o		2	1			
			/	/			
			3	3			

39	1	1	1	1	1	0.7	
40	1	1	1	1	1	0.6	0.2

- Combinazioni QUASI PERMANENTI Stati Limite di Esercizio

Combinazione di carico numero						
41						QP
Comb.\Cond	P	S	P	P	T	V
	.	o	e	e	a	a
	p	l	r	r	m	r
	o	g	m	m	p	.
	p	e	p	p	o	C
	r	t	o	o	n	
	i	t	r	r	.	
	o	a	t	t		
		t	.	.		
		o				
			2	1		
			/	/		
			3	3		
41	1	1	1	1	1	0.6

- Combinazioni agli Stati Limite di Danno

Combinazione di carico numero	
42	Sisma 0+ / 90+
43	Sisma 0+ / 90-
44	Sisma 0+ / 270+
45	Sisma 0+ / 270-
46	Sisma 0- / 90+
47	Sisma 0- / 90-
48	Sisma 0- / 270+
49	Sisma 0- / 270-
50	Sisma 90+ / 0+
51	Sisma 90+ / 0-
52	Sisma 90+ / 180+
53	Sisma 90+ / 180-
54	Sisma 90- / 0+
55	Sisma 90- / 0-
56	Sisma 90- / 180+
57	Sisma 90- / 180-
58	Sisma 180+ / 90+
59	Sisma 180+ / 90-
60	Sisma 180+ / 270+
61	Sisma 180+ / 270-
62	Sisma 180- / 90+
63	Sisma 180- / 90-
64	Sisma 180- / 270+
65	Sisma 180- / 270-
66	Sisma 270+ / 0+

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

67	Sisma 270+ / 0-
68	Sisma 270+ / 180+
69	Sisma 270+ / 180-
70	Sisma 270- / 0+
71	Sisma 270- / 0-
72	Sisma 270- / 180+
73	Sisma 270- / 180-

Comb.\Cond	P	S	P	P	T	V	S	S	S	S	S	S	S	S
	.	o	e	e	a	a	i	i	i	i	i	i	i	i
	p	l	r	r	m	r	s	s	s	s	s	s	s	s
	r	.	m	.	p	.	a	a	a	a	a	a	a	a
	o	g	.	.	o	.								
	p	e	p	p	n	C								
	r	t	o	o	.		0	0	9	9	1	1	2	2
	i	t	r	r	.		S	S	0	0	8	8	7	7
	o	a	t	t	.		L	L	S	S	0	0	0	0
	o	t	.	.	.		D	D	L	L	S	S	S	S
								D	D	L	L	L	L	
			2	1						D	D	D	D	
			/	/										
			3	3										

42	1	1	1	1	1	0.6	1		0.3					
43	1	1	1	1	1	0.6	1			0.3				
44	1	1	1	1	1	0.6	1						0.3	
45	1	1	1	1	1	0.6	1							0.3
46	1	1	1	1	1	0.6		1	0.3					
47	1	1	1	1	1	0.6		1		0.3				
48	1	1	1	1	1	0.6		1					0.3	
49	1	1	1	1	1	0.6		1						0.3
50	1	1	1	1	1	0.6	0.3		1					
51	1	1	1	1	1	0.6		0.3	1					
52	1	1	1	1	1	0.6			1		0.3			
53	1	1	1	1	1	0.6			1			0.3		
54	1	1	1	1	1	0.6	0.3			1				
55	1	1	1	1	1	0.6		0.3		1				
56	1	1	1	1	1	0.6				1	0.3			
57	1	1	1	1	1	0.6				1		0.3		
58	1	1	1	1	1	0.6			0.3		1			
59	1	1	1	1	1	0.6				0.3	1			
60	1	1	1	1	1	0.6					1		0.3	
61	1	1	1	1	1	0.6					1			0.3
62	1	1	1	1	1	0.6			0.3			1		
63	1	1	1	1	1	0.6				0.3		1		
64	1	1	1	1	1	0.6						1	0.3	
65	1	1	1	1	1	0.6						1		0.3
66	1	1	1	1	1	0.6	0.3						1	
67	1	1	1	1	1	0.6		0.3					1	
68	1	1	1	1	1	0.6					0.3		1	
69	1	1	1	1	1	0.6						0.3	1	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

70	1	1	1	1	1	0.6	0.3							1
71	1	1	1	1	1	0.6		0.3						1
72	1	1	1	1	1	0.6					0.3			1
73	1	1	1	1	1	0.6						0.3		1

- Combinazioni agli Stati Limite di Operativita'

Combinazione di carico numero

74	Sisma 0+ / 90+
75	Sisma 0+ / 90-
76	Sisma 0+ / 270+
77	Sisma 0+ / 270-
78	Sisma 0- / 90+
79	Sisma 0- / 90-
80	Sisma 0- / 270+
81	Sisma 0- / 270-
82	Sisma 90+ / 0+
83	Sisma 90+ / 0-
84	Sisma 90+ / 180+
85	Sisma 90+ / 180-
86	Sisma 90- / 0+
87	Sisma 90- / 0-
88	Sisma 90- / 180+
89	Sisma 90- / 180-
90	Sisma 180+ / 90+
91	Sisma 180+ / 90-
92	Sisma 180+ / 270+
93	Sisma 180+ / 270-
94	Sisma 180- / 90+
95	Sisma 180- / 90-
96	Sisma 180- / 270+
97	Sisma 180- / 270-
98	Sisma 270+ / 0+
99	Sisma 270+ / 0-
100	Sisma 270+ / 180+
101	Sisma 270+ / 180-
102	Sisma 270- / 0+
103	Sisma 270- / 0-
104	Sisma 270- / 180+
105	Sisma 270- / 180-

Comb.\Cond	P	S	P	P	T	V	S	S	S	S	S	S	S	S
	.	o	e	e	a	a	i	i	i	i	i	i	i	i
	p	l	r	r	m	r	s	s	s	s	s	s	s	s
	r	.	m	m	p	.	m	m	m	m	m	m	m	m

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

o g . . o a a a a a a a
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74	1	1	1	1	1	0.6	1		0.3					
75	1	1	1	1	1	0.6	1			0.3				
76	1	1	1	1	1	0.6	1						0.3	
77	1	1	1	1	1	0.6	1							0.3
78	1	1	1	1	1	0.6		1	0.3					
79	1	1	1	1	1	0.6		1		0.3				
80	1	1	1	1	1	0.6		1					0.3	
81	1	1	1	1	1	0.6		1						0.3
82	1	1	1	1	1	0.6	0.3		1					
83	1	1	1	1	1	0.6		0.3	1					
84	1	1	1	1	1	0.6			1		0.3			
85	1	1	1	1	1	0.6			1			0.3		
86	1	1	1	1	1	0.6	0.3			1				
87	1	1	1	1	1	0.6		0.3		1				
88	1	1	1	1	1	0.6				1	0.3			
89	1	1	1	1	1	0.6				1		0.3		
90	1	1	1	1	1	0.6			0.3		1			
91	1	1	1	1	1	0.6				0.3	1			
92	1	1	1	1	1	0.6					1		0.3	
93	1	1	1	1	1	0.6					1			0.3
94	1	1	1	1	1	0.6			0.3			1		
95	1	1	1	1	1	0.6				0.3		1		
96	1	1	1	1	1	0.6						1	0.3	
97	1	1	1	1	1	0.6						1		0.3
98	1	1	1	1	1	0.6	0.3						1	
99	1	1	1	1	1	0.6		0.3					1	
100	1	1	1	1	1	0.6					0.3		1	
101	1	1	1	1	1	0.6						0.3	1	
102	1	1	1	1	1	0.6	0.3							1
103	1	1	1	1	1	0.6		0.3						1
104	1	1	1	1	1	0.6					0.3			1
105	1	1	1	1	1	0.6						0.3		1

- Squilibrio nodi così vincolati:

Ux **VINCOLATA** Uy **VINCOLATA** Uz **VINCOLATA**

Rx **VINCOLATA** Ry **VINCOLATA** Rz **VINCOLATA**

N.B. I carichi nodali sono ESCLUSI.

- Combinazioni agli Stati Limite Ultimi

- Totali rispetto al baricentro nodi : 42.02 25.07 0.00

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
1	-0.0	-0.0	12726726.0	8486569.7	21694827.2	0.2
2	-0.0	-0.0	12623216.0	8393370.1	21452424.9	0.1
3	0.0	-0.0	11887570.0	7996997.9	19189423.5	0.1

- Totali rispetto al baricentro nodi : 9.94 8.76 0.00 (TUNNEL VERSO IL CORPO "C")

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
1	0.0	-0.0	1165783.5	-479634.2	0.6	-0.0
2	0.0	-0.0	1159621.0	-476470.6	1.1	0.0
3	0.0	-0.0	1119562.9	-455889.2	-1.4	-0.0

- Combinazioni agli Stati Limite di Salvaguardia della Vita

- Totali rispetto al baricentro nodi : 42.02 25.07 0.00

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
4	-932242.2	-310324.6	8579328.0	8275875.8	3752593.6	2006655.5
5	-949818.2	-303784.9	8571930.0	8073672.5	3738985.7	817163.1
6	-989176.6	381458.0	8640726.0	1373033.9	4093984.9	1733060.9
7	-1006752.4	387997.8	8633323.0	1171004.0	4079974.8	543570.2
8	-903573.8	-282280.7	8554871.0	8314002.2	1941503.1	2060169.1
9	-921149.5	-275740.9	8547473.0	8111863.0	1927831.1	870676.1
10	-960507.9	409501.8	8616269.0	1411208.4	2282734.4	1786604.7
11	-978083.3	416041.8	8608868.0	1209080.4	2269032.3	597097.1
12	-166666.7	-1152220.0	8382615.5	17220543.2	9642959.7	2820986.3
13	-158065.9	-1143806.1	8375279.5	17231905.5	9099701.2	2837007.5
14	406431.2	-1183935.1	8275333.5	17771032.2	15562333.7	2039857.6
15	415031.8	-1175521.4	8267997.5	17782490.6	15019011.2	2055857.3
16	-225251.8	-1130420.5	8357944.5	16546850.9	9596796.2	-1143971.2
17	-216651.3	-1122007.6	8350608.5	16558309.2	9053409.6	-1127897.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

18	347845.9	-1162136.0	8250662.5	17097451.9	15516138.2	-1925095.2
19	356446.6	-1153722.0	8243326.5	17108798.3	14972847.7	-1909070.8
20	978083.3	-416041.8	8221725.0	10111013.9	23484026.5	-597099.8
21	960508.1	-409502.0	8214324.5	9908841.4	23470313.5	-1786596.2
22	921149.6	275740.8	8283120.5	3208186.8	23825152.7	-870670.6
23	903573.8	282280.7	8275718.5	3006115.8	23811216.7	-2060169.9
24	1006752.4	-387997.9	8197268.0	10149156.4	21673000.0	-543576.7
25	989176.5	-381458.1	8189867.0	9947076.4	21658977.9	-1733065.4
26	949818.3	303784.8	8258666.0	3246298.5	22014135.3	-817163.9
27	932242.8	310324.5	8251263.5	3044256.1	22000274.2	-2006646.1
28	-356446.4	1153722.8	8587265.0	-5788730.4	10780244.1	1909036.0
29	-347845.5	1162135.4	8579928.0	-5777231.0	10236847.6	1925111.7
30	216651.6	1122007.8	8479983.0	-5238161.4	16699554.2	1127887.2
31	225252.1	1130420.4	8472646.0	-5226677.9	16156157.6	1143972.3
32	-415031.6	1175521.6	8562596.0	-6462424.8	10734132.7	-2055890.3
33	-406430.8	1183935.6	8555258.0	-6450948.3	10190630.1	-2039876.4
34	158066.4	1143806.6	8455312.0	-5911837.7	16653358.7	-2837037.1
35	166667.0	1152220.1	8447977.0	-5900452.4	16110046.1	-2820988.9

- Totali rispetto al baricentro nodi : 9.94 8.76 0.00 (TUNNEL VERSO IL CORPO "C")

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
4	-54286.1	-18723.8	798564.6	-31844.2	-807978.7	-129649.3
5	-55057.8	-18723.8	798564.5	-31844.7	-817138.4	-99701.1
6	-54286.1	18724.0	800174.6	-605997.9	-807978.8	-129649.5
7	-55057.8	18724.0	800174.6	-605997.4	-817138.4	-99701.4
8	-56032.3	-18724.2	798564.6	-31833.8	-856194.1	36296.8
9	-56804.1	-18724.2	798564.5	-31833.7	-865353.4	66245.0
10	-56032.3	18723.7	800174.7	-605987.5	-856194.1	36296.6
11	-56804.0	18723.7	800174.6	-605986.4	-865353.8	66244.8
12	-15115.4	-62413.1	796686.1	638004.0	-228503.6	-84315.9
13	-15639.2	-62413.2	796686.1	638007.5	-242967.6	-34532.1
14	18211.7	-62413.1	796686.1	638002.9	273497.5	-65294.6
15	17687.8	-62413.3	796686.2	638008.4	259032.6	-15510.8
16	-17687.8	-62413.1	796686.0	638003.0	-259033.3	15511.4
17	-18211.7	-62413.2	796686.0	638006.5	-273497.3	65295.3
18	15639.2	-62413.1	796686.1	638002.5	242967.4	34532.7
19	15115.3	-62413.2	796686.1	638008.5	228502.4	84316.6
20	56804.0	-18723.8	798564.6	-31844.2	865353.8	-66244.9
21	56032.3	-18723.8	798564.6	-31845.8	856196.4	-36296.6
22	56804.1	18724.0	800174.8	-605998.5	865354.5	-66245.0
23	56032.3	18724.0	800174.7	-605998.5	856195.4	-36296.7
24	55057.8	-18724.4	798564.7	-31826.8	817138.0	99701.4
25	54286.1	-18724.4	798564.6	-31825.8	807978.9	129649.6
26	55057.8	18723.5	800174.8	-605979.6	817138.6	99701.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

27	54286.1	18723.5	800174.8	-605980.0	807979.5	129649.5
28	-15115.3	62413.1	802053.3	-1275841.7	-228501.6	-84316.5
29	-15639.2	62413.0	802053.2	-1275838.2	-242966.7	-34532.8
30	18211.7	62413.1	802053.2	-1275840.7	273497.3	-65295.2
31	17687.8	62412.9	802053.3	-1275836.8	259033.0	-15511.3
32	-17687.8	62413.1	802053.1	-1275841.6	-259033.0	15510.7
33	-18211.7	62413.0	802053.1	-1275838.1	-273497.0	65294.6
34	15639.3	62413.1	802053.1	-1275842.1	242969.1	34532.1
35	15115.4	62413.0	802053.1	-1275835.6	228502.5	84316.0

- Combinazioni RARE Stati Limite di Esercizio

- Totali rispetto al baricentro nodi : 42.02 25.07 0.00

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
36	-0.0	0.0	9299234.0	6219316.7	15427173.1	-0.1
37	-0.0	0.0	9230225.0	6157199.5	15265430.9	-0.1
38	-0.0	0.0	8739796.0	5892989.6	13756844.0	0.0

- Totali rispetto al baricentro nodi : 9.94 8.76 0.00 (TUNNEL VERSO IL CORPO "C")

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
36	0.0	0.0	848671.6	-344246.5	0.3	-0.0
37	0.0	0.0	844563.1	-342135.6	-0.6	-0.0
38	0.0	0.0	817857.9	-328416.5	0.8	-0.0

- Combinazioni FREQUENTI Stati Limite di Esercizio

- Totali rispetto al baricentro nodi : 42.02 25.07 0.00

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
39	-0.0	0.0	8601776.0	5768789.3	13433339.5	-0.1
40	-0.0	0.0	8442900.0	5684914.1	12941174.1	-0.1

- Totali rispetto al baricentro nodi : 9.94 8.76 0.00 (TUNNEL VERSO IL CORPO "C")

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
39	0.0	0.0	809640.9	-324195.3	-0.1	-0.0
40	0.0	0.0	801013.0	-319762.2	-0.0	0.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Combinazioni QUASI PERMANENTI Stati Limite di Esercizio

- Totali rispetto al baricentro nodi : 42.02 25.07 0.00

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
41	-0.0	0.0	8415296.0	5660035.7	12876364.4	0.1

- Totali rispetto al baricentro nodi : 9.94 8.76 0.00 (TUNNEL VERSO IL CORPO "C")

Combinazione	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
41	0.0	0.0	799369.6	-318918.6	0.6	-0.0

- Combinazioni agli Stati Limite Ultimi

- Squilibri nodali

Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
1085	1	-2029.5	-34.3	42090.5	76.2	3469.8	8.0
	2	-2013.2	-33.9	42019.2	75.4	3462.7	8.0
	3	-1891.2	-34.2	41520.0	73.2	3443.1	7.8
1084	1	-4434.1	-19.0	57543.8	70.9	-5433.3	0.0
	2	-4407.9	-17.3	57312.5	67.8	-5410.6	0.0
	3	-4284.9	-20.1	55726.7	68.9	-5295.4	-0.1
1083	1	-29.0	6693.8	-2214.2	-3861.0	-50.6	3.2
	2	-29.4	6658.1	-2195.8	-3839.7	-51.2	3.1
	3	-27.7	6395.1	-2136.3	-3688.2	-48.3	3.2
1082	1	-389.6	2164.8	35799.3	7440.1	-614.9	0.9
	2	-388.1	2163.6	35689.6	7412.3	-612.7	0.9
	3	-372.7	1997.3	34787.8	7268.0	-588.9	0.8
1081	1	380.0	288.3	46919.8	10894.3	641.6	1.9
	2	378.5	292.2	46703.4	10840.3	638.9	1.9
	3	373.3	217.2	45074.7	10451.7	629.0	1.9
1080	1	3338.6	-2.3	4865.4	5.7	1397.8	-0.8
	2	3336.2	-2.2	4860.9	5.6	1396.9	-0.8
	3	3286.4	-2.4	4765.8	5.7	1379.1	-0.7
1079	1	-5063.9	-13.6	8074.6	16.9	-1947.7	-1.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	2	-5037.6	-13.5	8039.2	16.8	-1936.3	-1.1
	3	-4863.5	-13.1	7722.6	16.2	-1877.6	-1.1
1078	1	-6192.8	750.1	44889.3	6439.6	-2195.3	-9.9
	2	-6162.9	724.3	44730.4	6429.7	-2183.3	-9.9
	3	-5899.0	958.8	42876.5	6001.1	-2071.0	-9.0
1077	1	5556.5	1.5	11213.8	4.7	1497.0	-3.2
	2	5532.6	1.4	11167.7	4.9	1491.0	-3.2
	3	5280.9	2.1	10686.1	3.3	1412.6	-3.0
1076	1	-8961.0	-13.0	19157.0	22.0	-2104.1	0.4
	2	-8901.9	-13.5	19037.5	22.8	-2091.0	0.4
	3	-8411.5	-11.7	18007.6	19.7	-1966.4	0.3
1075	1	8825.3	-2990.9	80122.8	9741.5	2362.7	4.5
	2	8760.6	-2989.6	79596.5	9690.1	2342.0	4.5
	3	8307.6	-2703.0	75333.5	9069.4	2216.2	4.0
1074	1	21426.2	-55.2	36639.2	70.9	8021.9	8.6
	2	21281.3	-53.5	36431.7	68.1	7963.1	8.6
	3	19985.4	-57.1	33782.8	73.0	7543.2	8.7
1073	1	-10916.9	14.5	19423.4	-19.6	-3964.1	-1.4
	2	-10860.5	14.6	19326.9	-19.7	-3943.6	-1.4
	3	-10421.1	13.6	18599.5	-18.7	-3780.2	-1.3
1072	1	-6567.7	-8871.0	110067.2	-69006.8	4658.6	25.9
	2	-6548.5	-8827.2	109611.7	-68727.9	4626.3	25.8
	3	-6124.3	-8419.8	104896.2	-65882.2	4533.5	24.2
1071	1	-425.0	3.2	66116.0	6.2	-6636.9	11.5
	2	-404.6	3.1	65758.7	6.2	-6596.2	11.3
	3	-405.8	1.9	62600.8	5.6	-6323.7	11.3
1070	1	-4520.3	15.6	80547.5	-21.8	7582.5	-11.6
	2	-4490.7	13.6	80047.6	-18.5	7523.8	-11.5
	3	-4192.1	15.1	75872.0	-22.1	7174.3	-11.0
1069	1	11370.4	-11997.0	156165.5	-93475.6	-5736.6	-16.3
	2	11305.2	-11920.0	155100.1	-92836.3	-5687.9	-16.2
	3	10570.4	-11211.4	146697.6	-87810.4	-5539.4	-15.0
1068	1	-3569.8	99.0	107291.6	62583.9	-5692.8	5.2
	2	-3568.0	102.3	106859.9	62322.0	-5690.9	5.2
	3	-3147.3	125.1	102595.5	59756.5	-5015.6	5.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1067	1	3418.6	-3672.7	150153.7	87901.1	5590.7	-2.4
	2	3416.4	-3649.8	149137.1	87297.9	5586.6	-2.4
	3	2995.9	-3418.3	141118.4	82587.3	4901.7	-2.3
1066	1	21.3	737.0	33837.6	-4428.9	66.5	0.6
	2	21.8	728.8	33750.2	-4428.7	67.0	0.6
	3	18.6	481.2	32594.8	-4145.8	59.8	0.5
1065	1	-11.3	9766.0	21401.7	-1730.7	-9.7	-3.6
	2	-12.3	9709.2	21257.4	-1725.3	-11.5	-3.6
	3	-8.7	9114.6	20150.4	-1579.7	-6.2	-3.3
1064	1	18.3	1718.2	38457.9	4383.8	68.5	0.4
	2	18.2	1695.4	38376.4	4371.4	67.9	0.4
	3	17.3	1700.3	37005.7	4121.2	63.9	0.4
1063	1	15.4	-6532.9	27208.7	-3183.5	28.9	-0.8
	2	15.3	-6499.1	27081.3	-3170.2	28.6	-0.8
	3	15.1	-6200.9	25842.1	-3023.1	27.9	-0.9
1062	1	-39.8	-1445.5	27293.5	-2040.5	-32.4	0.2
	2	-39.9	-1450.7	27270.0	-2035.6	-32.9	0.2
	3	-39.0	-1474.8	26492.9	-1941.4	-33.6	0.2
1061	1	206.6	-2649.5	16165.5	-2962.3	338.4	-2.2
	2	205.6	-2645.1	16117.7	-2949.6	336.7	-2.2
	3	200.6	-2525.3	15488.8	-2856.3	328.3	-2.2
1060	1	480.4	2040.3	48860.5	-19.0	809.7	3.1
	2	477.5	2031.1	48643.8	-17.7	804.7	3.1
	3	466.2	1884.9	46327.2	-14.0	784.8	2.9
1059	1	17.5	-1158.5	45063.3	-5178.4	78.8	0.1
	2	17.4	-1155.9	45040.2	-5179.1	78.2	0.1
	3	17.2	-1187.7	43966.9	-5093.8	74.6	0.1
1058	1	-8391.8	11239.1	51827.3	-1667.2	5191.0	-7.4
	2	-8357.8	11193.4	51643.6	-1654.2	5170.9	-7.3
	3	-8008.8	10776.8	49625.4	-1621.7	4953.0	-7.0
1057	1	6974.2	2569.7	97141.7	-9412.9	-6003.0	-2.0
	2	6945.8	2563.1	96707.5	-9373.4	-5978.9	-2.0
	3	6641.0	2355.9	92547.7	-8958.3	-5741.7	-1.8
1056	1	-3300.6	-157.6	64354.2	-4038.3	-1263.6	-0.1
	2	-3299.2	-153.8	64340.1	-4046.1	-1264.5	-0.1
	3	-3251.2	-244.7	63385.6	-4143.0	-1252.9	-0.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

1055	1	41.7	-5483.0	29488.5	-8076.8	83.7	4.4
	2	41.1	-5463.3	29391.4	-8051.8	82.7	4.4
	3	41.6	-5326.2	28600.3	-7821.1	82.5	4.2
1054	1	4712.3	-908.7	82291.1	676.3	1511.0	-6.7
	2	4690.2	-903.1	81913.6	672.2	1505.6	-6.6
	3	4531.8	-950.3	78746.6	608.5	1462.2	-6.4
1053	1	-5757.0	4304.0	44224.6	13999.0	-1069.7	-2.1
	2	-5754.4	4307.6	44223.8	13995.6	-1070.8	-2.0
	3	-5768.4	4227.0	44008.1	13880.7	-1092.2	-1.9
1052	1	-1859.5	4661.4	71703.8	-417.6	-1660.5	-4.3
	2	-1840.7	4647.9	71480.1	-419.7	-1657.8	-4.2
	3	-1706.9	4535.6	69964.8	-398.8	-1615.3	-4.0
1051	1	13568.7	5625.6	39943.8	-195.9	4339.4	1.2
	2	13506.9	5597.9	39759.9	-195.3	4319.4	1.2
	3	13141.1	5387.7	38505.2	-172.9	4207.0	1.3
1022	1	-19391.8	9269.4	220243.3	152541.2	-5969.0	-1.1
	2	-19248.7	9179.6	218758.2	151448.9	-5911.8	-1.0
	3	-18159.2	8534.8	204269.3	141770.6	-5667.3	-0.3
1021	1	10551.0	-9.8	26689.7	5.5	1114.0	4.7
	2	10455.7	-10.6	26472.2	6.9	1101.7	4.7
	3	9864.2	-8.1	24830.5	4.2	1061.6	4.0
1020	1	-10260.7	-3763.3	261547.1	-133856.0	-1117.6	2.3
	2	-10152.8	-3768.4	259486.9	-132952.4	-1087.0	2.3
	3	-9710.5	-3511.9	243762.0	-123967.3	-1163.1	1.5
1019	1	-23.8	-11223.4	61127.2	-19015.2	-50.4	-1.2
	2	-23.4	-11133.8	60561.1	-18832.4	-49.6	-1.2
	3	-24.1	-10398.0	57418.5	-17942.7	-50.9	-1.4
1018	1	12.5	14884.3	15300.0	-6840.6	11.5	3.9
	2	13.2	14812.6	15206.6	-6811.1	12.7	3.8
	3	9.6	13698.6	14292.4	-6257.4	7.7	3.5
1017	1	11219.5	-23.3	26500.4	31.9	1782.6	2.4
	2	11156.8	-23.9	26360.3	32.9	1773.3	2.4
	3	10442.0	-21.1	24672.2	28.8	1650.3	2.2
1016	1	-10898.3	-6011.8	94722.4	18640.0	-2016.0	-4.6
	2	-10830.4	-6002.6	94179.7	18548.0	-1999.4	-4.6

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	3	-10195.3	-5430.4	88372.4	17270.4	-1895.4	-4.2
1015	1	-3584.1	-3914.5	164475.5	83069.9	-5860.1	4.0
	2	-3581.6	-3896.1	163390.0	82470.5	-5855.5	4.0
	3	-3143.9	-3748.8	154159.1	78163.2	-5143.1	3.4
1014	1	-11140.5	-9909.4	142233.6	-92948.1	3692.4	1.4
	2	-11075.3	-9837.7	141156.9	-92289.0	3642.5	1.4
	3	-10285.7	-9418.4	134110.6	-87276.2	3764.9	1.1
1013	1	3529.0	49.3	67787.2	-169.3	-5563.9	13.6
	2	3497.1	46.9	67289.9	-164.9	-5507.1	13.5
	3	3359.6	45.0	64313.6	-154.6	-5353.9	12.0
1012	1	-622.3	54.7	48931.7	-166.4	5218.3	1.9
	2	-644.5	54.2	48605.7	-165.5	5177.8	2.1
	3	-481.3	49.7	47139.1	-152.2	5063.8	-0.1
1011	1	3875.6	-6168.5	90873.7	-65963.1	-4395.1	-0.8
	2	3860.7	-6143.3	90465.8	-65685.8	-4363.1	-0.6
	3	3754.1	-5898.3	87598.7	-63195.0	-4259.1	-2.1
1010	1	3744.6	2695.4	113699.2	52916.9	5968.8	0.2
	2	3742.9	2683.8	113243.4	52684.7	5967.2	0.3
	3	3299.1	2557.9	108610.5	50926.1	5254.1	-0.7
1009	1	-6698.2	17.0	14634.0	-19.5	-1340.4	4.4
	2	-6670.0	16.7	14568.8	-19.1	-1335.9	4.3
	3	-6330.6	16.3	13909.9	-19.0	-1253.0	4.0
1008	1	8092.1	4940.9	54506.2	7127.0	2566.6	15.5
	2	8057.2	4919.6	54298.8	7102.8	2555.5	15.4
	3	7613.3	4755.8	51805.2	6720.7	2367.4	13.7
1007	1	-23.1	1269.3	41501.9	-4988.1	-65.9	2.5
	2	-23.7	1282.6	41317.7	-4963.3	-66.4	2.5
	3	-21.8	957.3	39724.3	-4769.3	-62.6	2.0
1006	1	-34.5	6128.7	65662.0	-7307.0	-104.1	1.2
	2	-35.2	6118.6	65368.9	-7261.1	-104.5	1.3
	3	-33.9	5657.6	62857.2	-7088.2	-102.0	0.6
1005	1	-5520.5	6.4	12935.2	-13.0	-812.9	-1.0
	2	-5484.8	6.4	12857.6	-12.9	-807.1	-1.0
	3	-5314.4	5.9	12487.1	-12.1	-781.2	-0.9
1004	1	7151.9	-7274.7	79897.4	11808.6	2114.5	4.4

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	2	7102.3	-7224.4	79484.9	11738.9	2095.8	4.5
	3	6865.4	-7091.9	76826.3	11446.5	2015.3	3.6
1003	1	-24.8	-544.8	43035.3	3937.1	-61.5	3.4
	2	-25.5	-542.4	42815.9	3918.1	-62.2	3.4
	3	-23.2	-492.1	41294.2	3761.1	-58.8	3.0
1002	1	-85.5	-8972.0	46144.0	-9383.0	-151.5	-1.4
	2	-86.7	-8930.4	45929.3	-9339.4	-153.1	-1.3
	3	-81.9	-8573.8	44125.4	-8963.2	-146.9	-1.9
1001	1	10356.8	13822.7	71864.1	10046.1	3517.5	11.4
	2	10300.2	13754.3	71524.5	9999.7	3495.1	11.3
	3	9878.5	13209.4	68661.8	9602.1	3346.5	10.7
67	1	-1168.4	-60.9	26097.0	-19.6	-1266.8	1.3
	2	-1167.9	-61.6	26072.1	-19.0	-1265.9	1.3
	3	-1058.2	-70.7	23786.5	6.1	-1149.3	1.0
58	1	47.8	-1813.3	124535.4	1945.9	112.8	0.1
	2	48.2	-1813.1	123437.8	1945.6	112.5	0.1
	3	50.1	-1641.5	117760.8	1761.5	110.3	0.1
57	1	25.4	-1845.8	124514.6	1981.0	89.3	0.1
	2	25.1	-1845.6	123382.6	1980.8	88.3	0.1
	3	23.4	-1671.1	117680.4	1793.6	82.2	0.1
56	1	27.1	-1847.4	124419.2	1983.0	91.1	0.1
	2	26.8	-1847.2	123288.3	1982.8	90.1	0.1
	3	25.3	-1672.6	117592.8	1795.5	84.2	0.1
55	1	26.8	-1847.9	124410.7	1983.9	90.8	0.1
	2	26.5	-1847.7	123280.0	1983.7	89.8	0.1
	3	24.9	-1673.1	117585.7	1796.4	83.9	0.1
54	1	25.8	-1850.3	124549.8	1986.8	89.7	0.1
	2	25.5	-1850.1	123415.9	1986.6	88.8	0.1
	3	24.2	-1675.3	117713.8	1799.0	83.1	0.1
53	1	-50.7	-1916.2	128976.5	2057.6	9.5	0.1
	2	-51.0	-1916.0	127799.9	2057.4	8.5	0.1
	3	-52.4	-1734.4	121873.3	1862.7	2.7	0.1
52	1	160.6	-1864.4	125366.6	2002.5	231.1	0.1
	2	160.1	-1864.3	124229.3	2002.4	230.0	0.1
	3	157.9	-1688.1	118492.9	1813.4	223.4	0.1

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

51	1	78.6	-1713.5	115170.4	1841.2	145.1	0.1
	2	77.6	-1713.3	114149.4	1841.0	143.4	0.1
	3	72.5	-1552.7	108939.8	1668.7	133.8	0.1
50	1	449.2	-960.6	68424.7	1035.1	533.8	0.1
	2	448.4	-960.6	67857.9	1035.2	532.3	0.1
	3	444.4	-876.8	65087.3	945.1	523.9	0.1
49	1	-3.8	-1260.6	219257.9	1340.6	102.4	0.4
	2	-3.6	-1260.3	217094.7	1340.2	101.4	0.4
	3	-2.1	-1139.7	201881.5	1212.0	96.1	0.5
48	1	15.9	-1236.3	217790.9	1316.5	123.1	0.4
	2	15.8	-1236.1	215647.7	1316.3	121.8	0.4
	3	15.1	-1117.9	200553.7	1190.7	114.1	0.5
47	1	15.8	-1237.4	217771.1	1319.1	122.9	0.4
	2	15.6	-1237.2	215628.2	1318.9	121.6	0.4
	3	15.0	-1119.0	200535.6	1193.3	114.0	0.5
46	1	15.8	-1238.7	217772.1	1322.0	122.9	0.4
	2	15.6	-1238.6	215629.2	1321.8	121.6	0.4
	3	15.0	-1120.3	200536.3	1196.2	114.0	0.5
45	1	14.7	-1239.8	217831.4	1324.6	121.8	0.4
	2	14.6	-1239.7	215687.8	1324.5	120.5	0.4
	3	14.1	-1121.4	200589.6	1198.8	113.0	0.5
44	1	-0.6	-1292.3	225465.3	1381.1	105.7	0.4
	2	-0.7	-1292.2	223234.3	1381.0	104.5	0.4
	3	-1.3	-1168.6	207513.3	1249.9	96.8	0.5
43	1	47.2	-1257.0	219719.4	1345.6	155.9	0.4
	2	47.0	-1256.9	217554.1	1345.6	154.5	0.4
	3	46.1	-1137.0	202302.0	1218.3	146.5	0.5
42	1	38.0	-1172.8	204475.1	1258.7	146.2	0.4
	2	37.5	-1172.8	202485.4	1258.7	144.6	0.4
	3	35.2	-1061.7	188470.8	1140.8	135.1	0.5
41	1	114.3	-633.0	118869.3	693.8	226.2	0.4
	2	113.9	-633.1	117865.9	694.0	224.7	0.4
	3	112.0	-577.9	110803.1	634.7	215.7	0.5
40	1	-1.9	1236.5	219214.9	-1278.5	106.8	0.4
	2	-1.7	1236.3	217053.2	-1278.4	105.9	0.4
	3	-0.3	1117.5	201841.8	-1155.5	100.5	0.5

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

39	1	17.7	1208.8	217821.6	-1248.1	127.3	0.4
	2	17.5	1208.7	215678.3	-1248.0	126.1	0.4
	3	16.7	1092.6	200580.9	-1127.8	118.3	0.5
38	1	17.6	1207.2	217798.5	-1244.9	127.2	0.4
	2	17.5	1207.0	215655.5	-1244.7	126.0	0.4
	3	16.7	1091.0	200560.1	-1124.6	118.3	0.5
37	1	17.7	1205.8	217797.9	-1242.0	127.4	0.4
	2	17.6	1205.6	215654.9	-1241.8	126.1	0.4
	3	16.8	1089.6	200559.8	-1121.7	118.4	0.5
36	1	17.4	1208.1	217752.9	-1243.0	127.1	0.4
	2	17.3	1207.8	215610.5	-1242.7	125.8	0.4
	3	16.5	1091.7	200516.9	-1122.4	118.1	0.5
35	1	38.1	1374.5	222564.3	-1416.0	148.8	0.4
	2	37.9	1373.5	220362.3	-1415.0	147.5	0.4
	3	36.1	1244.2	204810.3	-1280.9	138.6	0.5
34	1	38.3	1233.5	219315.1	-1266.7	149.0	0.4
	2	38.2	1233.2	217152.4	-1266.2	147.8	0.4
	3	37.3	1114.9	201920.7	-1143.6	139.9	0.5
33	1	39.9	1129.1	204480.2	-1155.8	150.6	0.4
	2	39.5	1128.8	202490.8	-1155.3	149.2	0.4
	3	37.0	1020.7	188476.7	-1043.3	139.6	0.5
32	1	115.9	586.3	118873.5	-585.1	230.4	0.4
	2	115.6	586.1	117870.4	-584.7	229.0	0.4
	3	113.5	534.0	110808.9	-531.4	219.9	0.5
31	1	48.5	1805.4	124064.3	-1929.5	117.2	0.1
	2	49.0	1805.2	122972.8	-1929.3	117.2	0.1
	3	51.4	1634.3	117343.9	-1746.6	115.6	0.1
30	1	28.9	1836.7	124420.0	-1962.7	96.7	0.1
	2	28.6	1836.6	123288.2	-1962.5	95.8	0.1
	3	26.8	1662.8	117597.0	-1776.8	89.8	0.1
29	1	30.9	1837.4	124338.5	-1963.1	98.9	0.1
	2	30.7	1837.2	123207.6	-1963.0	98.0	0.1
	3	28.9	1663.4	117521.2	-1777.1	92.0	0.1
28	1	31.7	1836.9	124355.8	-1962.3	99.7	0.1
	2	31.5	1836.7	123224.7	-1962.1	98.8	0.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	3	29.7	1662.9	117536.9	-1776.2	92.8	0.1
27	1	53.5	1833.4	122837.1	-1958.2	122.5	0.1
	2	52.8	1833.2	121729.6	-1958.0	121.2	0.1
	3	49.7	1659.7	116109.5	-1772.6	113.8	0.1
26	1	592.5	1694.9	78099.7	-1809.6	687.8	0.1
	2	591.7	1694.2	77461.7	-1808.8	686.4	0.1
	3	569.2	1535.6	73880.3	-1639.3	658.7	0.1
25	1	-86.5	504.9	68923.2	-535.1	-24.3	0.1
	2	-86.5	504.7	68285.0	-534.9	-24.9	0.1
	3	-105.1	457.5	65546.7	-484.6	-48.5	0.1
24	1	-17.0	1810.2	119423.2	-1932.7	48.6	0.1
	2	-16.8	1810.0	118329.9	-1932.4	48.2	0.1
	3	-14.8	1638.9	112732.8	-1749.6	46.1	0.1
23	1	84.0	1697.8	115074.4	-1812.1	154.5	0.1
	2	83.1	1697.6	114053.5	-1811.8	153.0	0.1
	3	77.8	1538.0	108841.9	-1641.2	143.2	0.1
22	1	452.3	945.5	68356.6	-1006.1	540.8	0.1
	2	451.6	945.4	67790.2	-1006.0	539.5	0.1
	3	447.4	862.5	65021.7	-917.4	530.9	0.1
21	1	2723.0	-343.5	60565.3	235.0	2784.3	4.2
	2	2724.3	-346.2	60517.6	237.6	2787.3	4.2
	3	2447.7	-321.5	54869.4	234.0	2493.3	3.1
20	1	-496.5	-983.6	71074.2	1023.3	-594.6	1.3
	2	-495.8	-983.5	70471.0	1023.1	-593.2	1.3
	3	-491.8	-900.0	67591.4	939.4	-583.2	1.0
19	1	-66.1	-1785.3	121206.4	1884.8	-143.2	1.3
	2	-65.3	-1785.0	120116.5	1884.5	-141.7	1.3
	3	-60.8	-1618.9	114630.9	1711.5	-131.0	1.0
18	1	-25.0	-1833.1	123859.4	1939.1	-100.1	1.3
	2	-24.7	-1832.9	122727.9	1938.8	-99.1	1.3
	3	-22.9	-1660.1	117093.7	1757.8	-91.3	1.0
17	1	-21.7	-1835.0	124009.4	1944.1	-96.6	1.3
	2	-21.4	-1834.8	122876.9	1943.9	-95.7	1.3
	3	-19.6	-1661.2	117228.4	1761.2	-87.8	1.0
16	1	-28.2	-1796.5	123270.5	1905.9	-103.5	1.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	2	-28.7	-1796.3	122178.8	1905.7	-103.3	1.3
	3	-31.0	-1625.7	116598.8	1725.4	-99.8	1.0
15	1	-164.5	-702.5	124892.5	597.8	-277.3	4.2
	2	-164.2	-701.9	123823.9	596.8	-275.6	4.2
	3	-159.4	-651.1	116266.0	569.5	-265.6	3.1
14	1	11.9	-1327.6	216312.3	1267.2	-92.2	4.2
	2	12.3	-1326.7	214190.5	1266.0	-90.5	4.2
	3	8.5	-1212.8	199211.7	1168.9	-89.6	3.1
13	1	-7.7	-1049.9	217740.0	990.0	-112.8	4.2
	2	-7.6	-1049.5	215597.4	989.4	-111.3	4.2
	3	-8.9	-987.5	200545.3	942.9	-107.8	3.1
12	1	-6.5	-1044.8	217737.5	998.6	-111.5	4.2
	2	-6.3	-1044.5	215594.6	998.1	-110.0	4.2
	3	-7.7	-981.6	200544.0	947.1	-106.5	3.1
11	1	14.9	-1066.7	218298.8	1035.4	-89.2	4.2
	2	14.7	-1066.4	216146.3	1035.1	-88.0	4.2
	3	11.1	-999.2	201050.1	975.9	-86.8	3.1
10	1	-1420.2	2151.2	126295.1	-2395.3	-1570.6	4.2
	2	-1418.8	2147.3	125237.4	-2391.6	-1567.6	4.2
	3	-1287.7	1969.4	117376.4	-2179.1	-1431.5	3.1
9	1	944.9	3738.8	216377.4	-4046.7	910.1	4.2
	2	946.3	3730.6	214285.8	-4038.5	913.1	4.2
	3	843.8	3461.4	198419.4	-3733.8	804.2	3.1
8	1	-31.4	-1981.3	233319.0	1966.8	-113.9	4.2
	2	-31.1	-1981.3	231175.9	1966.7	-112.1	4.2
	3	-31.7	-1132.6	211377.5	1095.1	-114.1	3.1
7	1	-13.6	-2048.6	233496.2	2051.4	-95.2	4.2
	2	-13.4	-2048.6	231352.8	2051.3	-93.5	4.2
	3	-16.3	-1185.1	211523.0	1160.5	-97.9	3.1
6	1	7.0	-2022.6	234260.7	2038.1	-73.6	4.2
	2	7.0	-2022.8	232105.9	2038.3	-72.1	4.2
	3	1.0	-1161.5	212201.5	1146.1	-79.7	3.1
5	1	-1625.3	23.5	74657.8	-55.2	-1742.2	1.3
	2	-1624.4	26.3	74067.0	-58.3	-1740.3	1.3
	3	-1505.1	3.3	70643.3	-28.0	-1618.9	1.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

4	1	814.5	226.5	124443.3	-269.6	816.8	1.3
	2	815.5	231.2	123376.0	-274.7	818.8	1.3
	3	725.4	137.7	116721.5	-169.7	720.6	1.0
3	1	-85.7	3867.8	138279.5	-4166.1	-127.4	1.3
	2	-85.2	3867.8	137150.2	-4166.2	-125.9	1.3
	3	-80.0	3072.1	127368.4	-3310.0	-124.2	1.0
2	1	-15.9	3996.8	138564.2	-4301.4	-54.2	1.3
	2	-15.5	3996.7	137433.0	-4301.2	-52.8	1.3
	3	-19.3	3176.6	127600.9	-3419.7	-60.5	1.0
1	1	-44.6	3901.5	138698.3	-4196.3	-84.3	1.3
	2	-44.8	3901.3	137601.6	-4196.1	-83.5	1.3
	3	-53.7	3101.9	127782.0	-3337.5	-96.6	1.0
Tot.	1	-0.0	-0.0	12726726.0	-4954.0	5320.0	142.9
Tot.	2	-0.0	-0.0	12623216.0	-4934.9	5304.4	143.9
Tot.	3	0.0	-0.0	11887570.0	-4783.4	4737.4	115.7
Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
59	1	203.7	1593.6	132244.8	-1844.3	213.6	0.0
	2	203.7	1593.0	131564.7	-1843.4	213.6	0.0
	3	203.7	1505.9	127133.3	-1742.9	213.6	0.0
60	1	-203.7	1593.6	132244.8	-1844.3	-213.6	0.0
	2	-203.7	1593.0	131564.7	-1843.4	-213.6	0.0
	3	-203.7	1505.9	127133.3	-1742.9	-213.6	0.0
61	1	203.7	78.3	174999.6	-254.9	213.6	0.0
	2	203.7	77.6	174033.8	-253.9	213.6	0.0
	3	203.7	74.5	167774.6	-241.6	213.6	0.0
62	1	-203.7	78.3	174999.6	-254.9	-213.6	0.0
	2	-203.7	77.6	174033.8	-253.9	-213.6	0.0
	3	-203.7	74.5	167774.6	-241.6	-213.6	0.0
63	1	203.7	209.9	173989.1	-392.9	213.6	0.0
	2	203.7	210.4	173032.0	-393.2	213.6	0.0
	3	203.7	197.7	166812.3	-370.9	213.6	0.0
64	1	-203.7	209.9	173989.1	-392.9	-213.6	0.0
	2	-203.7	210.4	173032.1	-393.2	-213.6	0.0
	3	-203.7	197.7	166812.3	-370.9	-213.6	0.0
65	1	203.7	-1881.7	101658.3	1800.9	213.6	0.0
	2	203.7	-1881.1	101179.8	1800.5	213.6	0.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	3	203.7	-1778.1	98061.3	1701.6	213.6	0.0
66	1	-203.7	-1881.7	101658.3	1800.9	-213.6	0.0
	2	-203.7	-1881.1	101179.8	1800.5	-213.6	0.0
	3	-203.7	-1778.1	98061.3	1701.6	-213.6	0.0
Tot.	1	0.0	-0.0	1165783.5	-1382.2	-0.0	0.0
Tot.	2	0.0	-0.0	1159621.0	-1379.9	-0.0	0.0
Tot.	3	0.0	-0.0	1119562.9	-1307.6	-0.0	0.0

- Combinazioni agli Stati Limite di Salvaguardia della Vita

- Squilibri nodali

Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
1085	4	-1264.2	-611.4	236229.0	459.1	13403.3	34.7
	5	-437.9	-597.9	238662.2	422.2	13565.5	39.6
	6	-9518.3	-84.4	290639.8	-713.0	13616.6	-5.6
	7	-8692.0	-70.9	293072.9	-749.8	13778.7	-0.7
	8	-2045.4	-494.1	232182.4	268.9	12319.5	20.6
	9	-1219.1	-480.6	234615.5	232.1	12481.6	25.5
	10	-10299.5	32.8	286593.1	-903.1	12532.7	-19.7
	11	-9473.2	46.4	289026.3	-940.0	12694.9	-14.9
	12	9972.6	-1021.0	6669.2	2008.5	5300.1	68.3
	13	9738.3	-985.9	5455.2	1951.5	4975.0	64.1
	14	12410.6	-866.8	-132038.5	2184.7	-944.9	65.9
	15	12176.3	-831.6	-133252.5	2127.6	-1270.0	61.6
	16	12726.8	-975.9	14779.6	1885.6	5840.7	84.4
	17	12492.4	-940.7	13565.6	1828.5	5515.5	80.2
	18	15164.8	-821.6	-123928.1	2061.8	-404.3	82.0
	19	14930.4	-786.5	-125142.1	2004.7	-729.5	77.7
	20	6862.5	-97.2	-226130.0	1046.3	-7413.3	26.5
	21	7688.8	-83.7	-223696.9	1009.5	-7251.2	31.4
	22	-1391.6	429.7	-171719.3	-125.7	-7200.1	-13.8
	23	-565.3	443.3	-169286.2	-162.6	-7037.9	-8.9
	24	6081.3	20.0	-230176.6	856.1	-8497.2	12.4
	25	6907.6	33.6	-227743.5	819.3	-8335.0	17.3
	26	-2172.8	547.0	-175765.9	-315.9	-8283.9	-27.9
	27	-1346.6	560.6	-173332.8	-352.8	-8121.7	-23.1
	28	-17541.2	735.6	188038.3	-1898.4	6011.0	-66.1
	29	-17775.5	770.8	186824.3	-1955.5	5685.8	-70.3
	30	-15103.2	889.9	49330.6	-1722.2	-234.0	-68.5
	31	-15337.5	925.0	48116.6	-1779.3	-559.1	-72.8
	32	-14787.0	780.8	196148.7	-2021.3	6551.6	-49.9
	33	-15021.3	815.9	194934.8	-2078.4	6226.4	-54.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	34	-12349.0	935.0	57441.0	-1845.1	306.6	-52.4
	35	-12583.3	970.2	56227.0	-1902.2	-18.6	-56.6
1084	4	-11481.6	881.0	-142523.6	-738.4	-11960.5	-8.9
	5	-12867.2	908.8	-144713.8	-747.2	-12756.5	-2.5
	6	-48296.8	3029.0	-154752.2	-4332.7	-28778.2	-111.2
	7	-49682.4	3056.8	-156942.4	-4341.5	-29574.2	-104.8
	8	-10642.9	914.3	-132391.8	-615.4	-11349.0	3.5
	9	-12028.5	942.1	-134582.0	-624.2	-12145.0	9.9
	10	-47458.0	3062.3	-144620.5	-4209.7	-28166.6	-98.8
	11	-48843.6	3090.1	-146810.7	-4218.5	-28962.6	-92.4
	12	52425.5	-3044.4	7953.1	5275.5	20457.1	142.7
	13	52677.1	-3034.4	10992.7	5312.4	20640.6	146.4
	14	68750.6	-4243.2	119474.9	6790.2	30446.5	173.1
	15	69002.3	-4233.2	122514.4	6827.1	30630.0	176.8
	16	47806.9	-2951.8	652.5	5246.1	17803.8	164.1
	17	48058.5	-2941.7	3692.0	5283.0	17987.3	167.8
	18	64132.0	-4150.6	112174.2	6760.7	27793.2	194.5
	19	64383.6	-4140.6	115213.7	6797.6	27976.7	198.2
	20	42935.6	-3115.1	229215.4	4310.6	21337.5	92.4
	21	41550.0	-3087.2	227025.2	4301.7	20541.5	98.8
	22	6120.4	-967.0	216986.8	716.2	4519.9	-9.9
	23	4734.8	-939.2	214796.6	707.4	3723.9	-3.5
	24	43774.3	-3081.7	239347.2	4433.6	21949.1	104.8
	25	42388.7	-3053.9	237157.0	4424.7	21153.1	111.2
	26	6959.1	-933.7	227118.6	839.2	5131.4	2.5
	27	5573.6	-905.9	224928.4	830.4	4335.4	9.0
	28	-70291.7	4115.6	-32808.9	-6705.6	-35601.8	-198.2
	29	-70040.1	4125.7	-29769.4	-6668.7	-35418.3	-194.5
	30	-53966.5	2916.8	78712.8	-5190.9	-25612.4	-167.8
	31	-53714.9	2926.9	81752.3	-5154.0	-25428.9	-164.1
	32	-74910.3	4208.3	-40109.6	-6735.1	-38255.1	-176.8
	33	-74658.7	4218.3	-37070.1	-6698.2	-38071.6	-173.0
	34	-58585.1	3009.5	71412.1	-5220.4	-28265.7	-146.4
	35	-58333.5	3019.5	74451.6	-5183.5	-28082.2	-142.6
1083	4	-446.7	5888.3	4575.1	-3641.1	-771.0	283.8
	5	-449.8	6613.3	5467.7	-4165.8	-778.4	278.7
	6	-232.0	9968.6	10345.9	-6438.1	-399.7	214.8
	7	-235.0	10693.6	11238.5	-6962.8	-407.1	209.7
	8	213.0	4879.5	4746.1	-2992.2	-800.1	275.2
	9	209.9	5604.5	5638.7	-3516.9	-807.5	270.2
	10	427.8	8959.8	10516.9	-5789.2	-428.8	206.2
	11	424.7	9684.8	11409.5	-6313.9	-436.2	201.2
	12	-469.6	-2240.7	-9830.3	2054.8	-808.3	199.1
	13	-271.7	-2543.3	-9779.0	2249.4	-817.1	196.5
	14	-475.4	-4100.5	-15565.8	3420.6	-467.7	55.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	15	-277.5	-4403.1	-15514.5	3615.2	-476.5	52.4
	16	-479.8	175.9	-6855.1	305.8	-833.0	182.2
	17	-281.9	-126.7	-6803.8	500.5	-841.8	179.7
	18	-485.6	-1683.8	-12590.6	1671.6	-492.4	38.2
	19	-287.7	-1986.5	-12539.3	1866.3	-501.2	35.6
	20	-466.1	-311.0	-14543.2	911.5	364.4	-196.5
	21	-469.1	414.0	-13650.6	386.8	357.0	-201.6
	22	-251.3	3769.3	-8772.5	-1885.5	735.7	-265.5
	23	-254.4	4494.3	-7879.9	-2410.2	728.3	-270.6
	24	193.6	-1319.8	-14372.2	1560.4	335.2	-205.0
	25	190.6	-594.8	-13479.6	1035.7	327.8	-210.1
	26	408.4	2760.5	-8601.5	-1236.7	706.5	-274.0
	27	405.3	3485.5	-7708.9	-1761.3	699.1	-279.1
	28	246.3	11360.2	9405.5	-7268.7	429.3	-30.9
	29	444.2	11057.6	9456.8	-7074.0	420.6	-33.5
	30	240.5	9500.5	3670.0	-5902.9	769.9	-175.0
	31	438.4	9197.8	3721.3	-5708.2	761.2	-177.6
	32	236.1	13776.9	12380.8	-9017.6	404.6	-47.7
	33	434.0	13474.3	12432.1	-8823.0	395.9	-50.3
	34	230.3	11917.1	6645.3	-7651.9	745.2	-191.8
	35	428.2	11614.5	6696.6	-7457.2	736.5	-194.4
1082	4	-10562.0	-959.9	18852.3	11007.5	-17576.0	8.0
	5	-10744.8	-1131.8	18093.3	11018.8	-17879.1	8.6
	6	-16330.2	5079.4	18765.0	7310.7	-27060.9	9.0
	7	-16513.1	4907.6	18006.0	7322.0	-27363.9	9.5
	8	-10281.2	-1567.3	20252.7	11264.2	-17081.6	7.0
	9	-10464.0	-1739.2	19493.8	11275.5	-17384.7	7.5
	10	-16049.5	4472.0	20165.4	7567.4	-26566.5	7.9
	11	-16232.3	4300.2	19406.4	7578.7	-26869.5	8.5
	12	5666.6	-8177.7	25080.6	12691.0	9270.3	0.6
	13	5750.8	-8359.9	25500.7	12768.0	9418.6	0.3
	14	13541.4	-8314.7	29152.7	10371.3	22345.3	-4.0
	15	13625.6	-8496.9	29572.8	10448.3	22493.6	-4.3
	16	5057.1	-8750.6	22550.6	12728.4	8260.2	2.5
	17	5141.3	-8932.8	22970.8	12805.4	8408.6	2.1
	18	12931.9	-8887.5	26622.7	10408.8	21335.2	-2.1
	19	13016.1	-9069.8	27042.9	10485.8	21483.5	-2.4
	20	15687.4	-1416.5	32425.9	3275.4	26007.3	-7.2
	21	15504.6	-1588.4	31666.9	3286.7	25704.2	-6.7
	22	9919.1	4622.8	32338.6	-421.4	16522.4	-6.3
	23	9736.3	4450.9	31579.6	-410.2	16219.4	-5.7
	24	15968.2	-2023.9	33826.4	3532.1	26501.7	-8.3
	25	15785.3	-2195.8	33067.4	3543.4	26198.6	-7.7
	26	10199.9	4015.4	33739.1	-164.7	17016.8	-7.4
	27	10017.1	3843.5	32980.1	-153.5	16713.8	-6.8
	28	-13561.0	11953.4	24789.5	368.3	-22345.8	3.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	29	-13476.8	11771.2	25209.6	445.3	-22197.4	3.4
	30	-5686.2	11816.4	28861.6	-1951.4	-9270.8	-0.9
	31	-5602.0	11634.2	29281.7	-1874.4	-9122.5	-1.2
	32	-14170.5	11380.5	22259.6	405.7	-23355.9	5.5
	33	-14086.3	11198.3	22679.7	482.7	-23207.5	5.2
	34	-6295.7	11243.5	26331.7	-1913.9	-10280.9	1.0
	35	-6211.5	11061.3	26751.8	-1836.9	-10132.5	0.6
1081	4	-11161.1	3847.7	-173862.8	-32030.3	-18574.6	-4.7
	5	-11381.6	4197.8	-173704.2	-32763.0	-18939.5	-4.5
	6	-17219.1	26116.8	-165942.4	-44753.8	-28537.8	-7.7
	7	-17439.5	26466.9	-165783.8	-45486.5	-28902.7	-7.5
	8	-10733.9	289.3	-160365.3	-29398.2	-17840.9	-4.8
	9	-10954.4	639.4	-160206.6	-30130.9	-18205.8	-4.7
	10	-16791.9	22558.3	-152444.8	-42121.7	-27804.1	-7.8
	11	-17012.3	22908.4	-152286.2	-42854.4	-28169.0	-7.6
	12	6370.7	-33045.3	-41269.4	16161.0	10422.6	3.7
	13	6498.8	-34112.8	-37220.2	16950.7	10642.7	3.7
	14	14991.3	-40981.2	76411.9	43222.1	24729.2	8.2
	15	15119.5	-42048.8	80461.2	44011.7	24949.3	8.2
	16	5635.9	-31878.3	-40740.7	13718.7	9206.4	4.3
	17	5764.0	-32945.8	-36691.4	14508.3	9426.5	4.3
	18	14256.6	-39814.2	76940.6	40779.7	23512.9	8.8
	19	14384.7	-40881.7	80989.9	41569.4	23733.1	8.8
	20	17574.5	-22605.3	218408.2	58173.2	29113.9	10.3
	21	17354.1	-22255.2	218566.8	57440.5	28749.0	10.5
	22	11516.5	-336.2	226328.7	45449.7	19150.7	7.4
	23	11296.1	13.9	226487.3	44717.0	18785.8	7.5
	24	18001.7	-26163.7	231905.8	60805.3	29847.6	10.2
	25	17781.3	-25813.6	232064.4	60072.6	29482.8	10.4
	26	11943.7	-3894.7	239826.3	48081.8	19884.4	7.2
	27	11723.3	-3544.6	239984.9	47349.1	19519.5	7.4
	28	-13822.6	41184.9	-14867.9	-26250.5	-22788.1	-6.1
	29	-13694.4	40117.4	-10818.6	-25460.9	-22568.0	-6.1
	30	-5201.9	33249.0	102813.4	810.5	-8481.6	-1.6
	31	-5073.7	32181.4	106862.7	1600.1	-8261.5	-1.6
	32	-14557.4	42351.9	-14339.1	-28692.9	-24004.4	-5.5
	33	-14429.2	41284.4	-10289.8	-27903.2	-23784.2	-5.5
	34	-5936.7	34416.0	103342.2	-1631.8	-9697.8	-1.0
	35	-5808.5	33348.5	107391.5	-842.2	-9477.7	-1.0
1080	4	18532.7	-155.2	14936.2	209.2	9358.6	10.6
	5	18875.6	-163.3	15269.1	221.0	9526.9	10.7
	6	24171.8	-6.1	19054.6	2.4	12254.4	4.9
	7	24514.7	-14.3	19387.5	14.3	12422.8	5.0
	8	17387.2	-168.5	14397.8	228.1	8751.8	10.8
	9	17730.2	-176.6	14730.7	239.9	8920.1	10.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	10	23026.3	-19.4	18516.2	21.3	11647.6	5.1
	11	23369.2	-27.5	18849.1	33.2	11816.0	5.2
	12	-1766.8	-261.5	250.0	361.2	-1105.9	11.4
	13	-2110.4	-265.5	88.5	366.9	-1287.9	11.5
	14	-12840.7	-207.7	-7725.3	291.0	-6829.1	6.4
	15	-13184.3	-211.7	-7886.8	296.7	-7011.2	6.4
	16	-623.6	-288.6	1359.7	400.8	-544.7	11.7
	17	-967.3	-292.6	1198.2	406.4	-726.7	11.7
	18	-11697.5	-234.8	-6615.6	330.5	-6267.9	6.7
	19	-12041.2	-238.8	-6777.1	336.2	-6450.0	6.7
	20	-18380.3	24.1	-11648.2	-25.0	-9719.0	-6.1
	21	-18037.4	15.9	-11315.3	-13.1	-9550.6	-6.0
	22	-12741.3	173.1	-7529.8	-231.7	-6823.1	-11.8
	23	-12398.3	165.0	-7196.9	-219.9	-6654.7	-11.8
	24	-19525.8	10.8	-12186.6	-6.1	-10325.8	-5.9
	25	-19182.8	2.7	-11853.7	5.8	-10157.4	-5.8
	26	-13886.7	159.8	-8068.2	-212.9	-7429.9	-11.6
	27	-13543.8	151.7	-7735.3	-201.0	-7261.5	-11.6
	28	17030.1	235.3	13978.0	-328.0	8547.0	-7.6
	29	16686.4	231.3	13816.5	-322.3	8365.0	-7.6
	30	5956.2	289.1	6002.7	-398.2	2823.8	-12.7
	31	5612.5	285.1	5841.2	-392.6	2641.7	-12.6
	32	18173.3	208.2	15087.7	-288.5	9108.2	-7.4
	33	17829.6	204.3	14926.2	-282.8	8926.2	-7.3
	34	7099.3	262.0	7112.4	-358.7	3385.0	-12.4
	35	6755.7	258.0	6950.9	-353.1	3202.9	-12.3
1079	4	13301.0	123.3	-9349.6	-131.5	6873.3	13.0
	5	13666.9	128.5	-9709.4	-139.8	7048.6	13.3
	6	19430.7	385.2	-15165.6	-515.2	9848.6	19.5
	7	19796.7	390.5	-15525.3	-523.5	10023.9	19.8
	8	12101.4	121.7	-8346.6	-132.5	6278.7	11.8
	9	12467.4	126.9	-8706.3	-140.8	6454.0	12.2
	10	18231.2	383.6	-14162.5	-516.3	9253.9	18.3
	11	18597.2	388.9	-14522.2	-524.6	9429.2	18.7
	12	-8357.2	-374.9	10523.0	563.4	-3680.5	-7.1
	13	-8717.0	-375.4	10823.9	563.1	-3858.9	-7.4
	14	-20065.7	-534.3	21080.1	767.3	-9397.8	-17.1
	15	-20425.6	-534.8	21381.0	767.0	-9576.2	-17.4
	16	-7137.2	-357.5	9323.9	535.8	-3096.2	-5.9
	17	-7497.1	-358.0	9624.8	535.5	-3274.6	-6.2
	18	-18845.8	-516.9	19881.0	739.7	-8813.5	-15.9
	19	-19205.6	-517.4	20181.9	739.4	-8991.9	-16.2
	20	-25727.5	-408.0	25840.7	548.2	-12184.1	-20.3
	21	-25361.5	-402.8	25481.0	539.9	-12008.8	-20.0
	22	-19597.8	-146.1	20024.8	164.5	-9208.9	-13.8
	23	-19231.8	-140.9	19665.1	156.2	-9033.6	-13.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	24	-26927.0	-409.6	26843.8	547.2	-12778.8	-21.5
	25	-26561.0	-404.4	26484.1	538.9	-12603.5	-21.1
	26	-20797.3	-147.7	21027.9	163.4	-9803.5	-15.0
	27	-20431.3	-142.5	20668.1	155.1	-9628.2	-14.6
	28	12075.3	498.2	-8863.4	-715.7	6237.0	14.6
	29	11715.4	497.7	-8562.5	-716.1	6058.6	14.3
	30	366.8	338.8	1693.7	-511.8	519.8	4.6
	31	6.9	338.3	1994.6	-512.1	341.4	4.3
	32	13295.2	515.6	-10062.6	-743.4	6821.3	15.8
	33	12935.4	515.2	-9761.6	-743.7	6642.9	15.4
	34	1586.7	356.2	494.6	-539.5	1104.1	5.8
	35	1226.8	355.8	795.5	-539.8	925.7	5.5
1078	4	-5412.7	-12265.9	60913.2	22199.8	-1830.7	-2.8
	5	-5286.0	-14416.5	59168.0	23307.1	-1770.3	-0.9
	6	-9500.7	7042.7	80464.4	8346.8	-5418.0	-109.8
	7	-9374.0	4892.0	78719.1	9454.1	-5357.6	-107.9
	8	-5345.5	-9605.2	62163.5	22351.0	-1394.3	5.5
	9	-5218.8	-11755.8	60418.2	23458.3	-1333.9	7.4
	10	-9433.6	9703.3	81714.6	8498.0	-4981.6	-101.4
	11	-9306.9	7552.7	79969.4	9605.3	-4921.2	-99.5
	12	1352.7	-29133.7	13406.8	29045.2	3742.5	154.1
	13	1372.9	-28335.5	13781.9	29090.5	3873.4	156.6
	14	3170.1	-27232.1	-9882.2	22121.6	4861.6	180.9
	15	3190.3	-26433.9	-9507.1	22167.0	4992.6	183.4
	16	1775.0	-36302.5	7589.3	32736.4	3943.8	160.4
	17	1795.2	-35504.3	7964.4	32781.8	4074.8	162.9
	18	3592.4	-34400.9	-15699.7	25812.9	5063.0	187.2
	19	3612.6	-33602.7	-15324.6	25858.3	5193.9	189.7
	20	645.4	-5927.2	-16716.7	-878.6	1899.9	86.8
	21	772.1	-8077.9	-18461.9	228.8	1960.3	88.7
	22	-3442.7	13381.3	2834.4	-14731.6	-1687.4	-20.2
	23	-3316.0	11230.7	1089.2	-13624.2	-1627.0	-18.3
	24	712.5	-3266.6	-15466.5	-727.4	2336.3	95.1
	25	839.2	-5417.2	-17211.7	380.0	2396.7	97.0
	26	-3375.6	16042.0	4084.7	-14580.4	-1251.0	-11.8
	27	-3248.9	13891.3	2339.4	-13473.0	-1190.6	-9.9
	28	-12274.1	35228.1	78577.3	-17131.5	-8215.3	-202.5
	29	-12254.0	36026.3	78952.3	-17086.2	-8084.3	-200.0
	30	-10456.7	37129.7	55288.3	-24055.0	-7096.1	-175.6
	31	-10436.6	37927.9	55663.3	-24009.7	-6965.1	-173.1
	32	-11851.8	28059.3	72759.8	-13440.3	-8013.9	-196.2
	33	-11831.7	28857.5	73134.9	-13394.9	-7883.0	-193.7
	34	-10034.4	29960.9	49470.8	-20363.8	-6894.7	-169.3
	35	-10014.3	30759.1	49845.9	-20318.4	-6763.8	-166.8
1077	4	6129.2	-112.4	-8609.0	162.2	3562.1	-9.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	5	5870.7	-122.2	-8935.0	179.0	3636.5	-9.1
	6	9393.2	21.8	-2447.5	-40.8	2283.8	-15.9
	7	9134.7	12.0	-2773.5	-24.1	2358.2	-15.9
	8	6771.4	-126.8	-8276.9	180.2	3744.7	-9.3
	9	6512.9	-136.6	-8602.9	196.9	3819.1	-9.3
	10	10035.4	7.4	-2115.3	-22.9	2466.4	-16.1
	11	9776.9	-2.4	-2441.3	-6.1	2540.8	-16.1
	12	-10.3	-221.1	-5942.5	332.6	3615.9	6.0
	13	182.4	-225.5	-5842.8	338.0	3670.7	5.9
	14	-2459.8	-185.6	2079.1	287.0	2403.5	12.3
	15	-2267.2	-190.0	2178.8	292.3	2458.2	12.2
	16	-871.9	-253.8	-7029.0	388.4	3864.0	6.0
	17	-679.3	-258.1	-6929.4	393.8	3918.8	5.9
	18	-3321.5	-218.3	992.6	342.8	2651.6	12.2
	19	-3128.8	-222.6	1092.2	348.2	2706.3	12.1
	20	-2036.0	5.9	18129.6	10.1	-479.5	11.7
	21	-2294.4	-3.9	17803.6	26.9	-405.1	11.7
	22	1228.1	140.1	24291.2	-192.9	-1757.8	4.9
	23	969.6	130.3	23965.2	-176.1	-1683.4	4.9
	24	-1393.8	-8.5	18461.7	28.1	-296.9	11.5
	25	-1652.3	-18.3	18135.8	44.8	-222.5	11.5
	26	1870.2	125.7	24623.3	-175.0	-1575.2	4.7
	27	1611.7	115.9	24297.3	-158.2	-1500.8	4.7
	28	10869.8	226.2	14596.1	-344.2	-645.0	-16.5
	29	11062.4	221.8	14695.7	-338.8	-590.3	-16.6
	30	8420.2	261.7	22617.7	-389.8	-1857.5	-10.3
	31	8612.9	257.3	22717.3	-384.4	-1802.7	-10.4
	32	10008.1	193.5	13509.5	-288.3	-396.9	-16.6
	33	10200.8	189.2	13609.2	-282.9	-342.1	-16.7
	34	7558.6	229.0	21531.1	-334.0	-1609.4	-10.4
	35	7751.2	224.7	21630.7	-328.6	-1554.6	-10.4
1076	4	-10451.8	37.2	33504.8	-103.2	1200.3	-12.7
	5	-10085.0	41.1	32833.2	-109.2	1272.6	-12.2
	6	-15924.1	267.1	47066.2	-489.6	-266.5	-23.2
	7	-15557.3	271.0	46394.6	-495.6	-194.3	-22.7
	8	4264.4	39.6	34011.0	-109.1	1397.4	-13.6
	9	4631.2	43.6	33339.4	-115.1	1469.7	-13.1
	10	-1207.9	269.6	47572.4	-495.5	-69.4	-24.1
	11	-841.0	273.5	46900.8	-501.5	2.8	-23.6
	12	373.1	-349.8	-408.2	574.8	1488.4	11.5
	13	4788.0	-349.0	-256.3	573.1	1547.5	11.2
	14	131.3	-448.4	-16738.6	765.3	281.6	22.5
	15	4546.2	-447.6	-16586.7	763.5	340.7	22.2
	16	1595.9	-336.7	-2647.0	554.9	1729.2	13.1
	17	6010.8	-336.0	-2495.1	553.1	1788.3	12.8
	18	1354.2	-435.4	-18977.3	745.3	522.4	24.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	19	5769.0	-434.6	-18825.5	743.6	581.5	23.8
	20	-11257.8	-291.5	-20929.8	531.7	-2822.3	24.0
	21	-10890.9	-287.6	-21601.5	525.7	-2750.1	24.4
	22	-16730.0	-61.6	-7368.4	145.3	-4289.1	13.5
	23	-16363.2	-57.7	-8040.1	139.3	-4216.9	14.0
	24	3458.5	-289.1	-20423.7	525.8	-2625.2	23.1
	25	3825.3	-285.1	-21095.3	519.8	-2553.0	23.5
	26	-2013.8	-59.1	-6862.3	139.3	-4092.1	12.6
	27	-1647.0	-55.2	-7533.9	133.3	-4019.8	13.1
	28	-17867.8	416.6	44796.4	-713.4	-3401.0	-23.4
	29	-13453.0	417.3	44948.3	-715.2	-3341.9	-23.7
	30	-18109.6	318.0	28466.0	-522.9	-4607.8	-12.4
	31	-13694.7	318.7	28617.9	-524.7	-4548.7	-12.7
	32	-16645.0	429.6	42557.7	-733.3	-3160.2	-21.8
	33	-12230.1	430.4	42709.5	-735.1	-3101.1	-22.1
	34	-16886.8	331.0	26227.3	-542.9	-4367.0	-10.8
	35	-12471.9	331.7	26379.1	-544.7	-4307.9	-11.1
1075	4	2929.2	18177.0	-7988.4	-2333.4	1517.2	5.6
	5	2815.9	17949.9	-11379.5	-2510.9	1759.1	5.3
	6	4312.1	28484.6	50314.0	-12098.6	-2245.4	-26.6
	7	4198.8	28257.5	46922.9	-12276.0	-2003.5	-26.9
	8	2375.7	20133.5	-15412.2	-1784.2	1974.3	12.0
	9	2262.5	19906.4	-18803.4	-1961.6	2216.2	11.7
	10	3758.6	30441.1	42890.2	-11549.3	-1788.4	-20.1
	11	3645.4	30214.0	39499.0	-11726.8	-1546.5	-20.4
	12	3137.1	-11176.2	-47701.3	18930.0	6903.2	52.8
	13	2971.0	-10589.2	-49928.4	19094.8	7040.3	54.7
	14	4750.9	-26842.4	-24602.5	27048.4	7862.0	59.0
	15	4584.9	-26255.5	-26829.6	27213.2	7999.1	60.9
	16	2759.5	-11933.1	-59005.1	18338.5	7709.6	51.8
	17	2593.5	-11346.2	-61232.2	18503.2	7846.7	53.8
	18	4373.4	-27599.4	-35906.3	26456.9	8668.3	58.0
	19	4207.3	-27012.4	-38133.5	26621.7	8805.4	59.9
	20	8308.7	-34043.9	69007.6	24728.0	4713.0	26.0
	21	8195.5	-34271.0	65616.4	24550.5	4954.9	25.8
	22	9691.6	-23736.3	127310.0	14962.9	950.4	-6.1
	23	9578.4	-23963.4	123918.8	14785.4	1192.3	-6.4
	24	7755.3	-32087.4	61583.7	25277.3	5170.1	32.5
	25	7642.0	-32314.5	58192.6	25099.8	5412.0	32.2
	26	9138.2	-21779.8	119886.1	15512.1	1407.4	0.4
	27	9024.9	-22006.9	116495.0	15334.7	1649.3	0.1
	28	7746.8	23182.5	146640.1	-13620.4	-5638.9	-54.3
	29	7580.7	23769.5	144412.9	-13455.7	-5501.8	-52.4
	30	9360.6	7516.2	169738.9	-5502.0	-4680.2	-48.2
	31	9194.6	8103.2	167511.7	-5337.2	-4543.1	-46.2
	32	7369.2	22425.5	135336.3	-14212.0	-4832.6	-55.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	33	7203.2	23012.5	133109.1	-14047.2	-4695.4	-53.3
	34	8983.1	6759.3	158435.0	-6093.6	-3873.8	-49.1
	35	8817.0	7346.2	156207.9	-5928.8	-3736.7	-47.2
1074	4	-7982.7	-621.6	-59381.5	1098.0	258.5	-64.8
	5	-7794.3	-608.2	-58755.5	1076.7	396.6	-64.5
	6	2092.1	-90.6	-27733.4	257.4	2686.9	-35.5
	7	2280.5	-77.2	-27107.4	236.2	2825.0	-35.3
	8	-6408.0	-596.8	-54120.9	1049.4	485.8	-60.5
	9	-6219.6	-583.4	-53494.9	1028.1	623.9	-60.2
	10	3666.9	-65.8	-22472.8	208.8	2914.2	-31.2
	11	3855.3	-52.4	-21846.8	187.5	3052.3	-31.0
	12	-8048.8	-1040.3	-50026.9	1671.9	-76.1	-59.6
	13	-7576.3	-1032.9	-48448.7	1657.3	-7.9	-58.3
	14	1685.5	-862.3	-11312.7	1316.6	2135.4	-27.0
	15	2157.9	-854.9	-9734.5	1302.0	2203.6	-25.7
	16	-7420.8	-995.8	-47940.2	1601.0	384.3	-58.8
	17	-6948.3	-988.3	-46362.0	1586.4	452.4	-57.5
	18	2313.5	-817.7	-9226.1	1245.7	2595.8	-26.2
	19	2785.9	-810.3	-7647.9	1231.1	2664.0	-24.9
	20	24464.7	-28.2	69665.6	-86.4	7630.2	43.9
	21	24653.1	-14.9	70291.6	-107.7	7768.3	44.1
	22	34539.6	502.8	101313.7	-927.0	10058.6	73.1
	23	34728.0	516.1	101939.7	-948.3	10196.7	73.3
	24	26039.5	-3.4	74926.2	-135.1	7857.5	48.2
	25	26227.9	9.9	75552.2	-156.3	7995.6	48.4
	26	36114.4	527.6	106574.3	-975.6	10285.9	77.4
	27	36302.8	540.9	107200.3	-996.9	10424.0	77.6
	28	25534.1	729.6	55466.7	-1130.0	8018.6	37.8
	29	26006.5	737.1	57044.9	-1144.6	8086.8	39.1
	30	35268.3	907.6	94180.9	-1485.3	10230.1	70.4
	31	35740.8	915.1	95759.0	-1499.9	10298.3	71.7
	32	26162.1	774.2	57553.4	-1200.9	8478.9	38.6
	33	26634.5	781.7	59131.6	-1215.5	8547.1	39.9
	34	35896.4	952.2	96267.5	-1556.2	10690.4	71.2
	35	36368.8	959.7	97845.7	-1570.8	10758.6	72.5
1073	4	-19917.5	87.7	80940.9	-107.8	-1725.9	-74.5
	5	-19724.4	103.9	79408.5	-142.4	-187.9	-72.4
	6	-14511.8	334.1	61561.6	-466.8	-1890.5	-50.9
	7	-14318.6	350.3	60029.2	-501.4	-352.5	-48.8
	8	-18971.5	87.0	77331.6	-136.5	-1404.1	-68.9
	9	-18778.3	103.2	75799.1	-171.1	133.8	-66.8
	10	-13565.7	333.3	57952.3	-495.5	-1568.7	-45.3
	11	-13372.5	349.5	56419.8	-530.1	-30.7	-43.2
	12	-19805.0	-365.0	65553.4	555.0	-4534.3	-61.9
	13	-19521.2	-365.2	64470.6	546.4	-4437.8	-60.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	14	-14393.4	-490.3	32535.2	738.1	-5664.7	-27.2
	15	-14109.6	-490.5	31452.4	729.5	-5568.2	-25.5
	16	-19161.1	-311.1	60445.2	439.7	592.2	-55.0
	17	-18877.3	-311.3	59362.4	431.1	688.8	-53.3
	18	-13749.5	-436.3	27427.0	622.8	-538.1	-20.2
	19	-13465.7	-436.6	26344.1	614.2	-441.6	-18.6
	20	-1879.0	-329.8	-29119.9	502.6	-5493.7	41.3
	21	-1685.8	-313.6	-30652.4	468.0	-3955.7	43.4
	22	3526.7	-83.5	-48499.2	143.6	-5658.3	64.9
	23	3719.9	-67.3	-50031.7	109.0	-4120.3	67.0
	24	-932.9	-330.6	-32729.3	473.9	-5172.0	46.9
	25	-739.8	-314.4	-34261.7	439.3	-3634.0	49.0
	26	4472.8	-84.2	-52108.5	114.9	-5336.5	70.5
	27	4666.0	-68.0	-53641.0	80.3	-3798.6	72.5
	28	-1785.9	456.2	955.8	-641.7	-5082.9	16.6
	29	-1502.0	456.0	-127.0	-650.3	-4986.4	18.3
	30	3625.7	331.0	-32062.5	-458.6	-6213.2	51.4
	31	3909.5	330.7	-33145.3	-467.2	-6116.7	53.0
	32	-1141.9	510.2	-4152.4	-757.0	43.7	23.6
	33	-858.1	510.0	-5235.3	-765.6	140.2	25.2
	34	4269.6	384.9	-37170.7	-573.9	-1086.6	58.3
	35	4553.4	384.7	-38253.5	-582.5	-990.1	60.0
1072	4	-107387.1	-22324.5	280887.1	-133724.8	-68616.7	-298.3
	5	-110264.9	-24835.5	285309.6	-136869.7	-70246.8	-296.1
	6	-47156.2	-5388.6	156138.2	-86196.5	-28038.4	-487.6
	7	-50034.0	-7899.7	160560.7	-89341.4	-29668.6	-485.3
	8	-112641.4	-19681.3	290069.6	-135375.4	-71606.9	-288.7
	9	-115519.2	-22192.3	294492.1	-138520.3	-73237.0	-286.4
	10	-52410.5	-2745.5	165320.7	-87847.1	-31028.6	-477.9
	11	-55288.3	-5256.5	169743.2	-90991.9	-32658.8	-475.7
	12	-122318.3	-32880.1	320807.6	-141432.2	-77310.0	206.3
	13	-123894.6	-32087.1	323562.4	-141927.4	-78207.1	209.1
	14	-76187.2	-28295.9	231944.2	-103159.9	-44916.3	448.8
	15	-77763.5	-27503.0	234699.0	-103655.0	-45813.4	451.7
	16	-131911.0	-41250.1	335549.4	-151915.1	-82743.8	213.8
	17	-133487.3	-40457.2	338304.1	-152410.3	-83640.9	216.7
	18	-85779.9	-36666.0	246686.0	-113642.8	-50350.1	456.3
	19	-87356.2	-35873.0	249440.7	-114137.9	-51247.1	459.2
	20	46383.3	-7043.9	-15324.2	-6150.4	39362.4	510.2
	21	43505.5	-9554.9	-10901.7	-9295.3	37732.3	512.5
	22	106614.2	9892.0	-140073.1	41377.9	79940.7	321.0
	23	103736.4	7381.0	-135650.6	38233.0	78310.5	323.2
	24	41129.0	-4400.7	-6141.8	-7801.0	36372.2	519.9
	25	38251.2	-6911.7	-1719.3	-10945.9	34742.1	522.1
	26	101359.9	12535.1	-130890.6	39727.3	76950.5	330.6
	27	98482.1	10024.1	-126468.1	36582.5	75320.4	332.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	28	78451.3	23572.7	-95021.9	16995.6	57950.8	-424.7
	29	76875.0	24365.6	-92267.1	16500.4	57053.8	-421.8
	30	124582.4	28156.8	-183885.3	55267.9	90344.6	-182.1
	31	123006.1	28949.8	-181130.5	54772.7	89447.5	-179.2
	32	68858.6	15202.6	-80280.1	6512.7	52517.1	-417.1
	33	67282.3	15995.6	-77525.4	6017.5	51620.0	-414.3
	34	114989.7	19786.8	-169143.5	44785.0	84910.8	-174.6
	35	113413.4	20579.7	-166388.8	44289.9	84013.7	-171.7
1071	4	-66061.2	-41.4	182955.4	796.8	-8879.0	-260.2
	5	-69805.9	-83.5	186753.3	1057.9	-8771.4	-255.6
	6	-31896.1	420.6	93235.2	-939.1	8746.3	-483.2
	7	-35640.8	378.5	97033.2	-678.0	8853.8	-478.6
	8	-70562.1	-63.6	195787.5	917.6	-8849.7	-267.7
	9	-74306.9	-105.6	199585.4	1178.7	-8742.1	-263.1
	10	-36397.0	398.4	106067.3	-818.3	8775.6	-490.7
	11	-40141.8	356.3	109865.3	-557.2	8883.2	-486.1
	12	-66121.9	-648.6	217090.1	2478.5	-32790.0	258.9
	13	-67472.2	-655.2	220939.7	2514.7	-32781.2	256.7
	14	-34403.4	-742.5	156576.7	2408.8	-35561.2	487.8
	15	-35753.7	-749.1	160426.3	2445.0	-35552.4	485.6
	16	-78604.5	-788.9	229750.0	3348.7	-32431.4	274.4
	17	-79954.8	-795.5	233599.7	3384.9	-32422.6	272.1
	18	-46886.0	-882.8	169236.6	3279.0	-35202.6	503.2
	19	-48236.3	-889.4	173086.2	3315.3	-35193.8	501.0
	20	39667.2	-354.4	-18756.0	564.6	-18116.1	502.8
	21	35922.4	-396.5	-14958.0	825.7	-18008.6	507.4
	22	73832.3	107.6	-108476.2	-1171.3	-490.9	279.8
	23	70087.5	65.5	-104678.2	-910.2	-383.3	284.4
	24	35166.3	-376.6	-5923.9	685.4	-18086.8	495.3
	25	31421.5	-418.6	-2125.9	946.5	-17979.2	499.9
	26	69331.4	85.4	-95644.0	-1050.5	-461.6	272.3
	27	65586.6	43.3	-91846.1	-789.4	-354.0	276.9
	28	47761.7	891.3	-81977.1	-3307.9	25960.8	-484.3
	29	46411.4	884.7	-78127.4	-3271.6	25969.6	-486.5
	30	79480.2	797.4	-142490.5	-3377.5	23189.7	-255.4
	31	78129.9	790.8	-138640.8	-3341.3	23198.5	-257.6
	32	35279.2	751.0	-69317.1	-2437.6	26319.4	-468.9
	33	33928.9	744.4	-65467.5	-2401.4	26328.2	-471.1
	34	66997.7	657.1	-129830.6	-2507.3	23548.3	-240.0
	35	65647.4	650.5	-125980.9	-2471.1	23557.1	-242.2
1070	4	-50081.5	1945.2	-72085.2	-3736.7	5517.3	-48.2
	5	-52658.6	1961.7	-78068.1	-3753.8	6715.3	-33.7
	6	-442.9	2818.9	-4021.8	-5405.1	3273.8	-173.4
	7	-3020.1	2835.4	-10004.6	-5422.2	4471.8	-158.9
	8	-50341.9	-1291.4	-73018.9	-4071.9	6713.4	-48.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	9	-52919.0	-1275.0	-79001.7	-4089.0	7911.3	-33.7
	10	-703.4	-417.7	-4955.4	-5740.3	4469.9	-173.4
	11	-3280.5	-401.3	-10938.3	-5757.4	5667.8	-158.9
	12	-88431.6	-761.4	-77474.8	1427.8	6886.9	147.8
	13	-88509.8	-1732.4	-77754.9	1327.2	7245.8	147.8
	14	-74163.7	-1220.1	-19733.9	4269.4	6656.5	205.1
	15	-74241.8	-2191.1	-20014.0	4168.9	7015.4	205.1
	16	-97022.0	-706.5	-97417.6	1370.6	10880.1	196.2
	17	-97100.1	-1677.5	-97697.7	1270.0	11238.9	196.2
	18	-82754.0	-1165.3	-39676.6	4212.3	10649.7	253.5
	19	-82832.2	-2136.3	-39956.7	4111.7	11008.5	253.5
	20	-2521.5	415.9	120384.7	5735.6	4749.2	142.8
	21	-5098.7	432.4	114401.9	5718.4	5947.2	157.3
	22	47117.0	1289.6	188448.2	4067.2	2505.7	17.6
	23	44539.9	1306.1	182465.3	4050.0	3703.7	32.1
	24	-2782.0	-2820.7	119451.1	5400.3	5945.3	142.8
	25	-5359.1	-2804.3	113468.3	5383.2	7143.3	157.3
	26	46856.5	-1947.0	187514.5	3731.9	3701.8	17.6
	27	44279.4	-1930.6	181531.7	3714.8	4899.8	32.1
	28	77030.1	2151.0	149403.2	-4133.6	-591.4	-269.6
	29	76952.0	1180.0	149123.1	-4234.1	-232.6	-269.6
	30	91298.1	1692.2	207144.2	-1291.9	-821.8	-212.3
	31	91220.0	721.2	206864.1	-1392.5	-463.0	-212.3
	32	68439.8	2205.8	129460.4	-4190.7	3401.7	-221.2
	33	68361.6	1234.8	129180.3	-4291.3	3760.5	-221.2
	34	82707.8	1747.0	187201.4	-1349.0	3171.3	-163.9
	35	82629.6	776.0	186921.3	-1449.6	3530.1	-163.9
1069	4	-94606.0	9273.9	-82022.9	30107.6	-72819.5	-210.1
	5	-97730.9	9503.4	-82702.2	31760.4	-74561.3	-215.3
	6	-36268.8	47541.9	-81048.3	-20842.8	-30328.7	-125.9
	7	-39393.8	47771.4	-81727.6	-19190.0	-32070.4	-131.1
	8	-98992.1	10305.4	-78086.7	33175.7	-77441.2	-218.5
	9	-102117.1	10534.9	-78766.0	34828.6	-79183.0	-223.7
	10	-40655.0	48573.4	-77112.1	-17774.7	-34950.4	-134.3
	11	-43779.9	48802.8	-77791.4	-16121.8	-36692.2	-139.5
	12	-106834.2	-61252.6	48671.4	39663.3	-86453.4	-190.3
	13	-108150.0	-60943.2	49852.3	40583.7	-87839.9	-192.8
	14	-60787.5	-83515.9	159809.5	-2364.1	-56004.0	-91.8
	15	-62103.4	-83206.4	160990.3	-1443.7	-57390.5	-94.3
	16	-117250.7	-60487.6	46407.0	45172.7	-92259.2	-207.6
	17	-118566.6	-60178.2	47587.9	46093.1	-93645.7	-210.2
	18	-71204.1	-82750.9	157545.1	3145.3	-61809.8	-109.1
	19	-72519.9	-82441.4	158726.0	4065.7	-63196.3	-111.6
	20	58882.9	-64937.0	288437.3	-109983.8	28678.5	118.2
	21	55757.9	-64707.5	287758.0	-108330.9	26936.8	113.0
	22	117220.0	-26669.0	289411.9	-160934.2	71169.3	202.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	23	114095.0	-26439.5	288732.6	-159281.3	69427.6	197.2
	24	54496.8	-63905.5	292373.6	-106915.6	24056.8	109.9
	25	51371.8	-63676.0	291694.3	-105262.8	22315.0	104.7
	26	112833.9	-25637.5	293348.1	-157866.0	66547.6	194.1
	27	109708.9	-25408.1	292668.8	-156213.2	64805.8	188.8
	28	87622.9	66307.3	51920.0	-130171.4	55182.7	90.4
	29	86307.1	66616.7	53100.9	-129250.9	53796.1	87.9
	30	133669.6	44044.0	163058.1	-172198.8	85632.1	188.9
	31	132353.7	44353.5	164239.0	-171278.3	84245.6	186.4
	32	77206.4	67072.3	49655.6	-124662.0	49376.8	73.0
	33	75890.5	67381.7	50836.5	-123741.5	47990.3	70.5
	34	123253.0	44809.0	160793.7	-166689.4	79826.3	171.5
	35	121937.2	45118.5	161974.5	-165768.9	78439.7	169.0
1068	4	-3256.9	-4047.9	210169.8	134699.4	-6075.3	73.3
	5	-2939.9	-8089.8	214374.9	137659.8	-5568.2	76.4
	6	-3286.2	19612.8	138114.7	74140.1	-5841.2	-54.8
	7	-2969.3	15570.9	142319.8	77100.4	-5334.1	-51.7
	8	-2930.2	-5585.3	213922.4	136868.8	-5497.6	90.0
	9	-2613.2	-9627.2	218127.5	139829.1	-4990.5	93.1
	10	-2959.6	18075.5	141867.3	76309.5	-5263.5	-38.1
	11	-2642.6	14033.6	146072.3	79269.8	-4756.4	-35.0
	12	-2954.1	-30875.6	218948.2	158591.9	-5402.6	214.2
	13	-2856.0	-31336.8	220073.9	159242.7	-5229.3	219.2
	14	-2505.0	-33790.7	157496.7	120821.4	-4258.2	204.9
	15	-2406.9	-34251.9	158622.4	121472.2	-4084.9	209.9
	16	-1897.5	-44348.7	232965.2	168459.7	-3712.3	224.5
	17	-1799.5	-44809.9	234091.0	169110.5	-3538.9	229.5
	18	-1448.4	-47263.8	171513.7	130689.2	-2567.9	215.2
	19	-1350.4	-47725.0	172639.5	131340.0	-2394.6	220.2
	20	-1759.8	-13765.0	5331.5	8797.7	-2260.7	42.4
	21	-1442.9	-17806.9	9536.6	11758.1	-1753.6	45.5
	22	-1789.2	9895.8	-66723.7	-51761.6	-2026.6	-85.7
	23	-1472.3	5853.9	-62518.6	-48801.3	-1519.5	-82.6
	24	-1433.2	-15302.3	9084.1	10967.1	-1683.0	59.1
	25	-1116.2	-19344.3	13289.2	13927.4	-1175.9	62.2
	26	-1462.5	8358.4	-62971.1	-49592.2	-1448.9	-68.9
	27	-1145.6	4316.5	-58766.0	-46631.9	-941.8	-65.9
	28	-3052.0	47993.6	-21235.7	-43272.5	-4622.5	-212.8
	29	-2954.0	47532.4	-20109.9	-42621.7	-4449.2	-207.7
	30	-2602.9	45078.5	-82687.2	-81043.0	-3478.1	-222.0
	31	-2504.9	44617.3	-81561.4	-80392.2	-3304.8	-217.0
	32	-1995.5	34520.5	-7218.6	-33404.7	-2932.2	-202.4
	33	-1897.5	34059.3	-6092.9	-32753.9	-2758.9	-197.4
	34	-1546.4	31605.4	-68670.1	-71175.3	-1787.8	-211.7
	35	-1448.4	31144.2	-67544.4	-70524.4	-1614.5	-206.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

1067	4	1475.1	-54516.8	-20146.3	-31945.9	1937.0	26.8
	5	1662.2	-54314.7	-23964.7	-34046.4	2227.5	28.7
	6	1553.6	-14475.1	54446.1	6091.9	2271.9	-36.3
	7	1740.7	-14273.0	50627.7	3991.4	2562.4	-34.5
	8	1717.7	-58137.1	-27387.2	-30122.9	2336.6	34.7
	9	1904.8	-57935.0	-31205.5	-32223.4	2627.1	36.6
	10	1796.1	-18095.5	47205.2	7914.9	2671.5	-28.4
	11	1983.2	-17893.4	43386.8	5814.4	2962.0	-26.6
	12	1497.9	-79125.5	-42361.5	-22569.5	2018.3	99.9
	13	1570.7	-80211.6	-44533.8	-22022.6	2138.2	102.2
	14	1710.2	-58888.9	11543.2	20857.9	2593.5	98.8
	15	1783.0	-59975.0	9370.9	21404.8	2713.4	101.2
	16	2121.6	-78451.9	-55089.4	-29571.2	2986.5	106.1
	17	2194.3	-79537.9	-57261.6	-29024.3	3106.4	108.4
	18	2333.9	-58215.2	-1184.7	13856.2	3561.6	105.0
	19	2406.7	-59301.3	-3357.0	14403.1	3681.5	107.4
	20	2182.9	12938.6	159536.0	112812.0	3854.2	23.4
	21	2370.0	13140.7	155717.6	110711.5	4144.7	25.3
	22	2261.3	52980.3	234128.3	150849.8	4189.1	-39.7
	23	2448.4	53182.4	230310.0	148749.3	4479.6	-37.9
	24	2425.4	9318.3	152295.1	114635.0	4253.8	31.3
	25	2612.5	9520.4	148476.7	112534.5	4544.3	33.1
	26	2503.9	49359.9	226887.5	152672.8	4588.7	-31.9
	27	2691.0	49562.1	223069.1	150572.3	4879.2	-30.0
	28	1759.5	54346.6	206279.8	104223.3	3134.7	-110.6
	29	1832.2	53260.5	204107.6	104770.2	3254.6	-108.2
	30	1971.8	74583.2	260184.5	147650.6	3709.8	-111.6
	31	2044.5	73497.1	258012.2	148197.5	3829.7	-109.2
	32	2383.1	55020.3	193551.9	97221.6	4102.8	-104.4
	33	2455.9	53934.2	191379.7	97768.5	4222.7	-102.0
	34	2595.4	75256.9	247456.6	140648.9	4678.0	-105.4
	35	2668.2	74170.8	245284.3	141195.8	4797.8	-103.0
1066	4	-611.9	-24399.9	91913.5	-5139.3	-1511.0	-29.2
	5	-608.5	-26058.3	91737.9	-2259.6	-1535.1	-30.6
	6	-867.5	-4869.7	83205.2	-8560.5	-2005.4	-115.1
	7	-864.1	-6528.2	83029.6	-5680.8	-2029.4	-116.6
	8	-598.3	-21839.7	88060.6	-5202.7	-1428.4	-22.4
	9	-594.9	-23498.2	87885.0	-2323.0	-1452.5	-23.8
	10	-853.9	-2309.6	79352.4	-8623.9	-1922.8	-108.3
	11	-850.5	-3968.1	79176.8	-5744.2	-1946.8	-109.7
	12	208.3	-34271.3	58027.2	-2844.6	362.6	124.0
	13	212.3	-33503.3	56871.4	-2863.6	387.3	126.0
	14	655.0	-25628.9	21253.9	-1400.3	1425.3	165.9
	15	659.0	-24860.9	20098.0	-1419.3	1450.1	167.9
	16	219.6	-39799.6	57441.9	6754.3	282.3	119.2
	17	223.7	-39031.5	56286.0	6735.3	307.1	121.3

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	18	666.3	-31157.2	20668.6	8198.6	1345.1	161.1
	19	670.4	-30389.2	19512.7	8179.6	1369.8	163.2
	20	877.1	4408.0	-30664.3	-324.8	2031.4	110.5
	21	880.5	2749.5	-30839.9	2554.9	2007.3	109.0
	22	621.5	23938.1	-39372.6	-3746.0	1537.0	24.5
	23	624.9	22279.7	-39548.2	-866.3	1513.0	23.1
	24	890.7	6968.1	-34517.2	-388.2	2114.0	117.3
	25	894.1	5309.7	-34692.8	2491.5	2089.9	115.9
	26	635.1	26498.3	-43225.5	-3809.4	1619.6	31.4
	27	638.5	24839.8	-43401.1	-929.7	1595.6	29.9
	28	-643.8	30829.1	28999.7	-14248.6	-1285.3	-162.4
	29	-639.7	31597.1	27843.9	-14267.6	-1260.5	-160.4
	30	-197.1	39471.4	-7773.6	-12804.3	-222.6	-120.5
	31	-193.0	40239.5	-8929.5	-12823.3	-197.8	-118.5
	32	-632.4	25300.8	28414.4	-4649.7	-1365.5	-167.2
	33	-628.4	26068.9	27258.5	-4668.7	-1340.7	-165.1
	34	-185.7	33943.2	-8358.9	-3205.4	-302.8	-125.3
	35	-181.7	34711.2	-9514.8	-3224.4	-278.0	-123.2
1065	4	-247.7	-6623.4	-20823.9	-2098.5	-453.4	47.2
	5	-235.2	-7034.9	-22086.5	-2174.9	-439.4	48.2
	6	-415.8	2971.8	2951.5	-5417.1	-684.1	23.7
	7	-403.3	2560.3	1689.0	-5493.5	-670.1	24.7
	8	-265.4	-8212.3	-24974.0	3484.7	-463.4	47.2
	9	-252.9	-8623.9	-26236.5	3408.3	-449.4	48.2
	10	-433.4	1382.8	-1198.5	166.1	-694.1	23.7
	11	-420.9	971.3	-2461.1	89.8	-680.1	24.7
	12	156.7	-11339.4	-30227.6	3734.8	188.5	46.7
	13	151.4	-11816.1	-31472.6	5409.8	185.5	46.7
	14	353.1	-5721.5	-14530.0	3664.9	525.0	23.7
	15	347.8	-6198.2	-15775.0	5339.8	522.0	23.7
	16	198.4	-12711.3	-34436.1	3480.2	235.3	50.0
	17	193.1	-13188.0	-35681.1	5155.2	232.3	50.0
	18	394.7	-7093.3	-18738.5	3410.3	571.8	27.1
	19	389.5	-7570.0	-19983.5	5085.2	568.8	27.1
	20	406.9	12103.2	31501.4	-2331.7	668.3	-29.3
	21	419.4	11691.7	30238.8	-2408.0	682.3	-28.3
	22	238.8	21698.4	55276.8	-5650.3	437.5	-52.8
	23	251.3	21286.8	54014.3	-5726.6	451.6	-51.8
	24	389.2	10514.2	27351.3	3251.6	658.3	-29.3
	25	401.7	10102.7	26088.8	3175.2	672.3	-28.3
	26	221.2	20109.4	51126.7	-67.0	427.5	-52.8
	27	233.7	19697.8	49864.2	-143.4	441.6	-51.8
	28	-403.5	20644.5	49023.8	-7327.1	-580.6	-31.7
	29	-408.8	20167.8	47778.8	-5652.2	-583.6	-31.7
	30	-207.1	26262.5	64721.4	-7397.1	-244.1	-54.6
	31	-212.4	25785.8	63476.4	-5722.1	-247.1	-54.6

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	32	-361.9	19272.7	44815.3	-7581.7	-533.8	-28.3
	33	-367.1	18796.0	43570.3	-5906.8	-536.8	-28.3
	34	-165.5	24890.6	60512.9	-7651.7	-197.3	-51.3
	35	-170.8	24413.9	59267.9	-5976.7	-200.3	-51.3
1064	4	-532.4	-16207.9	103404.0	13146.2	-1486.5	-24.2
	5	-524.8	-18312.0	101931.3	13396.1	-1504.1	-24.8
	6	-713.8	6270.5	104713.6	7125.7	-1927.5	-108.1
	7	-706.2	4166.4	103240.9	7375.6	-1945.2	-108.7
	8	-519.3	-12871.2	100412.7	13796.7	-1396.3	-15.6
	9	-511.7	-14975.4	98939.9	14046.6	-1413.9	-16.2
	10	-700.7	9607.2	101722.3	7776.2	-1837.3	-99.5
	11	-693.1	7503.1	100249.5	8026.1	-1854.9	-100.1
	12	112.4	-34876.4	50543.0	14797.2	281.0	121.1
	13	116.3	-33875.4	49645.6	14992.4	308.1	123.7
	14	487.4	-31504.7	5967.8	10246.6	1310.3	158.6
	15	491.3	-30503.7	5070.4	10441.8	1337.3	161.2
	16	137.7	-41890.2	45633.9	15630.2	222.2	119.2
	17	141.6	-40889.2	44736.5	15825.4	249.3	121.8
	18	512.6	-38518.4	1058.6	11079.6	1251.5	156.7
	19	516.6	-37517.4	161.2	11274.8	1278.6	159.3
	20	717.5	-4968.8	-45180.0	-2022.5	1944.5	100.8
	21	725.1	-7073.0	-46652.7	-1772.6	1926.8	100.2
	22	536.1	17509.6	-43870.4	-8043.0	1503.4	16.9
	23	543.7	15405.5	-45343.1	-7793.1	1485.8	16.3
	24	730.6	-1632.1	-48171.3	-1372.0	2034.7	109.4
	25	738.2	-3736.3	-49644.1	-1122.1	2017.0	108.8
	26	549.2	20846.3	-46861.7	-7392.5	1593.7	25.5
	27	556.8	18742.2	-48334.5	-7142.6	1576.0	24.9
	28	-492.2	40051.7	54908.3	-5271.2	-1189.1	-158.6
	29	-488.2	41052.7	54010.9	-5076.0	-1162.0	-156.0
	30	-117.2	43423.4	10333.1	-9821.8	-159.8	-121.1
	31	-113.3	44424.4	9435.7	-9626.6	-132.7	-118.5
	32	-466.9	33037.9	49999.2	-4438.1	-1247.8	-160.5
	33	-462.9	34038.9	49101.8	-4243.0	-1220.8	-157.9
	34	-91.9	36409.6	5424.0	-8988.8	-218.5	-123.0
	35	-88.0	37410.6	4526.6	-8793.6	-191.5	-120.4
1063	4	-370.1	19345.6	-63267.2	4263.6	-726.0	-49.2
	5	-352.3	19336.9	-63335.7	3792.3	-701.4	-50.1
	6	-605.1	32730.2	-101987.5	1039.2	-1101.9	-70.6
	7	-587.4	32721.5	-102056.1	568.0	-1077.3	-71.4
	8	-390.9	18833.1	-61465.8	4129.2	-735.9	-46.0
	9	-373.1	18824.3	-61534.3	3658.0	-711.3	-46.8
	10	-626.0	32217.7	-100186.1	904.8	-1111.8	-67.3
	11	-608.2	32208.9	-100254.6	433.6	-1087.2	-68.1
	12	226.3	-17639.9	53029.8	5340.6	329.2	18.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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	13	220.1	-17793.7	53570.2	5300.3	326.3	19.3
	14	526.5	-35812.1	113383.6	2608.4	885.4	53.1
	15	520.3	-35965.9	113924.0	2568.1	882.4	54.1
	16	285.6	-17669.1	52801.3	3769.7	411.1	15.6
	17	279.3	-17822.9	53341.8	3729.4	408.1	16.6
	18	585.8	-35841.3	113155.1	1037.5	967.2	50.4
	19	579.5	-35995.1	113695.6	997.2	964.3	51.3
	20	630.5	-41228.5	137912.1	-4843.7	1127.8	66.7
	21	648.3	-41237.2	137843.6	-5315.0	1152.3	65.9
	22	395.5	-27843.8	99191.8	-8068.1	751.9	45.3
	23	413.2	-27852.6	99123.3	-8539.4	776.4	44.5
	24	609.7	-41741.0	139713.5	-4978.1	1117.8	69.9
	25	627.5	-41749.8	139645.0	-5449.4	1142.4	69.1
	26	374.7	-28356.4	100993.2	-8202.5	741.9	48.6
	27	392.4	-28365.1	100924.7	-8673.8	766.5	47.8
	28	-557.2	26975.6	-76038.0	-5407.4	-923.7	-52.8
	29	-563.4	26821.8	-75497.6	-5447.7	-926.7	-51.8
	30	-257.0	8803.3	-15684.2	-8139.6	-367.6	-18.1
	31	-263.3	8649.6	-15143.8	-8179.9	-370.6	-17.1
	32	-498.0	26946.4	-76266.5	-6978.2	-841.9	-55.6
	33	-504.2	26792.6	-75726.0	-7018.5	-844.8	-54.6
	34	-197.8	8774.2	-15912.7	-9710.4	-285.7	-20.8
	35	-204.0	8620.4	-15372.2	-9750.7	-288.7	-19.8
1062	4	-1165.7	-26399.2	87888.6	2464.6	-2463.1	-24.8
	5	-1149.5	-27863.7	86865.5	3502.6	-2463.3	-27.5
	6	-1540.6	-8836.5	122902.3	-6988.0	-3184.2	-106.9
	7	-1524.4	-10301.0	121879.2	-5950.0	-3184.5	-109.6
	8	-1152.6	-23256.6	81297.9	1857.2	-2371.6	-20.9
	9	-1136.4	-24721.1	80274.8	2895.3	-2371.9	-23.6
	10	-1527.5	-5693.9	116311.6	-7595.4	-3092.8	-102.9
	11	-1511.3	-7158.4	115288.5	-6557.3	-3093.1	-105.6
	12	173.3	-33147.2	-11255.8	12499.8	335.6	121.1
	13	177.2	-32204.4	-13233.0	12317.6	363.0	122.3
	14	958.4	-23775.8	-60268.9	12869.1	1985.5	160.4
	15	962.3	-22833.0	-62246.1	12686.9	2012.9	161.5
	16	227.2	-38029.0	-14666.1	15960.0	334.7	112.2
	17	231.1	-37086.2	-16643.3	15777.8	362.1	113.4
	18	1012.3	-28657.6	-63679.2	16329.3	1984.6	151.4
	19	1016.2	-27714.8	-65656.4	16147.0	2012.1	152.6
	20	1451.2	4838.9	-75488.4	3695.5	3036.8	105.9
	21	1467.4	3374.3	-76511.5	4733.6	3036.5	103.2
	22	1076.4	22401.6	-40474.7	-5757.1	2315.7	23.8
	23	1092.5	20937.0	-41497.8	-4719.0	2315.4	21.2
	24	1464.3	7981.5	-82079.0	3088.2	3128.2	109.8
	25	1480.5	6516.9	-83102.1	4126.2	3128.0	107.1
	26	1089.4	25544.2	-47065.3	-6364.4	2407.1	27.8

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	27	1105.6	24079.6	-48088.4	-5326.3	2406.8	25.1
	28	-1076.3	25395.2	105456.5	-19008.8	-2068.3	-152.3
	29	-1072.4	26338.0	103479.3	-19191.0	-2040.9	-151.1
	30	-291.2	34766.6	56443.4	-18639.5	-418.4	-113.1
	31	-287.3	35709.4	54466.2	-18821.7	-390.9	-111.9
	32	-1022.4	20513.4	102046.2	-15548.6	-2069.2	-161.3
	33	-1018.5	21456.2	100069.0	-15730.8	-2041.8	-160.1
	34	-237.3	29884.8	53033.1	-15179.3	-419.2	-122.1
	35	-233.4	30827.6	51055.9	-15361.5	-391.8	-120.9
1061	4	-4634.2	-15954.1	60307.8	-7861.1	-7688.2	-59.7
	5	-4475.4	-16006.7	61428.3	-8114.6	-7435.0	-60.9
	6	-7121.0	-10965.4	35980.8	-3964.8	-11746.0	-80.8
	7	-6962.3	-11018.0	37101.3	-4218.3	-11492.8	-81.9
	8	-4710.1	-15285.4	60320.1	-8479.4	-7788.9	-55.7
	9	-4551.3	-15338.0	61440.6	-8732.9	-7535.7	-56.9
	10	-7196.9	-10296.7	35993.1	-4583.2	-11846.7	-76.8
	11	-7038.1	-10349.3	37113.6	-4836.6	-11593.5	-77.9
	12	2244.0	-13578.7	61300.0	-9362.1	3632.8	14.7
	13	2221.2	-13378.1	61303.7	-9547.6	3602.5	15.9
	14	5834.3	-6807.1	38940.3	-6820.3	9562.1	55.0
	15	5811.5	-6606.5	38944.0	-7005.8	9531.9	56.2
	16	2773.3	-13754.1	65034.9	-10206.9	4476.9	10.8
	17	2750.5	-13553.5	65038.6	-10392.4	4446.6	12.0
	18	6363.6	-6982.6	42675.2	-7665.1	10406.2	51.1
	19	6340.8	-6782.0	42678.9	-7850.6	10376.0	52.3
	20	7333.5	6617.7	-14224.6	611.5	12076.2	74.6
	21	7492.3	6565.1	-13104.1	358.1	12329.5	73.5
	22	4846.7	11606.4	-38551.6	4507.8	8018.4	53.6
	23	5005.5	11553.8	-37431.1	4254.4	8271.7	52.4
	24	7257.6	7286.4	-14212.3	-6.8	11975.5	78.6
	25	7416.4	7233.8	-13091.9	-260.2	12228.7	77.5
	26	4770.8	12275.1	-38539.3	3889.5	7917.7	57.6
	27	4929.6	12222.5	-37418.8	3636.0	8170.9	56.4
	28	-6045.4	3050.4	-19789.9	3625.5	-9893.2	-55.6
	29	-6068.2	3251.0	-19786.2	3440.0	-9923.4	-54.4
	30	-2455.1	9821.9	-42149.7	6167.3	-3963.9	-15.3
	31	-2477.9	10022.5	-42146.0	5981.8	-3994.1	-14.1
	32	-5516.2	2874.9	-16055.0	2780.7	-9049.1	-59.5
	33	-5538.9	3075.5	-16051.3	2595.2	-9079.4	-58.3
	34	-1925.8	9646.5	-38414.7	5322.5	-3119.8	-19.2
	35	-1948.6	9847.1	-38411.1	5137.0	-3150.0	-18.0
1060	4	-5974.3	11774.5	-104717.0	-620.0	-9982.1	-17.7
	5	-5685.5	11337.7	-106285.9	-718.9	-9518.9	-17.6
	6	-10062.9	20088.6	-161682.8	-9632.9	-16635.6	-30.1
	7	-9774.1	19651.9	-163251.6	-9731.8	-16172.3	-30.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	8	-6273.6	11780.7	-99849.6	-443.4	-10423.2	-17.4
	9	-5984.8	11343.9	-101418.5	-542.3	-9960.0	-17.3
	10	-10362.1	20094.9	-156815.4	-9456.3	-17076.7	-29.8
	11	-10073.4	19658.1	-158384.2	-9555.2	-16613.4	-29.7
	12	4211.1	-7473.0	80969.4	13630.2	6798.0	14.9
	13	4121.3	-7471.1	82429.6	13683.1	6665.7	14.9
	14	9231.5	-16095.2	180134.5	16679.8	15123.1	30.4
	15	9141.7	-16093.4	181594.7	16732.8	14990.8	30.5
	16	5173.7	-8928.8	75740.0	13300.6	8342.1	15.2
	17	5083.9	-8927.0	77200.2	13353.5	8209.8	15.3
	18	10194.1	-17551.1	174905.1	16350.2	16667.2	30.7
	19	10104.3	-17549.2	176365.3	16403.2	16534.9	30.8
	20	10760.3	-16966.4	225833.1	9545.6	17768.2	34.0
	21	11049.0	-17403.2	224264.3	9446.7	18231.4	34.1
	22	6671.7	-8652.2	168867.3	532.7	11114.8	21.6
	23	6960.5	-9089.0	167298.5	433.8	11578.0	21.7
	24	10461.0	-16960.2	230700.4	9722.2	17327.1	34.3
	25	10749.8	-17397.0	229131.6	9623.3	17790.3	34.4
	26	6372.4	-8646.0	173734.7	709.3	10673.7	21.9
	27	6661.2	-9082.8	172165.9	610.4	11136.9	22.0
	28	-9417.4	20240.9	-108916.4	-16412.8	-15380.1	-26.5
	29	-9507.2	20242.8	-107456.2	-16359.9	-15512.4	-26.4
	30	-4397.0	11618.6	-9751.4	-13363.2	-7055.0	-11.0
	31	-4486.8	11620.5	-8291.2	-13310.2	-7187.3	-10.9
	32	-8454.8	18785.1	-114145.8	-16742.4	-13836.0	-26.2
	33	-8544.6	18786.9	-112685.6	-16689.5	-13968.4	-26.1
	34	-3434.4	10162.8	-14980.8	-13692.8	-5510.9	-10.7
	35	-3524.2	10164.7	-13520.6	-13639.8	-5643.3	-10.6
1059	4	-1292.5	-35604.4	182335.4	-18022.4	-3021.3	-63.5
	5	-1275.3	-36458.8	183849.6	-17769.4	-3020.9	-65.4
	6	-2009.7	-16472.8	241731.3	-35320.4	-4350.7	-166.0
	7	-1992.5	-17327.2	243245.5	-35067.4	-4350.4	-167.8
	8	-1315.6	-32548.9	170205.6	-17851.1	-2944.3	-58.5
	9	-1298.5	-33403.4	171719.8	-17598.1	-2943.9	-60.3
	10	-2032.8	-13417.3	229601.5	-35149.1	-4273.7	-161.0
	11	-2015.7	-14271.8	231115.7	-34896.1	-4273.3	-162.8
	12	682.7	-39050.8	-14452.3	17732.5	1146.3	139.2
	13	675.8	-38134.1	-18091.2	17783.9	1169.4	140.7
	14	1682.7	-24644.3	-118578.4	31283.3	3366.4	207.2
	15	1675.7	-23727.7	-122217.3	31334.7	3389.5	208.7
	16	739.9	-41898.9	-9405.0	18575.9	1147.5	133.1
	17	733.0	-40982.2	-13043.9	18627.3	1170.7	134.6
	18	1739.9	-27492.4	-113531.0	32126.7	3367.6	201.1
	19	1732.9	-26575.8	-117170.0	32178.1	3390.8	202.6
	20	2040.7	12417.2	-164751.5	27146.8	4379.0	163.0
	21	2057.8	11562.8	-163237.3	27399.8	4379.4	161.2

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	22	1323.5	31548.8	-105355.6	9848.8	3049.6	60.6
	23	1340.6	30694.3	-103841.4	10101.8	3050.0	58.8
	24	2017.5	15472.6	-176881.3	27318.1	4456.0	168.1
	25	2034.7	14618.2	-175367.1	27571.1	4456.4	166.3
	26	1300.3	34604.2	-117485.4	10020.1	3126.6	65.6
	27	1317.5	33749.8	-115971.2	10273.1	3127.0	63.8
	28	-1707.9	24721.2	183534.1	-39927.3	-3285.1	-202.4
	29	-1714.9	25637.8	179895.2	-39876.0	-3261.9	-200.8
	30	-708.0	39127.7	79408.0	-26376.6	-1065.0	-134.4
	31	-714.9	40044.3	75769.1	-26325.2	-1041.8	-132.9
	32	-1650.7	21873.1	188581.4	-39084.0	-3283.8	-208.4
	33	-1657.7	22789.7	184942.5	-39032.6	-3260.7	-206.9
	34	-650.8	36279.5	84455.4	-25533.2	-1063.7	-140.5
	35	-657.7	37196.2	80816.4	-25481.8	-1040.6	-138.9
1058	4	-23256.8	27105.0	133835.8	4092.9	-8828.5	32.7
	5	-22901.4	27845.4	135499.9	4008.6	-8607.1	33.1
	6	-23966.9	16448.1	89576.9	-1115.3	-14830.7	-0.8
	7	-23611.5	17188.5	91241.0	-1199.5	-14609.3	-0.4
	8	-23553.5	28909.0	135734.7	3635.1	-8880.6	31.0
	9	-23198.1	29649.4	137398.8	3550.8	-8659.3	31.4
	10	-24263.6	18252.1	91475.9	-1573.0	-14882.8	-2.5
	11	-23908.2	18992.5	93140.0	-1657.3	-14661.4	-2.1
	12	-10552.5	28728.2	130348.3	8418.2	8660.0	56.4
	13	-10641.5	29269.4	130918.0	8280.9	8644.4	55.9
	14	71.3	19661.8	84194.5	6970.6	17885.1	44.2
	15	-17.8	20203.0	84764.2	6833.2	17869.4	43.7
	16	-9367.8	31196.3	135895.2	8137.3	9398.0	57.9
	17	-9456.8	31737.5	136464.8	8000.0	9382.3	57.4
	18	1255.9	22129.9	89741.4	6689.7	18623.0	45.7
	19	1166.9	22671.1	90311.1	6552.4	18607.4	45.2
	20	12155.6	-3116.3	-20010.1	-732.6	21921.6	-8.0
	21	12511.0	-2375.9	-18346.1	-816.8	22143.0	-7.5
	22	11445.5	-13773.3	-64269.0	-5940.7	15919.5	-41.5
	23	11800.9	-13032.8	-62604.9	-6024.9	16140.9	-41.0
	24	11858.9	-1312.3	-18111.2	-1190.3	21869.5	-9.6
	25	12214.3	-571.9	-16447.1	-1274.6	22090.9	-9.2
	26	11148.8	-11969.3	-62370.1	-6398.4	15867.3	-43.1
	27	11504.2	-11228.9	-60706.0	-6482.7	16088.7	-42.7
	28	-12919.5	-6794.9	-17181.3	-8942.2	-11347.2	-55.2
	29	-13008.5	-6253.7	-16611.6	-9079.5	-11362.8	-55.7
	30	-2295.7	-15861.3	-63335.0	-10389.8	-2122.1	-67.4
	31	-2384.7	-15320.1	-62765.4	-10527.1	-2137.8	-67.9
	32	-11734.8	-4326.9	-11634.4	-9223.1	-10609.2	-53.8
	33	-11823.8	-3785.7	-11064.7	-9360.4	-10624.9	-54.3
	34	-1111.1	-13393.3	-57788.1	-10670.7	-1384.2	-66.0
	35	-1200.1	-12852.1	-57218.5	-10808.0	-1399.8	-66.5

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1057	4	-22016.3	29185.1	-175418.2	13167.8	-18184.0	-44.6
	5	-21316.8	28759.2	-178798.5	12212.5	-18193.9	-46.0
	6	-36104.3	47154.6	-270446.3	-7058.1	-19935.2	-97.9
	7	-35404.8	46728.7	-273826.6	-8013.3	-19945.1	-99.3
	8	-21975.5	28349.4	-163829.4	11801.5	-18468.4	-38.6
	9	-21276.1	27923.5	-167209.7	10846.3	-18478.3	-40.0
	10	-36063.5	46318.9	-258857.5	-8424.3	-20219.6	-91.9
	11	-35364.1	45893.0	-262237.8	-9379.6	-20229.5	-93.3
	12	17099.7	-16672.5	143961.6	31494.8	-5739.6	68.7
	13	17111.9	-16923.2	147438.3	31084.9	-5824.9	70.5
	14	37226.9	-38184.7	315830.7	26432.4	3251.3	109.2
	15	37239.1	-38435.4	319307.3	26022.5	3166.0	111.0
	16	19431.2	-18092.1	132694.0	28310.6	-5772.5	64.0
	17	19443.4	-18342.9	136170.6	27900.7	-5857.8	65.8
	18	39558.4	-39604.4	304563.1	23248.2	3218.4	104.6
	19	39570.6	-39855.1	308039.8	22838.3	3133.1	106.4
	20	45074.3	-42522.3	397478.8	-3706.8	11785.6	90.6
	21	45773.8	-42948.2	394098.5	-4662.1	11775.8	89.2
	22	30986.3	-24552.8	302450.7	-23932.7	10034.4	37.3
	23	31685.8	-24978.7	299070.4	-24887.9	10024.6	35.9
	24	45115.1	-43358.0	409067.6	-5073.0	11501.3	96.6
	25	45814.5	-43783.9	405687.3	-6028.3	11491.4	95.2
	26	31027.1	-25388.5	314039.5	-25298.9	9750.0	43.3
	27	31726.5	-25814.4	310659.3	-26254.2	9740.2	41.9
	28	-29860.3	43225.8	-172798.7	-35924.7	-11577.0	-109.0
	29	-29848.1	42975.1	-169322.0	-36334.6	-11662.3	-107.2
	30	-9733.1	21713.6	-929.6	-40987.1	-2586.1	-68.5
	31	-9720.9	21462.8	2547.1	-41396.9	-2671.4	-66.7
	32	-27528.8	41806.1	-184066.3	-39108.9	-11609.8	-113.7
	33	-27516.6	41555.4	-180589.6	-39518.8	-11695.1	-111.9
	34	-7401.6	20293.9	-12197.2	-44171.3	-2618.9	-73.1
	35	-7389.4	20043.2	-8720.5	-44581.2	-2704.2	-71.4
1056	4	-24605.9	-55984.3	377181.3	-50397.3	-20603.2	-35.1
	5	-25062.0	-57812.9	383385.5	-51284.3	-20968.3	-33.4
	6	-33914.0	-67044.2	494560.8	-67914.6	-29433.4	-147.7
	7	-34370.2	-68872.9	500765.0	-68801.5	-29798.5	-146.1
	8	-23214.2	-50961.6	356154.5	-49346.5	-19642.6	-29.9
	9	-23670.3	-52790.3	362358.7	-50233.5	-20007.6	-28.3
	10	-32522.3	-62021.5	473534.0	-66863.8	-28472.7	-142.6
	11	-32978.5	-63850.2	479738.2	-67750.7	-28837.8	-141.0
	12	5697.5	2587.3	-40527.0	10508.9	7092.4	157.9
	13	6115.0	4094.1	-46835.0	10824.2	7380.6	159.4
	14	21490.0	38396.3	-268670.8	43994.9	21348.0	210.6
	15	21907.5	39903.1	-274978.8	44310.1	21636.2	212.2
	16	4177.0	-3508.1	-19846.2	7552.5	5875.4	163.3

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	17	4594.5	-2001.3	-26154.3	7867.7	6163.6	164.8
	18	19969.6	32300.9	-247990.1	41038.4	20131.0	216.0
	19	20387.1	33807.7	-254298.1	41353.6	20419.2	217.6
	20	28035.8	63378.8	-383298.2	61222.5	26915.4	140.8
	21	27579.7	61550.2	-377094.0	60335.6	26550.3	142.5
	22	18727.7	52318.9	-265918.8	43705.3	18085.2	28.2
	23	18271.6	50490.3	-259714.5	42818.3	17720.1	29.8
	24	29427.5	68401.5	-404325.0	62273.3	27876.1	146.0
	25	28971.4	66572.9	-398120.8	61386.4	27511.0	147.6
	26	20119.4	57341.6	-286945.5	44756.1	19045.9	33.3
	27	19663.3	55513.0	-280741.3	43869.1	18680.8	34.9
	28	-25329.7	-34279.0	350738.0	-47881.8	-22341.6	-217.7
	29	-24912.2	-32772.2	344429.9	-47566.6	-22053.4	-216.1
	30	-9537.2	1529.9	122594.1	-14395.9	-8086.0	-164.9
	31	-9119.7	3036.7	116286.1	-14080.6	-7797.8	-163.4
	32	-26850.1	-40374.4	371418.8	-50838.3	-23558.6	-212.3
	33	-26432.6	-38867.6	365110.7	-50523.1	-23270.4	-210.7
	34	-11057.6	-4565.5	143274.9	-17352.4	-9303.0	-159.5
	35	-10640.1	-3058.7	136966.9	-17037.1	-9014.8	-158.0
1055	4	-1798.2	-1815.2	16120.4	-6824.0	-3240.1	-62.5
	5	-1841.7	-1794.4	16316.1	-6779.2	-3314.0	-63.2
	6	-2701.8	4011.3	7104.7	-10563.4	-4805.8	-87.2
	7	-2745.4	4032.1	7300.4	-10518.6	-4879.8	-87.8
	8	-1746.6	-1766.5	15924.7	-6999.0	-3125.0	-58.5
	9	-1790.2	-1745.7	16120.4	-6954.2	-3199.0	-59.1
	10	-2650.2	4060.0	6909.0	-10738.5	-4690.7	-83.1
	11	-2693.8	4080.8	7104.8	-10693.7	-4764.7	-83.8
	12	918.7	-12186.0	33098.3	-510.7	1557.1	21.6
	13	934.2	-12171.3	33039.6	-563.2	1591.7	22.8
	14	2284.8	-15242.6	38889.6	1258.5	3994.9	67.3
	15	2300.2	-15227.9	38830.9	1206.0	4029.4	68.5
	16	773.4	-12116.7	33750.7	-361.4	1310.7	19.5
	17	788.9	-12102.1	33692.0	-413.9	1345.2	20.7
	18	2139.5	-15173.3	39542.0	1407.8	3748.4	65.2
	19	2155.0	-15158.6	39483.3	1355.3	3782.9	66.4
	20	2755.4	-12003.8	35424.6	-926.6	4885.7	89.7
	21	2711.9	-11983.0	35620.3	-881.9	4811.7	89.1
	22	1851.8	-6177.3	26408.9	-4666.1	3320.0	65.1
	23	1808.3	-6156.5	26604.6	-4621.3	3246.0	64.4
	24	2807.0	-11955.1	35228.9	-1101.7	5000.8	93.7
	25	2763.4	-11934.3	35424.7	-1056.9	4926.8	93.1
	26	1903.4	-6128.6	26213.3	-4841.1	3435.0	69.1
	27	1859.8	-6107.8	26409.0	-4796.4	3361.1	68.5
	28	-2093.3	7235.7	3046.0	-12975.6	-3661.9	-60.5
	29	-2077.9	7250.3	2987.3	-13028.1	-3627.4	-59.3
	30	-727.3	4179.1	8837.3	-11206.4	-1224.2	-14.8

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
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	31	-711.8	4193.7	8778.6	-11258.9	-1189.7	-13.6
	32	-2238.6	7305.0	3698.5	-12826.3	-3908.4	-62.6
	33	-2223.1	7319.6	3639.8	-12878.8	-3873.9	-61.4
	34	-872.5	4248.4	9489.7	-11057.1	-1470.7	-16.9
	35	-857.0	4263.0	9431.0	-11109.6	-1436.1	-15.7
1054	4	-17937.4	35522.0	-194288.8	-2124.1	-14347.7	0.9
	5	-18354.3	36451.4	-199700.3	-3168.8	-14607.0	0.8
	6	-26284.4	69750.3	-286445.3	-29526.3	-21021.4	-19.5
	7	-26701.3	70679.6	-291856.8	-30571.1	-21280.7	-19.6
	8	-16701.8	31624.7	-175911.3	-2201.2	-13682.4	4.3
	9	-17118.6	32554.1	-181322.8	-3246.0	-13941.7	4.2
	10	-25048.8	65853.0	-268067.8	-29603.5	-20356.1	-16.1
	11	-25465.6	66782.3	-273479.3	-30648.2	-20615.4	-16.1
	12	10240.5	-43168.3	130057.5	42802.9	6966.3	28.0
	13	10611.2	-44337.5	135570.7	42779.8	7165.9	29.0
	14	25258.4	-74290.2	304987.3	52887.9	18103.0	29.7
	15	25629.1	-75459.4	310500.6	52864.7	18302.5	30.8
	16	8850.9	-40070.4	112019.2	39320.3	6102.1	27.9
	17	9221.6	-41239.5	117532.5	39297.2	6301.7	28.9
	18	23868.8	-71192.3	286949.0	49405.3	17238.7	29.7
	19	24239.5	-72361.5	292462.3	49382.1	17438.3	30.7
	20	32122.3	-68217.8	388810.7	31492.5	22774.3	6.8
	21	31705.5	-67288.5	383399.2	30447.7	22515.1	6.8
	22	23775.3	-33989.6	296654.2	4090.3	16100.6	-13.6
	23	23358.5	-33060.2	291242.7	3045.5	15841.4	-13.6
	24	33357.9	-72115.1	407188.2	31415.3	23439.7	10.2
	25	32941.1	-71185.8	401776.7	30370.5	23180.4	10.2
	26	25010.9	-37886.9	315031.7	4013.1	16766.0	-10.2
	27	24594.1	-36957.5	309620.2	2968.3	16506.7	-10.2
	28	-17582.8	70926.0	-177130.8	-48537.9	-15279.3	-40.0
	29	-17212.2	69756.8	-171617.6	-48561.0	-15079.7	-39.0
	30	-2564.9	39804.1	-2201.0	-38452.9	-4142.7	-38.2
	31	-2194.2	38634.9	3312.3	-38476.0	-3943.1	-37.2
	32	-18972.4	74023.9	-195169.1	-52020.4	-16143.6	-40.1
	33	-18601.7	72854.7	-189655.9	-52043.6	-15944.0	-39.1
	34	-3954.5	42902.0	-20239.3	-41935.5	-5007.0	-38.3
	35	-3583.8	41732.8	-14726.0	-41958.6	-4807.4	-37.3
1053	4	-123900.6	-11544.1	398863.4	111285.2	-70460.9	252.6
	5	-125761.7	-13350.5	404759.5	113414.0	-71564.8	257.4
	6	-170706.5	-2417.6	536233.9	146200.9	-100498.3	126.5
	7	-172567.6	-4224.0	542130.0	148329.7	-101602.2	131.3
	8	-117371.5	-13223.0	379344.1	104878.0	-66958.9	247.3
	9	-119232.5	-15029.3	385240.2	107006.8	-68062.8	252.1
	10	-164177.4	-4096.5	516714.7	139793.7	-96996.4	121.1
	11	-166038.4	-5902.9	522610.8	141922.6	-98100.3	125.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	12	33522.9	-12315.9	-73998.6	-15369.1	25487.6	258.9
	13	35481.7	-12819.5	-79854.4	-17291.2	26538.2	257.3
	14	117831.6	-5153.7	-330186.4	-84963.2	75537.1	144.6
	15	119790.4	-5657.3	-336042.2	-86885.3	76587.7	143.0
	16	27319.4	-18337.2	-54345.0	-8273.0	21807.9	275.0
	17	29278.2	-18840.8	-60200.7	-10195.1	22858.5	273.4
	18	111628.1	-11175.0	-310532.8	-77867.0	71857.5	160.6
	19	113586.9	-11678.6	-316388.6	-79789.2	72908.1	159.0
	20	157128.5	12329.9	-455096.0	-120695.1	96371.0	-128.5
	21	155267.4	10523.5	-449199.9	-118566.3	95267.1	-123.7
	22	110322.5	21456.4	-317725.4	-85779.4	66333.5	-254.7
	23	108461.5	19650.0	-311829.4	-83650.5	65229.6	-249.9
	24	163657.6	10651.0	-474615.3	-127102.3	99872.9	-133.9
	25	161796.6	8844.6	-468719.2	-124973.4	98769.0	-129.0
	26	116851.7	19777.5	-337244.7	-92186.6	69835.4	-260.0
	27	114990.6	17971.1	-331348.6	-90057.7	68731.5	-255.2
	28	-122496.9	18105.7	383903.3	101016.6	-74637.4	-161.6
	29	-120538.1	17602.0	378047.5	99094.5	-73586.8	-163.2
	30	-38188.1	25267.8	127715.4	31422.5	-24587.8	-276.0
	31	-36229.4	24764.2	121859.7	29500.4	-23537.3	-277.6
	32	-128700.4	12084.4	403556.9	108112.8	-78317.0	-145.6
	33	-126741.6	11580.7	397701.1	106190.6	-77266.4	-147.2
	34	-44391.6	19246.6	147369.1	38518.7	-28267.5	-259.9
	35	-42432.9	18742.9	141513.3	36596.5	-27216.9	-261.5
1052	4	-60576.0	6942.3	63647.3	-3176.7	-51622.4	-203.2
	5	-60474.2	6711.5	63272.3	-3284.3	-52485.9	-185.5
	6	-98381.9	15963.8	97497.3	-8642.4	-78159.5	-439.0
	7	-98280.0	15733.0	97122.4	-8750.1	-79023.0	-421.3
	8	-60049.4	7453.1	67141.3	-3370.2	-49586.6	-208.2
	9	-59947.6	7222.3	66766.4	-3477.8	-50450.1	-190.5
	10	-97855.3	16474.6	100991.3	-8835.9	-76123.7	-444.0
	11	-97753.4	16243.8	100616.4	-8943.6	-76987.2	-426.3
	12	38167.6	-8882.5	4906.1	7291.3	25214.5	267.9
	13	38325.6	-8729.2	5954.4	7233.2	25825.3	266.4
	14	84942.9	-13809.0	-13016.5	10748.4	63063.3	455.1
	15	85100.9	-13655.8	-11968.3	10690.4	63674.1	453.6
	16	38507.0	-9651.6	3656.3	6932.4	22336.2	326.9
	17	38665.0	-9498.4	4704.5	6874.4	22946.9	325.4
	18	85282.4	-14578.2	-14266.3	10389.6	60185.0	514.1
	19	85440.4	-14424.9	-13218.1	10331.6	60795.7	512.6
	20	95341.8	-9479.5	3905.1	8347.2	74540.3	420.8
	21	95443.7	-9710.3	3530.2	8239.6	73676.8	438.6
	22	57536.0	-458.0	37755.2	2881.5	48003.1	185.1
	23	57637.8	-688.8	37380.2	2773.9	47139.6	202.8
	24	95868.4	-8968.7	7399.2	8153.8	76576.1	415.8
	25	95970.3	-9199.5	7024.2	8046.1	75712.6	433.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	26	58062.6	52.8	41249.2	2688.0	50038.9	180.0
	27	58164.4	-178.0	40874.3	2580.4	49175.4	197.7
	28	-87852.0	21189.2	117739.6	-10927.9	-63242.7	-518.1
	29	-87694.0	21342.5	118787.8	-10986.0	-62631.9	-519.6
	30	-41076.6	16262.7	99817.0	-7470.7	-25393.9	-330.9
	31	-40918.6	16415.9	100865.2	-7528.8	-24783.2	-332.4
	32	-87512.5	20420.0	116489.8	-11286.7	-66121.0	-459.0
	33	-87354.5	20573.3	117538.0	-11344.8	-65510.3	-460.5
	34	-40737.1	15493.5	98567.2	-7829.5	-28272.2	-271.8
	35	-40579.2	15646.7	99615.4	-7887.6	-27661.5	-273.3
1051	4	-70635.3	-6296.9	-169477.8	-9593.7	-37067.8	140.1
	5	-71886.7	-6434.5	-171961.4	-9750.2	-37688.6	138.7
	6	-100135.8	5969.3	-198684.8	-18545.4	-53910.9	276.3
	7	-101387.2	5831.7	-201168.5	-18701.9	-54531.7	274.9
	8	-64897.8	-6539.0	-155838.8	-9472.3	-34747.0	140.3
	9	-66149.2	-6676.6	-158322.4	-9628.8	-35367.8	138.9
	10	-94398.3	5727.2	-185045.8	-18424.0	-51590.1	276.5
	11	-95649.7	5589.6	-187529.4	-18580.6	-52210.9	275.1
	12	32153.4	-17520.2	17076.5	10851.0	17495.0	-161.6
	13	33874.6	-17592.8	21168.2	10887.4	18191.3	-161.5
	14	87784.8	-14938.9	141197.9	19230.3	46103.0	-285.4
	15	89506.0	-15011.6	145289.6	19266.7	46799.2	-285.4
	16	27982.1	-17978.8	8797.8	10329.2	15425.7	-166.2
	17	29703.3	-18051.4	12889.5	10365.6	16121.9	-166.2
	18	83613.5	-15397.5	132919.1	18708.5	44033.7	-290.1
	19	85334.7	-15470.1	137010.9	18744.9	44729.9	-290.1
	20	114802.7	2307.3	244260.0	18337.3	58292.1	-272.8
	21	113551.3	2169.8	241776.4	18180.7	57671.3	-274.2
	22	85302.2	14573.5	215053.0	9385.6	41449.0	-136.6
	23	84050.8	14436.0	212569.4	9229.0	40828.2	-138.0
	24	120540.2	2065.2	257899.1	18458.7	60612.9	-272.6
	25	119288.8	1927.7	255415.5	18302.1	59992.1	-274.0
	26	91039.7	14331.4	228692.1	9506.9	43769.8	-136.4
	27	89788.3	14193.9	226208.5	9350.4	43149.0	-137.8
	28	-66181.7	23367.1	-80280.2	-18988.1	-38648.7	292.3
	29	-64460.5	23294.5	-76188.5	-18951.7	-37952.5	292.4
	30	-10550.3	25948.4	43841.2	-10608.8	-10040.7	168.5
	31	-8829.1	25875.7	47932.9	-10572.4	-9344.5	168.5
	32	-70353.0	22908.5	-88558.9	-19510.0	-40718.0	287.7
	33	-68631.8	22835.9	-84467.2	-19473.5	-40021.8	287.7
	34	-14721.6	25489.8	35562.5	-11130.7	-12110.0	163.8
	35	-13000.4	25417.2	39654.2	-11094.3	-11413.8	163.8
1022	4	-6530.6	-47315.4	130054.8	130331.7	-20324.2	93.2
	5	-6556.2	-46917.6	131260.6	130113.3	-20334.1	91.7
	6	-10214.2	-18359.1	197454.7	143532.9	-15523.6	66.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	7	-10239.8	-17961.2	198660.5	143314.6	-15533.6	65.2
	8	-7511.1	-44597.3	125354.4	131827.7	-20277.7	85.7
	9	-7536.7	-44199.5	126560.2	131609.3	-20287.7	84.2
	10	-11194.7	-15641.0	192754.3	145028.9	-15477.2	59.2
	11	-11220.3	-15243.1	193960.0	144810.6	-15487.2	57.7
	12	-5389.9	-54495.5	36522.9	89939.9	-16226.8	70.4
	13	-5684.1	-53680.1	35112.8	90388.7	-16212.9	68.2
	14	-7827.2	-32111.1	26368.5	67852.6	-7938.1	25.2
	15	-8121.4	-31295.7	24958.3	68301.4	-7924.2	22.9
	16	-5475.3	-53169.4	40542.2	89212.1	-16260.0	65.3
	17	-5769.4	-52354.0	39132.1	89661.0	-16246.1	63.1
	18	-7912.6	-30785.0	30387.8	67124.8	-7971.3	20.1
	19	-8206.7	-29969.6	28977.6	67573.6	-7957.4	17.8
	20	-14655.0	27299.3	96206.7	56707.1	7304.9	-57.6
	21	-14680.6	27697.1	97412.5	56488.8	7294.9	-59.1
	22	-18338.6	56255.6	163606.5	69908.4	12105.4	-84.1
	23	-18364.2	56653.5	164812.3	69690.0	12095.5	-85.6
	24	-15635.5	30017.3	91506.3	58203.1	7351.3	-65.1
	25	-15661.1	30415.2	92712.1	57984.8	7341.3	-66.7
	26	-19319.1	58973.7	158906.1	71404.4	12151.8	-91.6
	27	-19344.7	59371.5	160111.9	71186.0	12141.9	-93.1
	28	-17668.6	42025.7	261189.1	133944.1	-224.9	-17.8
	29	-17962.7	42841.1	259779.0	134393.0	-211.0	-20.0
	30	-20105.9	64410.1	251034.7	111856.8	8063.8	-63.0
	31	-20400.0	65225.5	249624.5	112305.6	8077.7	-65.3
	32	-17753.9	43351.8	265208.4	133216.3	-258.1	-22.9
	33	-18048.0	44167.2	263798.3	133665.1	-244.2	-25.1
	34	-20191.2	65736.2	255054.0	111129.0	8030.6	-68.1
	35	-20485.4	66551.6	253643.8	111577.8	8044.5	-70.4
1021	4	1434.7	-232.7	-37420.5	445.5	4294.1	-27.8
	5	1512.7	-223.3	-35970.6	431.3	4235.8	-27.4
	6	2406.8	-8.4	-25589.5	76.4	3197.3	-15.2
	7	2484.7	1.0	-24139.6	62.1	3139.1	-14.8
	8	1298.0	-230.3	-36265.3	433.0	4200.6	-25.4
	9	1376.0	-220.8	-34815.4	418.7	4142.3	-25.0
	10	2270.1	-5.9	-24434.3	63.8	3103.8	-12.9
	11	2348.0	3.5	-22984.4	49.6	3045.6	-12.5
	12	3764.6	-429.1	-19011.3	718.7	3582.8	-26.0
	13	3723.6	-428.3	-18664.8	714.9	3554.8	-25.3
	14	6852.7	-364.4	9702.3	573.1	1846.3	-12.3
	15	6811.7	-363.6	10048.8	569.3	1818.2	-11.6
	16	4024.4	-397.6	-14178.3	671.1	3388.7	-24.7
	17	3983.4	-396.9	-13831.7	667.3	3360.7	-24.0
	18	7112.5	-332.9	14535.3	525.5	1652.2	-11.0
	19	7071.5	-332.1	14881.9	521.7	1624.1	-10.3
	20	11728.3	-17.0	58291.6	-39.8	-1494.4	17.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	21	11806.2	-7.5	59741.5	-54.1	-1552.6	18.3
	22	12700.3	207.3	70122.5	-409.0	-2591.1	30.4
	23	12778.3	216.8	71572.5	-423.2	-2649.4	30.8
	24	11591.5	-14.5	59446.7	-52.3	-1587.9	20.3
	25	11669.5	-5.1	60896.6	-66.6	-1646.1	20.7
	26	12563.6	209.8	71277.7	-421.5	-2684.6	32.8
	27	12641.5	219.3	72727.6	-435.8	-2742.9	33.2
	28	7004.8	318.7	20425.3	-511.9	-72.9	15.7
	29	6963.8	319.4	20771.8	-515.7	-101.0	16.4
	30	10092.8	383.4	49138.9	-657.5	-1809.5	29.4
	31	10051.8	384.1	49485.4	-661.3	-1837.5	30.1
	32	7264.6	350.1	25258.3	-559.5	-267.0	17.1
	33	7223.6	350.9	25604.9	-563.3	-295.1	17.8
	34	10352.7	414.9	53971.9	-705.1	-2003.6	30.8
	35	10311.6	415.6	54318.5	-708.9	-2031.6	31.5
1020	4	-14488.5	-59152.6	306866.1	-54490.2	-25762.6	-262.4
	5	-14457.9	-58599.7	304904.1	-56510.1	-25839.5	-260.6
	6	-4889.1	-38578.1	253781.7	-99572.7	-15050.9	-192.9
	7	-4858.5	-38025.2	251819.7	-101592.6	-15127.7	-191.0
	8	-14746.7	-56871.4	301477.3	-55109.2	-25296.0	-259.4
	9	-14716.1	-56318.5	299515.3	-57129.1	-25372.9	-257.6
	10	-5147.4	-36297.0	248392.9	-100191.7	-14584.3	-189.8
	11	-5116.7	-35744.0	246430.9	-102211.6	-14661.1	-188.0
	12	-23824.9	-51547.5	296962.5	-6479.9	-24464.1	-186.5
	13	-23902.4	-50863.1	295345.9	-6665.6	-24324.1	-185.6
	14	-22120.0	-24585.7	235044.1	-12244.9	-12856.2	-50.9
	15	-22197.5	-23901.4	233427.4	-12430.6	-12716.2	-50.0
	16	-23722.7	-49704.3	290422.6	-13212.9	-24720.4	-180.3
	17	-23800.2	-49020.0	288806.0	-13398.6	-24580.4	-179.4
	18	-22017.9	-22742.6	228504.1	-18977.9	-13112.5	-44.7
	19	-22095.4	-22058.3	226887.5	-19163.6	-12972.5	-43.8
	20	-8805.6	30719.9	100471.2	-73706.8	12930.5	189.6
	21	-8775.0	31272.8	98509.2	-75726.7	12853.6	191.4
	22	793.8	51294.3	47386.8	-118789.3	23642.3	259.2
	23	824.4	51847.3	45424.9	-120809.1	23565.4	261.0
	24	-9063.9	33001.0	95082.4	-74325.8	13397.1	192.6
	25	-9033.2	33554.0	93120.4	-76345.7	13320.2	194.5
	26	535.5	53575.5	41998.0	-119408.3	24108.9	262.2
	27	566.2	54128.4	40036.1	-121428.1	24032.0	264.0
	28	8173.0	17034.1	120014.6	-156754.8	11241.9	45.4
	29	8095.5	17718.4	118398.0	-156940.5	11381.8	46.3
	30	9877.9	43995.8	58096.2	-162519.8	22849.8	181.0
	31	9800.4	44680.1	56479.5	-162705.5	22989.8	181.9
	32	8275.1	18877.2	113474.7	-163487.8	10985.6	51.6
	33	8197.7	19561.6	111858.1	-163673.5	11125.5	52.5
	34	9980.0	45839.0	51556.2	-169252.7	22593.5	187.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	35	9902.5	46523.3	49939.6	-169438.4	22733.5	188.1
1019	4	-652.3	-43150.0	161022.6	-34684.9	-1322.1	-211.5
	5	-649.2	-42708.7	159937.7	-34775.9	-1323.0	-207.7
	6	-387.8	-26674.0	110480.7	-23971.9	-780.2	-158.8
	7	-384.7	-26232.6	109395.7	-24062.9	-781.2	-155.0
	8	373.6	-41378.3	153495.1	-32967.8	-1276.5	-204.5
	9	376.7	-40936.9	152410.2	-33058.8	-1277.4	-200.6
	10	638.1	-24902.2	102953.1	-22254.8	-734.6	-151.8
	11	641.2	-24460.9	101868.2	-22345.8	-735.5	-147.9
	12	-613.6	-43766.8	155301.6	-35498.3	-1242.5	-150.0
	13	-305.8	-43235.3	153043.3	-34983.1	-1228.8	-147.9
	14	-620.6	-27909.5	101029.3	-26088.6	-647.1	-42.8
	15	-312.8	-27378.0	98771.0	-25573.5	-633.4	-40.7
	16	-603.2	-42295.6	151685.2	-35801.6	-1245.7	-137.1
	17	-295.4	-41764.1	149426.9	-35286.5	-1232.0	-135.0
	18	-610.2	-26438.4	97412.8	-26392.0	-650.3	-29.8
	19	-302.4	-25906.8	95154.6	-25876.8	-636.6	-27.7
	20	-675.6	9707.4	-19885.2	-3319.4	662.7	145.8
	21	-672.5	10148.8	-20970.1	-3410.4	661.7	149.7
	22	-411.1	26183.5	-70427.1	7393.6	1204.6	198.5
	23	-408.0	26624.8	-71512.1	7302.6	1203.6	202.4
	24	350.3	11479.2	-27412.7	-1602.3	708.3	152.9
	25	353.4	11920.5	-28497.7	-1693.3	707.4	156.8
	26	614.8	27955.2	-77954.7	9110.7	1250.2	205.6
	27	617.9	28396.6	-79039.6	9019.7	1249.3	209.5
	28	268.0	11153.4	-13171.5	211.7	563.8	25.6
	29	575.7	11684.9	-15429.8	726.8	577.5	27.7
	30	261.0	27010.6	-67443.9	9621.3	1159.2	132.9
	31	568.8	27542.1	-69702.2	10136.5	1172.9	135.0
	32	278.4	12624.6	-16788.0	-91.7	560.6	38.6
	33	586.2	13156.1	-19046.3	423.4	574.3	40.7
	34	271.4	28481.8	-71060.3	9317.9	1156.0	145.8
	35	579.2	29013.3	-73318.6	9833.1	1169.7	147.9
1018	4	190.1	-2297.3	17949.0	1381.6	-487.7	90.7
	5	194.2	-2147.8	18355.6	1338.6	-482.7	87.8
	6	334.5	5701.6	33064.3	-2381.8	-282.5	73.5
	7	338.6	5851.0	33470.9	-2424.8	-277.6	70.6
	8	203.6	12119.0	15634.6	690.8	303.8	91.5
	9	207.7	12268.5	16041.2	647.8	308.7	88.7
	10	348.0	20117.9	30749.9	-3072.6	508.9	74.3
	11	352.1	20267.3	31156.5	-3115.6	513.9	71.5
	12	-162.9	-6235.1	-10985.4	3086.7	-460.3	59.3
	13	-158.9	-1910.2	-11679.7	2879.5	-222.9	59.6
	14	-321.2	-5787.0	-19570.1	949.2	-464.3	12.2
	15	-317.1	-1462.1	-20264.4	741.9	-226.8	12.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	16	-149.3	-5737.0	-9630.1	2943.4	-443.8	49.8
	17	-145.3	-1412.1	-10324.4	2736.2	-206.4	50.0
	18	-307.5	-5288.9	-18214.8	805.8	-447.7	2.6
	19	-303.5	-964.0	-18909.1	598.6	-210.3	2.9
	20	-337.2	-803.6	-10666.6	-5743.7	-500.7	-66.5
	21	-333.2	-654.1	-10260.0	-5786.7	-495.8	-69.4
	22	-192.9	7195.3	4448.7	-9507.1	-295.6	-83.7
	23	-188.8	7344.7	4855.3	-9550.1	-290.6	-86.6
	24	-323.8	13612.7	-12981.0	-6434.5	290.7	-65.7
	25	-319.7	13762.2	-12574.4	-6477.5	295.7	-68.6
	26	-179.4	21611.6	2134.3	-10197.9	495.8	-82.9
	27	-175.3	21761.0	2540.9	-10240.9	500.8	-85.7
	28	318.3	20427.8	39399.0	-9457.9	223.4	2.1
	29	322.3	24752.7	38704.7	-9665.2	460.9	2.3
	30	160.1	20875.9	30814.3	-11595.5	219.5	-45.1
	31	164.1	25200.8	30120.0	-11802.7	457.0	-44.8
	32	331.9	20925.9	40754.3	-9601.2	240.0	-7.5
	33	336.0	25250.8	40060.0	-9808.5	477.4	-7.2
	34	173.7	21374.0	32169.6	-11738.8	236.0	-54.6
	35	177.8	25698.9	31475.3	-11946.1	473.5	-54.4
1017	4	-8732.8	-220.0	-54515.4	452.9	4357.4	-40.9
	5	-8631.8	-211.4	-54116.6	439.4	4487.7	-40.6
	6	770.7	-6.9	-24746.4	92.4	5796.7	-25.1
	7	871.7	1.7	-24347.5	78.9	5927.0	-24.8
	8	-6875.2	-215.4	-49014.5	437.4	4574.3	-38.2
	9	-6774.2	-206.9	-48615.7	423.9	4704.7	-37.9
	10	2628.4	-2.3	-19245.5	76.9	6013.6	-22.4
	11	2729.3	6.2	-18846.6	63.4	6144.0	-22.0
	12	-11954.7	-413.3	-49730.0	718.5	-248.7	-35.7
	13	-11397.4	-411.9	-48079.7	713.8	-183.6	-34.9
	14	-5669.0	-358.7	-17110.6	576.8	-2692.2	-15.9
	15	-5111.7	-357.3	-15460.3	572.2	-2627.1	-15.1
	16	-11618.0	-384.8	-48400.4	673.5	185.8	-34.6
	17	-11060.7	-383.4	-46750.1	668.9	250.9	-33.7
	18	-5332.4	-330.2	-15781.0	531.9	-2257.7	-14.7
	19	-4775.1	-328.8	-14130.7	527.2	-2192.6	-13.9
	20	12219.4	-38.0	54215.9	-19.4	-3787.7	25.2
	21	12320.4	-29.4	54614.8	-32.8	-3657.3	25.5
	22	21722.9	175.1	83985.0	-379.9	-2348.4	41.0
	23	21823.9	183.7	84383.8	-393.3	-2218.0	41.3
	24	14077.0	-33.4	59716.9	-34.8	-3570.7	27.9
	25	14178.0	-24.9	60115.7	-48.3	-3440.4	28.2
	26	23580.6	179.7	89485.9	-395.3	-2131.4	43.7
	27	23681.6	188.2	89884.7	-408.8	-2001.1	44.1
	28	19723.8	297.0	49500.0	-483.2	4548.9	17.0
	29	20281.1	298.4	51150.3	-487.8	4614.0	17.9

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	30	26009.5	351.6	82119.4	-624.8	2105.4	36.9
	31	26566.8	353.0	83769.7	-629.5	2170.5	37.7
	32	20060.4	325.6	50829.6	-528.1	4983.4	18.2
	33	20617.7	326.9	52479.9	-532.8	5048.5	19.0
	34	26346.1	380.2	83449.0	-669.8	2539.9	38.0
	35	26903.4	381.5	85099.3	-674.4	2605.0	38.8
1016	4	4163.0	-37272.4	46351.4	26508.6	-3753.1	-92.5
	5	4179.5	-37032.2	47514.7	26486.9	-3616.9	-90.9
	6	1902.7	-25235.2	113771.0	21743.4	1037.3	-61.7
	7	1919.2	-24995.0	114934.3	21721.7	1173.5	-60.1
	8	4006.4	-33376.4	40283.6	26891.3	-3411.1	-88.2
	9	4022.8	-33136.1	41446.9	26869.6	-3275.0	-86.6
	10	1746.1	-21339.2	107703.2	22126.1	1379.3	-57.4
	11	1762.5	-21098.9	108866.5	22104.4	1515.4	-55.8
	12	-466.0	-32481.7	-45771.6	23845.1	-9545.7	-79.0
	13	-513.0	-31312.9	-47592.0	23959.9	-9443.1	-77.7
	14	-6630.6	-17266.6	-54331.0	16660.4	-9686.9	-36.3
	15	-6677.6	-16097.8	-56151.4	16775.2	-9584.3	-35.0
	16	-411.2	-31680.8	-41894.0	23772.7	-9091.9	-73.6
	17	-458.2	-30512.0	-43714.3	23887.5	-8989.4	-72.3
	18	-6575.7	-16465.8	-50453.4	16588.0	-9233.1	-30.9
	19	-6622.7	-15296.9	-52273.7	16702.8	-9130.5	-29.6
	20	-16385.6	13444.3	17820.1	2559.6	-4223.6	49.8
	21	-16369.1	13684.6	18983.4	2537.9	-4087.5	51.4
	22	-18645.9	25481.5	85239.7	-2205.6	566.8	80.5
	23	-18629.4	25721.8	86403.0	-2227.4	703.0	82.2
	24	-16542.3	17340.4	11752.4	2942.2	-3881.7	54.1
	25	-16525.8	17580.7	12915.6	2920.5	-3745.5	55.7
	26	-18802.6	29377.6	79172.0	-1823.0	908.7	84.8
	27	-18786.1	29617.9	80335.3	-1844.7	1044.9	86.5
	28	-8000.3	7642.3	178960.4	7961.1	6422.3	23.6
	29	-8047.3	8811.2	177140.0	8075.9	6524.9	24.8
	30	-14164.9	22857.4	170401.0	776.4	6281.2	66.2
	31	-14211.9	24026.2	168580.7	891.2	6383.7	67.5
	32	-7945.5	8443.2	182838.0	7888.7	6876.1	29.0
	33	-7992.5	9612.1	181017.7	8003.5	6978.7	30.3
	34	-14110.1	23658.3	174278.6	704.0	6735.0	71.7
	35	-14157.1	24827.1	172458.3	818.8	6837.5	72.9
1015	4	-2793.8	-62525.6	176758.1	177319.5	-5022.1	-276.3
	5	-2781.0	-62554.7	179571.9	172472.2	-5017.5	-271.9
	6	-2641.2	-25243.2	244801.8	142338.0	-4846.2	-192.5
	7	-2628.4	-25272.2	247615.5	137490.6	-4841.6	-188.0
	8	-2771.6	-59394.8	183171.2	182212.4	-5120.6	-262.0
	9	-2758.7	-59423.9	185984.9	177365.0	-5116.0	-257.5
	10	-2618.9	-22112.4	251214.8	147230.8	-4944.8	-178.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	11	-2606.1	-22141.4	254028.5	142383.5	-4940.1	-173.6
	12	-2619.3	-77201.2	23007.0	152914.9	-4283.8	-215.3
	13	-2612.6	-76261.9	24931.0	154382.7	-4313.3	-211.0
	14	-2310.9	-53466.1	-39846.2	90699.8	-3440.9	-79.0
	15	-2304.2	-52526.8	-37922.3	92167.7	-3470.4	-74.7
	16	-2576.6	-77298.1	32386.1	136757.1	-4268.4	-200.4
	17	-2569.9	-76358.9	34310.0	138224.9	-4297.9	-196.1
	18	-2268.2	-53563.0	-30467.1	74542.0	-3425.4	-64.1
	19	-2261.5	-52623.8	-28543.2	76009.9	-3455.0	-59.8
	20	-1765.9	16591.4	-32752.7	-30064.0	-2212.4	178.1
	21	-1753.1	16562.3	-29939.0	-34911.3	-2207.8	182.6
	22	-1613.3	53873.9	35290.9	-65045.6	-2036.5	262.0
	23	-1600.5	53844.8	38104.6	-69892.9	-2031.9	266.5
	24	-1743.6	19722.2	-26339.7	-25171.1	-2310.9	192.5
	25	-1730.8	19693.1	-23525.9	-30018.5	-2306.3	196.9
	26	-1591.0	57004.7	41704.0	-60152.7	-2135.1	276.4
	27	-1578.2	56975.6	44517.7	-65000.0	-2130.4	280.8
	28	-2110.5	47073.8	249819.0	36309.6	-3697.5	64.3
	29	-2103.8	48013.0	251743.0	37777.5	-3727.1	68.6
	30	-1802.1	70808.9	186965.8	-25905.5	-2854.6	200.6
	31	-1795.4	71748.1	188889.7	-24437.6	-2884.2	204.9
	32	-2067.8	46976.8	259198.1	20151.8	-3682.1	79.2
	33	-2061.1	47916.0	261122.0	21619.7	-3711.7	83.5
	34	-1759.4	70711.9	196344.9	-42063.3	-2839.2	215.5
	35	-1752.7	71651.2	198268.8	-40595.4	-2868.7	219.8
1014	4	-62224.4	-75705.8	380073.3	-115719.6	-22494.0	-338.9
	5	-63286.1	-75149.0	375700.4	-117986.2	-23277.5	-347.7
	6	-93211.7	-40564.1	319316.4	-153764.8	-50061.6	-400.1
	7	-94273.4	-40007.4	314943.6	-156031.4	-50845.2	-408.9
	8	-64493.8	-73247.1	381698.5	-120191.5	-23606.8	-327.1
	9	-65555.5	-72690.4	377325.7	-122458.0	-24390.4	-335.8
	10	-95481.1	-38105.4	320941.7	-158236.7	-51174.5	-388.3
	11	-96542.8	-37548.7	316568.8	-160503.3	-51958.0	-397.1
	12	24826.1	-81654.1	280301.1	-17412.3	38209.1	5.0
	13	24145.3	-80916.5	280788.6	-18753.8	37875.2	8.5
	14	68072.7	-51791.8	129164.7	27880.9	62223.0	226.2
	15	67391.9	-51054.2	129652.3	26539.3	61889.1	229.8
	16	21287.1	-79798.3	265724.9	-24967.5	35597.4	-24.3
	17	20606.3	-79060.7	266212.4	-26309.1	35263.5	-20.7
	18	64533.7	-49936.0	114588.5	20325.7	59611.3	197.0
	19	63852.9	-49198.4	115076.1	18984.1	59277.4	200.5
	20	81930.8	23835.1	-123714.5	35257.7	57552.3	398.5
	21	80869.1	24391.8	-128087.4	32991.1	56768.8	389.7
	22	50943.5	58976.7	-184471.4	-2787.6	29984.7	337.3
	23	49881.8	59533.5	-188844.3	-5054.1	29201.2	328.5
	24	79661.5	26293.8	-122089.3	30785.8	56439.5	410.4

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	25	78599.8	26850.5	-126462.1	28519.2	55656.0	401.6
	26	48674.2	61435.4	-182846.2	-7259.5	28871.8	349.1
	27	47612.5	61992.2	-187219.0	-9526.0	28088.3	340.4
	28	-78464.8	35484.8	77778.1	-144229.7	-53683.1	-199.1
	29	-79145.6	36222.4	78265.7	-145571.3	-54016.9	-195.5
	30	-35218.3	65347.1	-73358.3	-98936.6	-29669.2	22.1
	31	-35899.1	66084.7	-72870.7	-100278.1	-30003.0	25.7
	32	-82003.8	37340.6	63201.9	-151785.0	-56294.8	-228.3
	33	-82684.6	38078.3	63689.5	-153126.5	-56628.7	-224.8
	34	-38757.3	67202.9	-87934.4	-106491.8	-32280.9	-7.1
	35	-39438.1	67940.5	-87446.9	-107833.3	-32614.8	-3.5
1013	4	4963.3	-1060.2	135995.9	2125.1	-5462.0	-695.7
	5	3276.7	-1025.9	138988.7	2044.7	-5450.4	-680.2
	6	-25389.4	-209.6	160917.1	466.9	8389.6	-470.8
	7	-27076.0	-175.3	163910.0	386.5	8401.3	-455.3
	8	3399.5	-1052.1	149620.9	2082.9	-4203.7	-652.8
	9	1712.8	-1017.8	152613.8	2002.5	-4192.0	-637.3
	10	-26953.2	-201.4	174542.2	424.7	9648.0	-428.0
	11	-28639.9	-167.2	177535.0	344.3	9659.6	-412.4
	12	51728.2	-1640.8	31049.0	3202.4	-25411.6	-567.5
	13	51259.0	-1638.3	35136.5	3189.8	-25034.1	-554.6
	14	60242.1	-1256.0	-35078.8	2399.9	-29025.5	-230.0
	15	59772.9	-1253.5	-30991.3	2387.2	-28648.0	-217.2
	16	46105.9	-1526.5	41025.1	2934.4	-25372.8	-515.7
	17	45636.7	-1524.1	45112.7	2921.8	-24995.3	-502.8
	18	54619.8	-1141.7	-25102.7	2131.9	-28986.6	-178.3
	19	54150.6	-1139.2	-21015.2	2119.2	-28609.1	-165.4
	20	33343.0	222.5	-84430.2	-550.1	-17508.2	429.1
	21	31656.3	256.8	-81437.4	-630.5	-17496.6	444.6
	22	2990.3	1073.1	-59509.0	-2208.3	-3656.5	653.9
	23	1303.6	1107.4	-56516.1	-2288.7	-3644.9	669.4
	24	31779.1	230.7	-70805.2	-592.3	-16249.8	471.9
	25	30092.5	265.0	-67812.3	-672.7	-16238.2	487.5
	26	1426.4	1081.3	-45883.9	-2250.5	-2398.2	696.8
	27	-260.2	1115.6	-42891.0	-2330.9	-2386.5	712.3
	28	-49447.5	1194.6	114120.0	-2325.0	20760.6	182.0
	29	-49916.7	1197.0	118207.5	-2337.7	21138.1	194.9
	30	-40933.6	1579.4	47992.1	-3127.6	17146.7	519.5
	31	-41402.8	1581.9	52079.6	-3140.3	17524.2	532.3
	32	-55069.8	1308.9	124096.1	-2593.0	20799.4	233.8
	33	-55538.9	1311.3	128183.6	-2605.7	21176.9	246.7
	34	-46555.9	1693.7	57968.3	-3395.6	17185.5	571.2
	35	-47025.1	1696.1	62055.8	-3408.2	17563.1	584.1
1012	4	-4756.7	439.6	-26443.7	624.8	19998.3	-811.5
	5	-6060.9	491.8	-31226.3	389.7	18926.1	-802.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	6	-24125.7	938.8	-130627.1	-811.8	5754.7	-511.7
	7	-25429.9	991.0	-135409.8	-1046.8	4682.5	-502.9
	8	-7079.7	-107.2	-43058.0	597.4	21039.2	-763.1
	9	-8383.9	-55.0	-47840.6	362.3	19967.0	-754.3
	10	-26448.6	392.0	-147241.5	-839.2	6795.6	-463.3
	11	-27752.9	444.2	-152024.1	-1074.2	5723.4	-454.5
	12	29679.8	-680.1	181635.2	2647.6	31848.7	-712.1
	13	28982.9	-844.2	176650.9	2639.3	32161.0	-697.6
	14	39220.6	-924.4	256006.6	2718.0	26378.1	-332.9
	15	38523.7	-1088.5	251022.3	2709.8	26690.4	-318.3
	16	25332.4	-506.2	165693.1	1864.1	28274.7	-682.9
	17	24635.5	-670.2	160708.8	1855.9	28587.0	-668.4
	18	34873.1	-750.5	240064.5	1934.6	22804.1	-303.7
	19	34176.2	-914.5	235080.2	1926.4	23116.4	-289.1
	20	27045.7	-374.8	221461.2	859.6	1763.0	452.6
	21	25741.5	-322.6	216678.6	624.6	690.7	461.4
	22	7676.8	124.4	117277.7	-576.9	-12480.7	752.4
	23	6372.5	176.6	112495.1	-812.0	-13552.9	761.2
	24	24722.7	-921.6	204846.9	832.2	2803.8	501.0
	25	23418.5	-869.4	200064.3	597.2	1731.6	509.8
	26	5353.8	-422.4	100663.4	-604.4	-11439.8	800.8
	27	4049.5	-370.2	95880.8	-839.4	-12512.0	809.6
	28	-34883.4	983.9	-165643.1	-2141.0	-15630.0	287.3
	29	-35580.3	819.9	-170627.4	-2149.2	-15317.7	301.8
	30	-25342.6	739.6	-91271.6	-2070.5	-21100.6	666.5
	31	-26039.5	575.6	-96255.9	-2078.8	-20788.4	681.0
	32	-39230.8	1157.9	-181585.2	-2924.4	-19204.0	316.5
	33	-39927.7	993.8	-186569.5	-2932.6	-18891.7	331.0
	34	-29690.1	913.6	-107213.7	-2854.0	-24674.6	695.7
	35	-30387.0	749.5	-112198.0	-2862.2	-24362.4	710.2
1011	4	-50870.7	19734.9	-133624.3	32158.6	-33602.6	-831.2
	5	-51964.4	23919.6	-143426.7	35371.8	-33620.5	-819.6
	6	-84513.3	38463.9	-225898.5	60901.5	-57143.6	-550.7
	7	-85607.0	42648.6	-235700.9	64114.6	-57161.5	-539.1
	8	-53192.5	18874.4	-139834.7	36817.7	-34197.9	-788.7
	9	-54286.3	23059.0	-149637.1	40030.9	-34215.8	-777.1
	10	-86835.1	37603.3	-232108.8	65560.6	-57738.9	-508.1
	11	-87928.9	41788.0	-241911.3	68773.8	-57756.8	-496.6
	12	39398.2	-31877.6	160286.9	-71513.9	23455.2	-693.9
	13	38701.7	-32135.8	158423.8	-70116.2	23276.6	-681.1
	14	82731.7	-52945.1	311997.3	-129817.8	48981.5	-296.8
	15	82035.2	-53203.2	310134.2	-128420.1	48802.9	-284.1
	16	35752.4	-17928.7	127612.2	-60803.4	23395.7	-655.2
	17	35055.8	-18186.9	125749.1	-59405.7	23217.1	-642.5
	18	79085.9	-38996.2	279322.6	-119107.3	48922.0	-258.2
	19	78389.3	-39254.3	277459.5	-117709.5	48743.4	-245.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	20	93574.4	-50490.0	372077.1	-162187.6	51485.3	492.3
	21	92480.6	-46305.3	362274.7	-158974.5	51467.4	503.9
	22	59931.8	-31761.0	279802.9	-133444.7	27944.3	772.8
	23	58838.0	-27576.4	270000.5	-130231.6	27926.4	784.4
	24	91252.6	-51350.6	365866.7	-157528.5	50890.0	534.8
	25	90158.8	-47165.9	356064.3	-154315.3	50872.2	546.4
	26	57609.9	-32621.6	273592.5	-128785.6	27349.0	815.4
	27	56516.2	-28436.9	263790.1	-125572.4	27331.1	827.0
	28	-72743.8	30552.3	-147293.7	24295.7	-55014.9	241.2
	29	-73440.4	30294.2	-149156.8	25693.4	-55193.5	253.9
	30	-29410.3	9484.9	4416.7	-34008.2	-29488.5	638.2
	31	-30106.8	9226.7	2553.6	-32610.4	-29667.1	651.0
	32	-76389.6	44501.2	-179968.4	35006.2	-55074.4	279.8
	33	-77086.2	44243.1	-181831.5	36404.0	-55253.0	292.6
	34	-33056.1	23433.8	-28257.9	-23297.6	-29548.0	676.9
	35	-33752.7	23175.6	-30121.1	-21899.9	-29726.6	689.6
1010	4	1691.8	18328.4	-31496.1	-49975.6	1791.6	-554.1
	5	1750.4	23178.6	-34117.0	-55556.3	1874.1	-545.6
	6	1723.5	39031.7	-54431.9	-98732.4	1727.9	-382.9
	7	1782.1	43881.9	-57052.7	-104313.1	1810.4	-374.5
	8	1859.0	15972.9	-39079.9	-61513.2	1980.2	-524.7
	9	1917.6	20823.1	-41700.8	-67093.9	2062.7	-516.2
	10	1890.8	36676.2	-62015.6	-110270.0	1916.5	-353.5
	11	1949.4	41526.4	-64636.5	-115850.7	1999.0	-345.1
	12	1985.9	-31941.4	85354.9	93861.9	3081.8	-439.4
	13	2036.0	-32648.1	83079.7	90400.6	3138.4	-430.5
	14	2278.2	-48769.6	162231.4	166275.0	4150.0	-170.2
	15	2328.3	-49476.3	159956.3	162813.7	4206.5	-161.4
	16	2181.3	-15774.1	76618.7	75259.6	3356.8	-411.1
	17	2231.4	-16480.7	74343.5	71798.3	3413.4	-402.3
	18	2473.5	-32602.3	153495.2	147672.7	4424.9	-142.0
	19	2523.7	-33308.9	151220.1	144211.4	4481.5	-133.2
	20	2666.1	-37765.7	224759.0	191401.4	5352.0	343.1
	21	2724.7	-32915.5	222138.1	185820.7	5434.5	351.5
	22	2697.8	-17062.3	201823.2	142644.6	5288.3	514.2
	23	2756.5	-12212.1	199202.4	137063.9	5370.8	522.7
	24	2833.3	-40121.2	217175.2	179863.8	5540.6	372.5
	25	2891.9	-35271.0	214554.3	174283.1	5623.1	381.0
	26	2865.1	-19417.8	194239.4	131107.0	5476.9	543.6
	27	2923.7	-14567.6	191618.6	125526.3	5559.4	552.1
	28	2091.7	37069.7	8902.4	-68660.8	2869.5	131.2
	29	2141.9	36363.0	6627.3	-72122.0	2926.1	140.0
	30	2384.0	20241.5	85778.9	3752.4	3937.6	400.3
	31	2434.2	19534.8	83503.8	291.1	3994.2	409.1
	32	2287.1	53237.0	166.2	-87263.0	3144.5	159.4
	33	2337.3	52530.4	-2108.9	-90724.3	3201.1	168.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	34	2579.4	36408.8	77042.7	-14849.9	4212.6	428.5
	35	2629.6	35702.2	74767.6	-18311.2	4269.2	437.4
1009	4	-13123.8	-2.3	61775.9	-16.8	3342.7	-24.4
	5	-12978.8	9.9	60757.4	-38.7	3226.0	-24.1
	6	-9004.4	127.7	46227.6	-217.9	2349.6	-15.6
	7	-8859.4	139.9	45209.1	-239.8	2232.9	-15.4
	8	-12491.4	8.3	59160.1	-33.3	3498.7	-23.5
	9	-12346.4	20.4	58141.6	-55.2	3382.0	-23.2
	10	-8371.9	138.2	43611.8	-234.4	2505.7	-14.7
	11	-8227.0	150.4	42593.3	-256.3	2389.0	-14.4
	12	-13635.0	-208.0	50780.5	323.7	2051.3	-19.1
	13	-13445.3	-204.9	49995.8	318.8	2098.1	-18.8
	14	-9998.6	-245.5	25573.9	397.4	-212.2	-5.7
	15	-9808.9	-242.3	24789.1	392.5	-165.3	-5.4
	16	-13151.8	-167.4	47385.5	250.6	1662.3	-18.1
	17	-12962.1	-164.3	46600.8	245.7	1709.1	-17.8
	18	-9515.4	-204.9	22178.9	324.3	-601.2	-4.8
	19	-9325.7	-201.7	21394.2	319.4	-554.4	-4.5
	20	-1002.3	-127.0	-22246.2	229.0	-4202.2	20.1
	21	-857.4	-114.8	-23264.7	207.0	-4318.9	20.4
	22	3117.1	2.9	-37794.5	27.8	-5195.3	28.9
	23	3262.1	15.1	-38813.0	5.9	-5312.0	29.2
	24	-369.9	-116.5	-24862.0	212.5	-4046.2	21.1
	25	-224.9	-104.3	-25880.5	190.5	-4162.9	21.4
	26	3749.5	13.4	-40410.3	11.3	-5039.2	29.9
	27	3894.5	25.6	-41428.8	-10.6	-5155.9	30.2
	28	96.3	225.1	-1047.1	-346.8	-1258.8	10.2
	29	286.1	228.2	-1831.8	-351.7	-1212.0	10.5
	30	3732.8	187.7	-26253.7	-273.0	-3522.3	23.6
	31	3922.5	190.8	-27038.4	-278.0	-3475.5	23.9
	32	579.6	265.7	-4442.0	-419.9	-1647.9	11.2
	33	769.3	268.8	-5226.8	-424.8	-1601.1	11.5
	34	4216.0	228.3	-29648.7	-346.1	-3911.3	24.5
	35	4405.7	231.4	-30433.4	-351.1	-3864.5	24.8
1008	4	12878.9	20648.3	16777.3	-9419.3	-2229.9	-187.8
	5	13057.3	23476.3	17767.2	-10845.5	-2108.7	-181.2
	6	18356.7	40703.1	38144.7	-22191.9	3040.0	-87.9
	7	18535.0	43531.2	39134.6	-23618.1	3161.1	-81.4
	8	12865.6	18860.1	17972.1	-8940.1	1392.6	-180.6
	9	13044.0	21688.1	18962.0	-10366.3	1513.8	-174.1
	10	18343.4	38914.9	39339.5	-21712.6	6662.5	-80.8
	11	18521.8	41743.0	40329.4	-23138.9	6783.6	-74.3
	12	-838.2	-26052.0	-2264.2	22149.2	-7653.5	-210.9
	13	-842.2	-26588.5	-1905.8	22292.9	-6566.7	-208.8
	14	-6935.4	-42661.5	3413.2	34865.3	-7998.0	-126.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	15	-6939.4	-43198.0	3771.7	35009.0	-6911.3	-124.5
	16	-243.5	-16625.3	1035.4	17395.0	-7249.6	-189.2
	17	-247.5	-17161.8	1393.8	17538.7	-6162.9	-187.0
	18	-6340.8	-33234.8	6712.9	30111.0	-7594.2	-104.8
	19	-6344.8	-33771.2	7071.3	30254.8	-6507.4	-102.7
	20	-7445.4	-34716.6	35702.3	32967.6	-3378.4	93.4
	21	-7267.0	-31888.6	36692.2	31541.4	-3257.2	99.9
	22	-1967.6	-14661.8	57069.6	20195.1	1891.4	193.2
	23	-1789.2	-11833.7	58059.5	18768.8	2012.6	199.7
	24	-7458.7	-36504.8	36897.1	33446.9	244.1	100.5
	25	-7280.3	-33676.8	37886.9	32020.6	365.2	107.1
	26	-1980.9	-16450.0	58264.4	20674.3	5513.9	200.4
	27	-1802.5	-13621.9	59254.3	19248.0	5635.1	206.9
	28	17421.1	40797.5	68960.3	-20426.1	9912.7	121.8
	29	17417.2	40261.1	69318.8	-20282.3	10999.4	124.0
	30	11323.9	24188.1	74637.8	-7710.0	9568.1	206.2
	31	11319.9	23651.6	74996.2	-7566.2	10654.8	208.3
	32	18015.8	50224.3	72259.9	-25180.3	10316.5	143.6
	33	18011.8	49687.8	72618.4	-25036.5	11403.2	145.7
	34	11918.5	33614.8	77937.4	-12464.2	9971.9	227.9
	35	11914.5	33078.4	78295.9	-12320.4	11058.7	230.1
1007	4	-1146.7	15128.6	-5250.3	7428.5	-3054.3	-173.2
	5	-1122.7	17045.8	-6916.3	7473.4	-2991.4	-172.7
	6	-782.8	26731.2	-10803.5	7839.9	-2245.2	-119.2
	7	-758.7	28648.3	-12469.6	7884.8	-2182.2	-118.7
	8	-152.8	13807.1	-6194.5	6154.8	-3032.2	-160.7
	9	-128.7	15724.3	-7860.5	6199.7	-2969.3	-160.2
	10	211.2	25409.7	-11747.7	6566.1	-2223.1	-106.7
	11	235.2	27326.9	-13413.8	6611.0	-2160.1	-106.2
	12	-943.8	-15554.5	29856.3	-918.2	-2271.0	-133.8
	13	-645.6	-15951.0	29573.0	-1300.3	-2264.4	-130.0
	14	-680.1	-27938.2	53011.6	-7234.1	-734.0	-49.1
	15	-381.9	-28334.6	52728.4	-7616.2	-727.4	-45.4
	16	-863.6	-9163.9	24302.8	-768.5	-2061.1	-132.0
	17	-565.4	-9560.4	24019.6	-1150.6	-2054.5	-128.2
	18	-599.9	-21547.6	47458.2	-7084.4	-524.1	-47.3
	19	-301.7	-21944.0	47174.9	-7466.6	-517.5	-43.6
	20	-267.6	-26150.2	71934.2	-13624.6	2068.8	108.8
	21	-243.5	-24233.1	70268.1	-13579.7	2131.8	109.4
	22	96.3	-14547.7	66381.0	-13213.3	2878.0	162.9
	23	120.4	-12630.5	64714.9	-13168.4	2941.0	163.4
	24	726.3	-27471.7	70990.0	-14898.4	2090.9	121.3
	25	750.4	-25554.5	69323.9	-14853.5	2153.9	121.9
	26	1090.3	-15869.2	65436.8	-14487.0	2900.1	175.3
	27	1114.3	-13952.0	63770.7	-14442.1	2963.1	175.9
	28	269.3	23120.6	11345.5	453.0	426.3	46.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	29	567.5	22724.2	11062.3	70.9	432.9	50.0
	30	533.1	10737.0	34500.9	-5863.0	1963.2	130.9
	31	831.2	10340.5	34217.6	-6245.1	1969.8	134.6
	32	349.5	29511.3	5792.0	602.7	636.2	48.1
	33	647.7	29114.8	5508.8	220.5	642.8	51.8
	34	613.2	17127.6	28947.4	-5713.3	2173.1	132.7
	35	911.4	16731.2	28664.1	-6095.4	2179.7	136.4
1006	4	-1769.6	41513.2	-14021.8	-9397.5	-4544.9	-299.8
	5	-1774.0	41474.4	-8560.5	-9852.8	-4577.8	-294.8
	6	-1240.6	46898.4	31022.5	-16853.6	-3479.7	-222.5
	7	-1245.1	46859.6	36483.8	-17308.9	-3512.7	-217.6
	8	-1793.7	38387.1	-15665.6	-8456.1	-4434.6	-284.2
	9	-1798.2	38348.3	-10204.3	-8911.5	-4467.6	-279.2
	10	-1264.8	43772.3	29378.7	-15912.3	-3369.5	-206.9
	11	-1269.3	43733.5	34840.0	-16367.6	-3402.4	-202.0
	12	-1344.1	7194.4	-48411.6	5506.5	-2981.3	-214.5
	13	-1351.4	6256.6	-48904.7	5788.9	-2948.3	-209.8
	14	-447.7	-15937.4	-26889.7	10087.5	-642.0	-63.9
	15	-455.0	-16875.2	-27382.9	10369.9	-609.0	-59.2
	16	-1359.0	7065.2	-30207.2	3988.7	-3091.1	-198.1
	17	-1366.2	6127.3	-30700.3	4271.1	-3058.0	-193.4
	18	-462.6	-16066.7	-8685.3	8569.7	-751.8	-47.5
	19	-469.8	-17004.5	-9178.5	8852.1	-718.7	-42.8
	20	1218.4	-35592.9	57717.6	5872.4	3252.8	202.2
	21	1214.0	-35631.7	63179.0	5417.0	3219.9	207.1
	22	1747.3	-30207.8	102761.9	-1583.8	4317.9	279.5
	23	1742.9	-30246.5	108223.3	-2039.1	4285.0	284.4
	24	1194.2	-38719.1	56073.8	6813.7	3363.0	217.8
	25	1189.8	-38757.8	61535.1	6358.4	3330.1	222.7
	26	1723.2	-33333.9	101118.1	-642.5	4428.2	295.1
	27	1718.7	-33372.7	106579.5	-1097.8	4395.2	300.0
	28	419.0	25145.0	101736.1	-19347.3	569.1	43.0
	29	411.7	24207.2	101243.0	-19064.9	602.2	47.7
	30	1315.4	2013.2	123258.0	-14766.4	2908.4	193.6
	31	1308.1	1075.4	122764.8	-14484.0	2941.5	198.3
	32	404.1	25015.8	119940.5	-20865.1	459.3	59.4
	33	396.9	24077.9	119447.4	-20582.7	492.4	64.1
	34	1300.5	1883.9	141462.4	-16284.1	2798.6	210.0
	35	1293.3	946.1	140969.2	-16001.8	2831.7	214.7
1005	4	-13910.0	11.9	76309.5	-25.8	1645.0	-27.6
	5	-13826.6	21.8	75190.4	-44.6	1733.3	-27.5
	6	-10601.7	135.7	58891.6	-216.5	2697.8	-18.1
	7	-10518.4	145.6	57772.5	-235.4	2786.1	-18.0
	8	-13477.9	17.1	74145.2	-41.6	1709.9	-25.6
	9	-13394.6	27.1	73026.1	-60.4	1798.2	-25.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	10	-10169.7	140.9	56727.3	-232.3	2762.7	-16.1
	11	-10086.3	150.9	55608.2	-251.1	2850.9	-16.0
	12	-12050.1	-196.3	57447.7	304.0	-1636.4	-23.4
	13	-11920.5	-194.7	56798.4	299.3	-1617.0	-22.8
	14	-7193.9	-242.6	23392.7	381.8	-3327.6	-10.8
	15	-7064.2	-241.0	22743.5	377.1	-3308.1	-10.2
	16	-11772.2	-163.2	53717.3	241.2	-1342.3	-23.0
	17	-11642.6	-161.6	53068.1	236.4	-1322.8	-22.4
	18	-6916.0	-209.5	19662.4	319.0	-3033.4	-10.3
	19	-6786.4	-207.9	19013.1	314.3	-3013.9	-9.7
	20	2277.4	-142.4	-37207.1	233.7	-3992.1	14.6
	21	2360.8	-132.5	-38326.2	214.8	-3903.9	14.7
	22	5585.7	-18.6	-54625.0	43.0	-2939.4	24.1
	23	5669.0	-8.7	-55744.1	24.1	-2851.1	24.2
	24	2709.5	-137.1	-39371.3	217.9	-3927.2	16.6
	25	2792.8	-127.2	-40490.4	199.1	-3839.0	16.7
	26	6017.7	-13.3	-56789.2	27.2	-2874.5	26.1
	27	6101.1	-3.4	-57908.3	8.4	-2786.2	26.2
	28	-1022.5	216.4	-612.0	-331.7	1872.8	8.3
	29	-892.9	218.0	-1261.2	-336.4	1892.2	8.9
	30	3833.7	170.1	-34666.9	-253.9	181.6	21.0
	31	3963.3	171.7	-35316.2	-258.6	201.1	21.6
	32	-744.7	249.5	-4342.3	-394.5	2167.0	8.7
	33	-615.1	251.1	-4991.6	-399.3	2186.4	9.3
	34	4111.5	203.2	-38397.3	-316.7	475.8	21.4
	35	4241.2	204.8	-39046.6	-321.4	495.3	22.0
1004	4	2082.8	18016.8	-2906.3	-12479.5	-17275.8	-265.4
	5	2019.6	21295.3	643.5	-14257.0	-17280.7	-261.5
	6	7517.0	36701.6	25486.1	-26301.4	-9984.0	-167.4
	7	7453.8	39980.1	29035.9	-28079.0	-9988.9	-163.5
	8	2448.0	17352.8	349.4	-11311.9	-16742.0	-250.3
	9	2384.8	20631.3	3899.1	-13089.5	-16746.9	-246.4
	10	7882.2	36037.6	28741.8	-25133.9	-9450.2	-152.3
	11	7819.0	39316.1	32291.5	-26911.4	-9455.1	-148.4
	12	-3992.7	-31590.8	-9668.7	25853.5	-15202.4	-232.6
	13	-3883.2	-31790.0	-8692.0	26203.7	-15042.3	-228.0
	14	-3938.8	-51949.2	15500.4	42760.5	-6298.5	-107.1
	15	-3829.2	-52148.4	16477.1	43110.7	-6138.3	-102.5
	16	-4203.4	-20662.5	2163.8	19928.3	-15218.8	-219.6
	17	-4093.8	-20861.7	3140.4	20278.5	-15058.6	-215.1
	18	-4149.5	-41020.9	27332.8	36835.3	-6314.8	-94.1
	19	-4039.9	-41220.1	28309.5	37185.5	-6154.7	-89.6
	20	2262.6	-49844.4	80990.7	43877.2	12404.0	153.0
	21	2199.4	-46565.9	84540.4	42099.6	12399.1	156.9
	22	7696.8	-31159.6	109383.1	30055.2	19695.8	251.0
	23	7633.6	-27881.1	112932.8	28277.7	19690.9	254.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	24	2627.7	-50508.4	84246.3	45044.8	12937.8	168.1
	25	2564.5	-47229.9	87796.0	43267.2	12932.9	172.0
	26	8062.0	-31823.6	112638.7	31222.8	20229.7	266.1
	27	7998.8	-28545.1	116188.4	29445.2	20224.7	270.0
	28	14121.5	30691.7	84972.6	-20219.7	9103.6	94.2
	29	14231.0	30492.5	85949.3	-19869.5	9263.8	98.7
	30	14175.4	10333.4	110141.7	-3312.8	18007.6	219.7
	31	14285.0	10134.2	111118.4	-2962.5	18167.7	224.2
	32	13910.8	41620.1	96805.1	-26145.0	9087.3	107.1
	33	14020.4	41420.9	97781.8	-25794.7	9247.4	111.7
	34	13964.7	21261.7	121974.1	-9238.0	17991.2	232.6
	35	14074.3	21062.5	122950.8	-8887.7	18151.3	237.2
1003	4	-942.3	7993.0	8380.5	-4171.7	-2589.8	-138.7
	5	-947.9	8777.9	11173.7	-4117.3	-2583.1	-137.4
	6	-535.4	9767.1	27015.3	-4639.5	-1798.4	-97.8
	7	-541.0	10551.9	29808.5	-4585.1	-1791.7	-96.5
	8	-923.3	8111.0	6360.8	-3959.8	-2513.7	-130.0
	9	-928.9	8895.9	9154.0	-3905.4	-2507.0	-128.7
	10	-516.3	9885.1	24995.6	-4427.6	-1722.4	-89.2
	11	-521.9	10669.9	27788.8	-4373.2	-1715.6	-87.9
	12	-903.3	-1724.6	-8710.9	1309.3	-2017.4	-104.0
	13	-897.6	-1689.2	-9316.8	1372.9	-1994.6	-101.4
	14	-474.1	-7530.5	-1326.8	5530.3	-751.5	-34.8
	15	-468.4	-7495.1	-1932.7	5593.8	-728.6	-32.2
	16	-921.9	891.6	599.8	1490.7	-1995.0	-99.7
	17	-916.2	927.0	-6.1	1554.2	-1972.1	-97.1
	18	-492.8	-4914.2	7983.9	5711.7	-729.0	-30.5
	19	-487.1	-4878.8	7378.0	5775.2	-706.2	-27.9
	20	488.1	-11359.9	32994.1	9898.3	1630.0	92.1
	21	482.5	-10575.0	35787.4	9952.7	1636.7	93.4
	22	895.1	-9585.8	51628.9	9430.5	2421.4	132.9
	23	889.5	-8800.9	54422.1	9484.9	2428.1	134.2
	24	507.1	-11241.9	30974.5	10110.2	1706.0	100.7
	25	501.5	-10457.0	33767.7	10164.6	1712.8	102.0
	26	914.1	-9467.8	49609.3	9642.4	2497.4	141.6
	27	908.5	-8682.9	52402.5	9696.8	2504.2	142.8
	28	453.3	4188.9	53405.0	-250.1	620.6	32.1
	29	459.0	4224.3	52799.1	-186.6	643.4	34.7
	30	882.4	-1617.0	60789.1	3970.9	1886.5	101.3
	31	888.1	-1581.5	60183.2	4034.4	1909.3	103.9
	32	434.6	6805.1	62715.7	-68.7	643.0	36.4
	33	440.3	6840.6	62109.8	-5.2	665.8	39.0
	34	863.7	999.3	70099.8	4152.2	1909.0	105.6
	35	869.4	1034.7	69493.9	4215.8	1931.8	108.2
1002	4	-1744.2	4422.2	6921.6	-6990.1	-3333.0	-472.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	5	-1762.9	4345.1	7059.4	-7569.7	-3378.6	-464.7
	6	-854.3	-371.9	23712.3	-11760.0	-1725.9	-347.0
	7	-873.0	-449.1	23850.1	-12339.6	-1771.5	-339.2
	8	-1801.9	4393.7	6622.0	-7265.8	-3304.5	-453.8
	9	-1820.6	4316.5	6759.8	-7845.4	-3350.1	-446.0
	10	-912.0	-400.4	23412.7	-12035.7	-1697.4	-328.3
	11	-930.7	-477.6	23550.5	-12615.3	-1743.0	-320.5
	12	-1887.0	4308.3	-912.7	1413.3	-3444.6	-345.0
	13	-1904.3	4299.8	-1002.6	1330.6	-3436.0	-339.4
	14	-1121.0	-652.1	9390.5	3349.4	-1987.3	-108.0
	15	-1138.3	-660.7	9300.6	3266.7	-1978.7	-102.4
	16	-1949.4	4051.0	-453.4	-518.7	-3596.6	-319.1
	17	-1966.7	4042.5	-543.3	-601.4	-3588.1	-313.5
	18	-1183.4	-909.4	9849.8	1417.4	-2139.3	-82.1
	19	-1200.7	-918.0	9759.9	1334.7	-2130.8	-76.5
	20	809.3	-12112.6	41265.6	-536.4	1524.7	317.5
	21	790.5	-12189.8	41403.4	-1116.0	1479.1	325.2
	22	1699.1	-16906.8	58056.3	-5306.3	3131.8	443.0
	23	1680.4	-16984.0	58194.1	-5885.9	3086.2	450.8
	24	751.6	-12141.1	40966.0	-812.1	1553.2	336.1
	25	732.8	-12218.3	41103.8	-1391.7	1507.6	343.9
	26	1641.4	-16935.3	57756.7	-5582.0	3160.3	461.7
	27	1622.7	-17012.5	57894.5	-6161.6	3114.7	469.4
	28	1079.2	-11672.3	55056.2	-14486.4	1912.4	73.4
	29	1061.9	-11680.8	54966.3	-14569.1	1921.0	79.0
	30	1845.2	-16632.7	65359.4	-12550.3	3369.7	310.4
	31	1827.9	-16641.3	65269.5	-12633.0	3378.3	316.0
	32	1016.8	-11929.6	55515.4	-16418.4	1760.4	99.3
	33	999.5	-11938.1	55425.6	-16501.1	1768.9	104.9
	34	1782.8	-16890.0	65818.6	-14482.3	3217.7	336.3
	35	1765.5	-16898.6	65728.8	-14565.0	3226.2	341.9
1001	4	-3171.1	14412.6	64781.2	-2519.7	-8552.2	254.1
	5	-2879.5	15999.2	67969.7	-2534.8	-8519.6	252.0
	6	3928.6	23551.6	101717.1	1604.6	-3606.3	230.1
	7	4220.2	25138.1	104905.6	1589.5	-3573.7	228.0
	8	4990.1	14371.7	59884.3	-2788.0	-8517.1	251.1
	9	5281.7	15958.2	63072.8	-2803.1	-8484.5	249.0
	10	12089.9	23510.6	96820.1	1336.3	-3571.1	227.1
	11	12381.5	25097.2	100008.6	1321.2	-3538.5	225.0
	12	-7102.5	-5162.4	-6154.2	-2052.6	-8406.1	121.2
	13	-4654.2	-5174.7	-7623.3	-2133.1	-8395.6	120.3
	14	-5529.3	-11203.2	-25362.5	2537.6	-3312.8	-18.0
	15	-3081.0	-11215.5	-26831.6	2457.1	-3302.3	-18.9
	16	-6130.6	126.1	4474.1	-2102.9	-8297.3	114.2
	17	-3682.2	113.9	3005.0	-2183.4	-8286.8	113.3
	18	-4557.3	-5914.6	-14734.3	2487.2	-3204.1	-25.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	19	-2109.0	-5926.9	-16203.3	2406.8	-3193.5	-25.9
	20	2072.9	-5723.3	753.4	12780.7	8425.4	-209.8
	21	2364.5	-4136.8	3941.8	12765.6	8458.0	-211.9
	22	9172.6	3415.6	37689.2	16905.1	13371.3	-233.9
	23	9464.2	5002.2	40877.7	16890.0	13404.0	-235.9
	24	10234.1	-5764.3	-4143.6	12512.5	8460.5	-212.8
	25	10525.7	-4177.7	-955.1	12497.4	8493.2	-214.9
	26	17333.9	3374.7	32792.3	16636.8	13406.5	-236.9
	27	17625.5	4961.3	35980.8	16621.7	13439.1	-239.0
	28	16563.3	25300.8	116965.3	11695.2	8080.4	41.0
	29	19011.7	25288.5	115496.2	11614.7	8091.0	40.1
	30	18136.5	19260.0	97757.0	16285.3	13173.7	-98.1
	31	20584.9	19247.7	96287.9	16204.9	13184.2	-99.0
	32	17535.3	30589.4	127593.6	11644.9	8189.2	34.1
	33	19983.7	30577.1	126124.5	11564.4	8199.7	33.2
	34	19108.5	24548.6	108385.3	16235.0	13282.5	-105.1
	35	21556.9	24536.3	106916.2	16154.5	13293.0	-106.0
67	4	-2491.5	-8136.6	17452.3	13801.8	-4205.4	-145.3
	5	-2461.4	-8066.2	17505.1	13684.2	-4144.8	-143.8
	6	-2039.4	-5381.9	17836.9	9112.9	-3345.6	-98.2
	7	-2009.2	-5311.6	17889.7	8995.3	-3285.1	-96.7
	8	-2430.9	-7628.7	17502.4	12943.5	-4092.9	-136.5
	9	-2400.7	-7558.3	17555.2	12825.9	-4032.4	-135.0
	10	-1978.7	-4874.0	17887.0	8254.7	-3233.2	-89.4
	11	-1948.6	-4803.7	17939.7	8137.1	-3172.7	-87.8
	12	-1982.7	-6760.9	15994.5	11436.5	-3205.0	-117.0
	13	-1964.5	-6608.5	16009.5	11179.0	-3171.3	-114.3
	14	-1082.5	-2909.0	15167.2	4860.0	-1461.1	-46.7
	15	-1064.3	-2756.7	15182.2	4602.5	-1427.4	-44.0
	16	-1882.2	-6526.4	16170.3	11044.4	-3003.3	-111.9
	17	-1864.0	-6374.0	16185.4	10787.0	-2969.6	-109.3
	18	-982.0	-2674.5	15343.1	4468.0	-1259.4	-41.6
	19	-963.8	-2522.2	15358.1	4210.5	-1225.7	-39.0
	20	509.2	4702.9	14694.7	-8119.7	1607.7	89.0
	21	539.4	4773.2	14747.5	-8237.3	1668.2	90.5
	22	961.3	7457.5	15079.3	-12808.6	2467.4	136.1
	23	991.5	7527.9	15132.1	-12926.2	2527.9	137.6
	24	569.9	5210.8	14744.8	-8978.0	1720.2	97.8
	25	600.0	5281.1	14797.6	-9095.6	1780.7	99.3
	26	1022.0	7965.4	15129.4	-13666.8	2579.9	145.0
	27	1052.1	8035.8	15182.1	-13784.5	2640.4	146.5
	28	-475.6	2421.4	17276.4	-4193.1	-339.3	40.2
	29	-457.4	2573.7	17291.4	-4450.6	-305.6	42.8
	30	424.6	6273.2	16449.1	-10769.6	1404.6	110.4
	31	442.8	6425.6	16464.1	-11027.1	1438.4	113.1
	32	-375.1	2655.9	17452.3	-4585.2	-137.6	45.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	33	-356.9	2808.2	17467.3	-4842.7	-103.9	47.8
	34	525.1	6507.7	16625.0	-11161.6	1606.3	115.5
	35	543.3	6660.1	16640.0	-11419.1	1640.1	118.1
58	4	-549.1	-937.8	85449.0	792.4	-1468.2	-48.6
	5	-523.3	-935.7	85623.3	793.8	-1482.1	-47.3
	6	-293.8	-731.7	83091.0	381.8	-674.8	-83.9
	7	-268.0	-729.6	83265.3	383.2	-688.7	-82.6
	8	-542.9	-934.7	85925.4	779.5	-1491.1	-49.1
	9	-517.2	-932.6	86099.7	780.9	-1505.0	-47.8
	10	-287.7	-728.6	83567.4	368.9	-697.7	-84.4
	11	-261.9	-726.4	83741.6	370.3	-711.6	-83.1
	12	-567.0	-1414.0	86276.2	1734.9	-1569.7	37.1
	13	-565.2	-1413.0	86419.1	1731.0	-1576.6	37.0
	14	-303.2	-1614.8	84658.5	2137.3	-870.3	76.7
	15	-301.4	-1613.8	84801.4	2133.5	-877.2	76.5
	16	-481.1	-1406.9	86857.1	1739.4	-1615.9	41.4
	17	-479.3	-1405.9	87000.0	1735.5	-1622.7	41.3
	18	-217.3	-1607.7	85239.5	2141.8	-916.5	81.0
	19	-215.4	-1606.7	85382.4	2137.9	-923.3	80.9
	20	330.4	-1607.2	80056.8	2133.9	863.2	83.4
	21	356.2	-1605.1	80231.0	2135.2	849.3	84.7
	22	585.7	-1401.1	77698.7	1723.3	1656.5	48.0
	23	611.4	-1398.9	77873.0	1724.6	1642.7	49.3
	24	336.5	-1604.0	80533.1	2121.0	840.3	82.8
	25	362.3	-1601.9	80707.4	2122.3	826.4	84.1
	26	591.8	-1397.9	78175.1	1710.4	1633.6	47.5
	27	617.6	-1395.8	78349.4	1711.7	1619.8	48.8
	28	283.9	-726.9	78416.0	366.2	1074.9	-80.6
	29	285.8	-725.9	78558.9	362.4	1068.0	-80.8
	30	547.7	-927.7	76798.3	768.7	1774.3	-41.0
	31	549.6	-926.7	76941.3	764.8	1767.5	-41.2
	32	369.9	-719.8	78997.0	370.7	1028.7	-76.3
	33	371.7	-718.8	79139.9	366.8	1021.9	-76.5
	34	633.7	-920.6	77379.3	773.1	1728.1	-36.7
	35	635.5	-919.6	77522.2	769.3	1721.3	-36.9
57	4	-564.2	-831.8	86038.7	566.5	-1504.4	-48.6
	5	-541.2	-827.7	86230.6	567.8	-1521.4	-47.3
	6	-301.9	-546.6	83402.3	-5.5	-688.0	-83.9
	7	-278.9	-542.5	83594.2	-4.2	-705.0	-82.6
	8	-561.3	-831.8	86522.2	555.9	-1534.1	-49.1
	9	-538.3	-827.7	86714.1	557.3	-1551.1	-47.8
	10	-299.0	-546.5	83885.8	-16.1	-717.7	-84.4
	11	-276.0	-542.4	84077.7	-14.7	-734.7	-83.1
	12	-590.6	-1520.0	86795.3	1928.0	-1624.0	37.1
	13	-589.7	-1520.0	86940.4	1924.9	-1632.9	37.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	14	-328.8	-1820.6	84854.3	2527.6	-918.1	76.7
	15	-327.9	-1820.6	84999.4	2524.4	-927.0	76.5
	16	-513.9	-1506.4	87435.1	1932.5	-1680.6	41.4
	17	-513.1	-1506.4	87580.2	1929.3	-1689.5	41.3
	18	-252.2	-1806.9	85494.1	2532.0	-974.8	81.0
	19	-251.3	-1806.9	85639.2	2528.8	-983.7	80.9
	20	308.4	-1833.7	79568.7	2565.0	848.4	83.4
	21	331.4	-1829.6	79760.6	2566.3	831.4	84.7
	22	570.7	-1548.5	76932.3	1993.0	1664.8	48.0
	23	593.7	-1544.4	77124.2	1994.3	1647.8	49.3
	24	311.3	-1833.7	80052.2	2554.4	818.7	82.8
	25	334.3	-1829.6	80244.1	2555.7	801.7	84.1
	26	573.6	-1548.4	77415.8	1982.4	1635.1	47.5
	27	596.6	-1544.3	77607.7	1983.7	1618.1	48.8
	28	283.7	-569.2	78007.3	21.4	1097.4	-80.6
	29	284.6	-569.2	78152.3	18.3	1088.5	-80.8
	30	545.4	-869.8	76066.3	621.0	1803.2	-41.0
	31	546.3	-869.8	76211.3	617.8	1794.3	-41.2
	32	360.3	-555.6	78647.1	25.8	1040.7	-76.3
	33	361.2	-555.6	78792.1	22.7	1031.8	-76.5
	34	622.1	-856.1	76706.1	625.4	1746.6	-36.7
	35	623.0	-856.1	76851.1	622.2	1737.7	-36.9
56	4	-563.1	-707.0	87453.6	320.8	-1502.7	-48.6
	5	-540.0	-701.2	87722.6	322.8	-1519.5	-47.3
	6	-300.8	-343.0	83799.8	-413.3	-686.8	-83.9
	7	-277.7	-337.2	84068.8	-411.2	-703.7	-82.6
	8	-560.1	-710.1	88123.9	312.7	-1532.2	-49.1
	9	-537.0	-704.3	88392.9	314.7	-1549.1	-47.8
	10	-297.9	-346.2	84470.1	-421.4	-716.3	-84.4
	11	-274.8	-340.3	84739.1	-419.4	-733.2	-83.1
	12	-589.5	-1605.3	88603.9	2100.1	-1621.9	37.1
	13	-588.6	-1606.3	88805.0	2097.6	-1630.7	37.0
	14	-327.7	-2004.6	86004.0	2895.6	-916.2	76.7
	15	-326.8	-2005.6	86205.1	2893.1	-925.1	76.5
	16	-512.5	-1585.9	89500.5	2106.8	-1678.2	41.4
	17	-511.7	-1586.9	89701.6	2104.4	-1687.0	41.3
	18	-250.7	-1985.2	86900.6	2902.3	-972.5	81.0
	19	-249.8	-1986.2	87101.7	2899.9	-981.4	80.9
	20	309.7	-2038.0	78787.2	2972.5	849.5	83.4
	21	332.8	-2032.1	79056.2	2974.5	832.7	84.7
	22	571.9	-1674.0	75133.4	2238.4	1665.4	48.0
	23	595.0	-1668.2	75402.4	2240.4	1648.5	49.3
	24	312.6	-2041.1	79457.5	2964.3	820.0	82.8
	25	335.7	-2035.3	79726.5	2966.4	803.1	84.1
	26	574.9	-1677.2	75803.7	2230.3	1635.9	47.5
	27	598.0	-1671.3	76072.7	2232.3	1619.0	48.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	28	284.7	-392.2	76424.6	-346.8	1097.7	-80.6
	29	285.6	-393.1	76625.7	-349.2	1088.8	-80.8
	30	546.5	-791.4	73824.7	448.7	1803.4	-41.0
	31	547.4	-792.4	74025.8	446.3	1794.5	-41.2
	32	361.7	-372.7	77321.2	-340.0	1041.4	-76.3
	33	362.6	-373.7	77522.3	-342.5	1032.6	-76.5
	34	623.5	-772.0	74721.3	455.5	1747.1	-36.7
	35	624.4	-773.0	74922.4	453.0	1738.2	-36.9
55	4	-563.3	-581.6	88940.4	74.6	-1503.0	-48.6
	5	-540.2	-574.2	89285.5	77.7	-1519.9	-47.3
	6	-301.0	-138.5	84255.4	-822.4	-687.1	-83.9
	7	-277.9	-131.2	84600.5	-819.3	-704.0	-82.6
	8	-560.3	-587.9	89801.3	68.9	-1532.5	-49.1
	9	-537.2	-580.5	90146.5	72.0	-1549.4	-47.8
	10	-298.1	-144.9	85116.4	-828.1	-716.6	-84.4
	11	-275.0	-137.5	85461.5	-825.0	-733.5	-83.1
	12	-589.7	-1690.3	90495.1	2272.2	-1622.3	37.1
	13	-588.8	-1692.2	90753.3	2270.5	-1631.1	37.0
	14	-327.9	-2188.3	87229.5	3263.7	-916.6	76.7
	15	-327.0	-2190.2	87487.8	3262.0	-925.4	76.5
	16	-512.8	-1665.7	91645.5	2282.6	-1678.6	41.4
	17	-511.9	-1667.6	91903.8	2280.9	-1687.4	41.3
	18	-251.0	-2163.7	88380.0	3274.0	-972.9	81.0
	19	-250.1	-2165.6	88638.3	3272.3	-981.7	80.9
	20	309.4	-2241.6	78055.3	3379.5	849.3	83.4
	21	332.5	-2234.2	78400.5	3382.6	832.4	84.7
	22	571.7	-1798.6	73370.4	2482.5	1665.3	48.0
	23	594.8	-1791.2	73715.5	2485.6	1648.4	49.3
	24	312.4	-2248.0	78916.3	3373.8	819.8	82.8
	25	335.4	-2240.6	79261.4	3376.9	802.9	84.1
	26	574.6	-1804.9	74231.4	2476.8	1635.8	47.5
	27	597.7	-1797.6	74576.5	2479.9	1618.9	48.8
	28	284.5	-213.5	74878.6	-717.8	1097.6	-80.6
	29	285.4	-215.4	75136.9	-719.5	1088.7	-80.8
	30	546.3	-711.5	71613.1	273.6	1803.3	-41.0
	31	547.2	-713.5	71871.4	271.9	1794.4	-41.2
	32	361.5	-188.9	76029.0	-707.5	1041.3	-76.3
	33	362.4	-190.8	76287.3	-709.2	1032.4	-76.5
	34	623.3	-686.9	72763.5	284.0	1747.0	-36.7
	35	624.2	-688.8	73021.8	282.3	1738.1	-36.9
54	4	-564.2	-457.4	90522.1	-170.1	-1503.4	-48.6
	5	-541.1	-448.6	90941.5	-165.7	-1520.2	-47.3
	6	-301.9	64.9	84815.6	-1230.6	-687.6	-83.9
	7	-278.8	73.8	85235.0	-1226.2	-704.5	-82.6
	8	-561.2	-467.0	91569.7	-173.4	-1532.9	-49.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	9	-538.1	-458.1	91989.1	-169.0	-1549.7	-47.8
	10	-298.9	55.4	85863.2	-1233.9	-717.1	-84.4
	11	-275.8	64.2	86282.6	-1229.5	-734.0	-83.1
	12	-590.4	-1776.7	92466.6	2446.1	-1622.5	37.1
	13	-589.5	-1779.5	92780.9	2445.2	-1631.3	37.0
	14	-328.4	-2373.4	88532.0	3633.6	-916.8	76.7
	15	-327.5	-2376.3	88846.3	3632.6	-925.7	76.5
	16	-513.5	-1747.1	93864.7	2460.8	-1678.7	41.4
	17	-512.6	-1750.0	94179.0	2459.8	-1687.6	41.3
	18	-251.4	-2343.9	89930.0	3648.2	-973.1	81.0
	19	-250.5	-2346.7	90244.3	3647.2	-981.9	80.9
	20	309.3	-2446.5	77406.7	3787.9	848.8	83.4
	21	332.4	-2437.7	77826.1	3792.3	831.9	84.7
	22	571.6	-1924.2	71700.2	2727.4	1664.6	48.0
	23	594.7	-1915.3	72119.6	2731.8	1647.7	49.3
	24	312.3	-2456.1	78454.3	3784.6	819.3	82.8
	25	335.4	-2447.2	78873.7	3789.0	802.4	84.1
	26	574.6	-1933.7	72747.8	2724.2	1635.1	47.5
	27	597.7	-1924.9	73167.2	2728.5	1618.2	48.8
	28	284.0	-35.6	73445.0	-1088.8	1096.7	-80.6
	29	284.9	-38.4	73759.3	-1089.8	1087.9	-80.8
	30	546.0	-632.3	69510.4	98.6	1802.4	-41.0
	31	546.9	-635.2	69824.6	97.6	1793.5	-41.2
	32	361.0	-6.0	74843.0	-1074.2	1040.5	-76.3
	33	361.8	-8.9	75157.3	-1075.1	1031.6	-76.5
	34	623.0	-602.8	70908.4	113.2	1746.1	-36.7
	35	623.9	-605.6	71222.7	112.3	1737.3	-36.9
53	4	-610.9	-374.0	94582.0	-371.3	-1546.0	-48.6
	5	-587.4	-363.7	95033.3	-365.4	-1562.2	-47.3
	6	-351.3	227.9	88322.9	-1595.7	-737.3	-83.9
	7	-327.8	238.2	88774.1	-1589.9	-753.5	-82.6
	8	-608.0	-386.6	95663.3	-372.2	-1575.0	-49.1
	9	-584.5	-376.3	96114.5	-366.3	-1591.2	-47.8
	10	-348.3	215.3	89404.1	-1596.6	-766.2	-84.4
	11	-324.8	225.6	89855.4	-1590.8	-782.4	-83.1
	12	-637.8	-1903.6	96467.9	2663.8	-1664.2	37.1
	13	-636.9	-1907.4	96792.3	2663.5	-1672.9	37.0
	14	-378.5	-2598.8	91952.2	4046.9	-964.3	76.7
	15	-377.6	-2602.6	92276.6	4046.6	-973.0	76.5
	16	-559.4	-1869.5	97972.2	2683.3	-1718.2	41.4
	17	-558.5	-1873.3	98296.6	2683.0	-1726.9	41.3
	18	-300.2	-2564.7	93456.5	4066.4	-1018.3	81.0
	19	-299.3	-2568.5	93780.9	4066.1	-1027.0	80.9
	20	253.1	-2691.4	79529.7	4239.2	787.0	83.4
	21	276.6	-2681.1	79981.0	4245.0	770.8	84.7
	22	512.8	-2089.5	73270.6	3014.7	1595.7	48.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	23	536.3	-2079.3	73721.9	3020.6	1579.5	49.3
	24	256.1	-2704.0	80611.0	4238.3	758.0	82.8
	25	279.6	-2693.8	81062.3	4244.1	741.8	84.1
	26	515.8	-2102.1	74351.9	3013.8	1566.7	47.5
	27	539.3	-2091.9	74803.1	3019.7	1550.5	48.8
	28	227.6	102.7	75604.2	-1417.7	1031.6	-80.6
	29	228.5	98.9	75928.6	-1418.0	1022.9	-80.8
	30	486.8	-592.5	71088.5	-34.6	1731.5	-41.0
	31	487.7	-596.3	71412.9	-34.9	1722.8	-41.2
	32	305.9	136.8	77108.5	-1398.2	977.5	-76.3
	33	306.8	133.0	77432.9	-1398.5	968.8	-76.5
	34	565.2	-558.4	72592.8	-15.1	1677.4	-36.7
	35	566.1	-562.2	72917.2	-15.4	1668.7	-36.9
52	4	-470.5	-203.4	95137.3	-674.9	-1405.2	-48.6
	5	-447.4	-191.6	95787.4	-667.6	-1422.0	-47.3
	6	-208.9	484.2	86296.0	-2076.5	-590.3	-83.9
	7	-185.7	496.1	86946.1	-2069.2	-607.2	-82.6
	8	-467.6	-219.8	96821.4	-672.8	-1434.6	-49.1
	9	-444.4	-208.0	97471.5	-665.5	-1451.4	-47.8
	10	-205.9	467.8	87980.1	-2074.3	-619.8	-84.4
	11	-182.8	479.7	88630.3	-2067.0	-636.6	-83.1
	12	-497.2	-1962.1	98631.5	2814.7	-1524.4	37.1
	13	-496.4	-1967.0	99136.7	2815.4	-1533.2	37.0
	14	-236.2	-2765.1	92930.2	4411.0	-819.7	76.7
	15	-235.3	-2770.0	93435.5	4411.7	-828.5	76.5
	16	-420.1	-1922.6	100798.8	2839.1	-1580.4	41.4
	17	-419.2	-1927.5	101304.0	2839.7	-1589.2	41.3
	18	-159.0	-2725.6	95097.5	4435.4	-875.7	81.0
	19	-158.2	-2730.5	95602.7	4436.0	-884.6	80.9
	20	399.6	-2880.1	76133.0	4646.0	943.8	83.4
	21	422.8	-2868.2	76783.2	4653.3	927.0	84.7
	22	661.3	-2192.4	67291.7	3244.4	1758.6	48.0
	23	684.4	-2180.6	67941.9	3251.7	1741.8	49.3
	24	402.6	-2896.5	77817.1	4648.1	914.3	82.8
	25	425.7	-2884.7	78467.3	4655.4	897.5	84.1
	26	664.2	-2208.9	68975.8	3246.6	1729.2	47.5
	27	687.4	-2197.0	69626.0	3253.9	1712.4	48.8
	28	375.0	330.0	69160.5	-1857.1	1191.7	-80.6
	29	375.9	325.1	69665.8	-1856.4	1182.9	-80.8
	30	636.1	-473.0	63459.3	-260.8	1896.4	-41.0
	31	636.9	-477.9	63964.5	-260.1	1887.6	-41.2
	32	452.2	369.6	71327.8	-1832.7	1135.7	-76.3
	33	453.0	364.7	71833.0	-1832.1	1126.9	-76.5
	34	713.2	-433.4	65626.5	-236.4	1840.4	-36.7
	35	714.1	-438.3	66131.8	-235.8	1831.6	-36.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

51	4	-546.6	9.1	89188.3	-1007.4	-1493.2	-48.6
	5	-524.4	22.2	89847.2	-998.5	-1511.2	-47.3
	6	-277.9	771.8	80228.5	-2563.3	-664.4	-83.9
	7	-255.6	784.8	80887.4	-2554.5	-682.4	-82.6
	8	-543.6	-10.1	90848.5	-1003.2	-1523.5	-49.1
	9	-521.4	3.0	91507.4	-994.3	-1541.6	-47.8
	10	-274.8	752.6	81888.8	-2559.2	-694.7	-84.4
	11	-252.6	765.6	82547.6	-2550.3	-712.7	-83.1
	12	-570.5	-1947.0	92448.4	2875.4	-1613.2	37.1
	13	-569.6	-1952.7	92946.4	2876.7	-1622.3	37.0
	14	-300.8	-2842.2	86443.8	4655.2	-896.1	76.7
	15	-299.9	-2848.0	86941.9	4656.5	-905.2	76.5
	16	-496.4	-1903.5	94644.7	2904.9	-1673.3	41.4
	17	-495.5	-1909.3	95142.8	2906.2	-1682.4	41.3
	18	-226.7	-2798.8	88640.2	4684.7	-956.3	81.0
	19	-225.8	-2804.5	89138.2	4686.0	-965.4	80.9
	20	352.2	-2975.0	69173.2	4925.2	897.0	83.4
	21	374.5	-2962.0	69832.1	4934.0	878.9	84.7
	22	621.0	-2212.3	60213.4	3369.2	1725.8	48.0
	23	643.2	-2199.3	60872.3	3378.0	1707.7	49.3
	24	355.2	-2994.2	70833.4	4929.3	866.6	82.8
	25	377.5	-2981.1	71492.3	4938.2	848.6	84.1
	26	624.0	-2231.5	61873.6	3373.4	1695.5	47.5
	27	646.3	-2218.5	62532.5	3382.2	1677.4	48.8
	28	325.5	595.1	62582.6	-2311.1	1149.6	-80.6
	29	326.4	589.4	63080.6	-2309.9	1140.5	-80.8
	30	595.1	-300.1	56578.0	-531.4	1866.6	-41.0
	31	596.0	-305.8	57076.1	-530.1	1857.5	-41.2
	32	399.6	638.6	64778.9	-2281.6	1089.4	-76.3
	33	400.5	632.9	65277.0	-2280.4	1080.3	-76.5
	34	669.2	-256.6	58774.4	-501.9	1806.5	-36.7
	35	670.1	-262.4	59272.4	-500.6	1797.4	-36.9
50	4	-239.1	599.5	36816.4	-1743.1	-1014.6	-48.6
	5	-215.5	613.1	37044.2	-1732.1	-1021.4	-47.3
	6	9.0	1439.1	31096.5	-3455.3	-306.9	-83.9
	7	32.6	1452.8	31324.3	-3444.3	-313.6	-82.6
	8	-238.1	578.7	36720.1	-1738.3	-1035.9	-49.1
	9	-214.5	592.3	36948.0	-1727.2	-1042.6	-47.8
	10	10.1	1418.3	31000.2	-3450.4	-328.2	-84.4
	11	33.7	1431.9	31228.1	-3439.4	-334.9	-83.1
	12	-270.4	-1553.8	51459.9	2531.1	-1115.8	37.1
	13	-270.1	-1560.1	51431.0	2532.6	-1122.2	37.0
	14	-25.8	-2540.0	58548.3	4492.1	-495.2	76.7
	15	-25.5	-2546.2	58519.4	4493.6	-501.5	76.5
	16	-191.7	-1508.4	52219.4	2567.9	-1138.2	41.4
	17	-191.4	-1514.6	52190.5	2569.3	-1144.6	41.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	18	52.9	-2494.5	59307.8	4528.9	-517.6	81.0
	19	53.2	-2500.8	59278.9	4530.3	-523.9	80.9
	20	576.2	-2687.7	60444.4	4793.5	1054.3	83.4
	21	599.8	-2674.1	60672.3	4804.6	1047.6	84.7
	22	824.3	-1848.1	54724.5	3081.3	1762.0	48.0
	23	847.9	-1834.4	54952.4	3092.4	1755.3	49.3
	24	577.3	-2708.6	60348.2	4798.4	1033.0	82.8
	25	600.9	-2694.9	60576.0	4809.5	1026.3	84.1
	26	825.4	-1868.9	54628.3	3086.2	1740.7	47.5
	27	849.0	-1855.3	54856.1	3097.3	1734.0	48.8
	28	556.7	1245.0	32393.6	-3176.2	1243.3	-80.6
	29	557.0	1238.8	32364.7	-3174.7	1236.9	-80.8
	30	801.3	258.8	39482.0	-1215.2	1864.0	-41.0
	31	801.6	252.6	39453.1	-1213.7	1857.6	-41.2
	32	635.4	1290.5	33153.1	-3139.5	1220.9	-76.3
	33	635.7	1284.2	33124.2	-3138.0	1214.5	-76.5
	34	880.0	304.3	40241.5	-1178.4	1841.6	-36.7
	35	880.3	298.0	40212.6	-1177.0	1835.2	-36.9
49	4	-426.4	-131.3	140936.0	-846.4	-2365.3	-155.9
	5	-418.0	-110.9	140896.9	-851.4	-2336.8	-151.8
	6	-726.3	518.1	141488.4	-2388.5	-1719.1	-269.3
	7	-717.9	538.4	141449.3	-2393.5	-1690.6	-265.2
	8	-447.6	-136.5	140823.4	-883.3	-2238.4	-157.7
	9	-439.2	-116.2	140784.2	-888.3	-2209.8	-153.5
	10	-747.5	512.8	141375.8	-2425.5	-1592.2	-271.1
	11	-739.1	533.2	141336.6	-2430.5	-1563.6	-266.9
	12	313.4	-1622.5	140749.8	2696.0	-1686.2	119.2
	13	307.1	-1624.1	140716.0	2684.9	-1648.1	118.6
	14	662.4	-2229.5	141137.3	4196.2	-467.4	246.2
	15	656.0	-2231.0	141103.5	4185.1	-429.3	245.7
	16	341.3	-1554.8	140619.3	2679.3	-1590.9	133.1
	17	335.0	-1556.3	140585.5	2668.2	-1552.9	132.5
	18	690.3	-2161.7	141006.8	4179.5	-372.1	260.1
	19	683.9	-2163.3	140973.0	4168.4	-334.1	259.6
	20	736.8	-2154.5	142227.5	4154.3	1697.4	267.6
	21	745.2	-2134.1	142188.3	4149.3	1726.0	271.8
	22	436.9	-1505.1	142779.9	2612.1	2343.6	154.2
	23	445.3	-1484.8	142740.7	2607.1	2372.1	158.4
	24	715.6	-2159.7	142114.8	4117.4	1824.3	265.9
	25	724.0	-2139.4	142075.7	4112.3	1852.9	270.1
	26	415.7	-1510.3	142667.2	2575.2	2470.5	152.5
	27	424.1	-1490.0	142628.1	2570.2	2499.1	156.7
	28	-686.2	542.0	142591.1	-2444.6	467.8	-258.9
	29	-692.6	540.4	142557.3	-2455.7	505.9	-259.4
	30	-337.3	-65.0	142978.6	-944.4	1686.6	-131.8
	31	-343.6	-66.5	142944.8	-955.5	1724.7	-132.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	32	-658.3	609.8	142460.6	-2461.3	563.0	-245.0
	33	-664.7	608.2	142426.8	-2472.4	601.1	-245.5
	34	-309.4	2.8	142848.1	-961.1	1781.9	-117.9
	35	-315.7	1.2	142814.3	-972.2	1819.9	-118.4
48	4	-409.7	264.2	139729.6	-1783.3	-2348.6	-155.9
	5	-401.2	301.2	139676.4	-1796.9	-2320.4	-151.8
	6	-706.7	1150.4	140464.2	-3913.2	-1703.1	-269.3
	7	-698.1	1187.4	140411.0	-3926.8	-1674.8	-265.2
	8	-430.9	241.4	139589.3	-1804.5	-2221.8	-157.7
	9	-422.3	278.4	139536.1	-1818.1	-2193.6	-153.5
	10	-727.8	1127.5	140323.9	-3934.4	-1576.3	-271.1
	11	-719.2	1164.5	140270.7	-3948.1	-1548.1	-266.9
	12	321.8	-1877.6	139498.4	3309.1	-1671.0	119.2
	13	315.5	-1884.4	139456.3	3302.7	-1633.0	118.6
	14	666.9	-2783.5	140023.6	5536.8	-454.5	246.2
	15	660.5	-2790.3	139981.5	5530.4	-416.5	245.7
	16	350.5	-1754.4	139321.0	3263.7	-1576.9	133.1
	17	344.1	-1761.2	139278.9	3257.3	-1538.9	132.5
	18	695.5	-2660.2	139846.2	5491.4	-360.4	260.1
	19	689.2	-2667.1	139804.1	5485.0	-322.4	259.6
	20	740.4	-2755.4	141480.5	5642.4	1706.4	267.6
	21	749.0	-2718.4	141427.3	5628.8	1734.7	271.8
	22	443.4	-1869.2	142215.1	3512.5	2351.9	154.2
	23	452.0	-1832.2	142161.9	3498.9	2380.2	158.4
	24	719.3	-2778.2	141340.2	5621.2	1833.2	265.9
	25	727.9	-2741.2	141286.9	5607.6	1861.4	270.1
	26	422.3	-1892.1	142074.8	3491.3	2478.7	152.5
	27	430.9	-1855.1	142021.5	3477.7	2506.9	156.7
	28	-668.0	1076.2	141947.0	-3790.7	480.7	-258.9
	29	-674.3	1069.4	141904.9	-3797.0	518.8	-259.4
	30	-323.0	170.4	142472.3	-1562.9	1697.2	-131.8
	31	-329.3	163.5	142430.2	-1569.3	1735.3	-132.3
	32	-639.4	1199.5	141769.6	-3836.1	574.8	-245.0
	33	-645.7	1192.6	141727.5	-3842.4	612.9	-245.5
	34	-294.3	293.6	142294.9	-1608.3	1791.4	-117.9
	35	-300.7	286.7	142252.8	-1614.7	1829.4	-118.4
47	4	-409.9	645.0	139315.6	-2703.2	-2348.7	-155.9
	5	-401.3	698.0	139243.1	-2722.7	-2320.5	-151.8
	6	-706.9	1769.8	140322.8	-5427.2	-1703.2	-269.3
	7	-698.3	1822.8	140250.3	-5446.8	-1675.0	-265.2
	8	-431.0	604.4	139125.5	-2708.3	-2222.0	-157.7
	9	-422.4	657.4	139052.9	-2727.8	-2193.7	-153.5
	10	-728.1	1729.2	140132.7	-5432.4	-1576.5	-271.1
	11	-719.5	1782.2	140060.2	-5451.9	-1548.2	-266.9
	12	321.9	-2150.3	138981.2	3944.6	-1671.1	119.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	13	315.6	-2162.5	138924.2	3943.1	-1633.1	118.6
	14	667.1	-3356.2	139686.3	6900.7	-454.5	246.2
	15	660.7	-3368.4	139629.3	6899.2	-416.5	245.7
	16	350.6	-1973.5	138739.5	3879.5	-1576.9	133.1
	17	344.2	-1985.7	138682.4	3878.0	-1538.9	132.5
	18	695.7	-3179.5	139444.6	6835.7	-360.4	260.1
	19	689.3	-3191.6	139387.6	6834.1	-322.3	259.6
	20	740.5	-3374.8	141666.0	7150.5	1706.4	267.6
	21	749.1	-3321.8	141593.5	7131.0	1734.7	271.8
	22	443.5	-2250.0	142673.2	4426.5	2351.9	154.2
	23	452.1	-2197.0	142600.7	4407.0	2380.2	158.4
	24	719.4	-3415.4	141475.9	7145.4	1833.2	265.9
	25	728.0	-3362.4	141403.3	7125.9	1861.5	270.1
	26	422.3	-2290.6	142483.1	4421.4	2478.7	152.5
	27	430.9	-2237.6	142410.6	4401.9	2507.0	156.7
	28	-668.3	1599.0	142338.6	-5135.5	480.6	-258.9
	29	-674.6	1586.8	142281.6	-5137.0	518.6	-259.4
	30	-323.2	393.1	143043.7	-2179.4	1697.1	-131.8
	31	-329.5	380.9	142986.7	-2180.9	1735.1	-132.3
	32	-639.7	1775.8	142096.9	-5200.5	574.7	-245.0
	33	-646.0	1763.6	142039.8	-5202.1	612.8	-245.5
	34	-294.6	569.9	142802.0	-2244.4	1791.3	-117.9
	35	-300.9	557.7	142745.0	-2245.9	1829.3	-118.4
46	4	-409.9	1025.5	138911.1	-3622.3	-2348.9	-155.9
	5	-401.3	1094.3	138819.5	-3646.4	-2320.6	-151.8
	6	-706.9	2389.9	140194.5	-6943.5	-1703.3	-269.3
	7	-698.3	2458.7	140102.9	-6967.6	-1675.1	-265.2
	8	-431.0	967.3	138670.5	-3611.3	-2222.1	-157.7
	9	-422.4	1036.0	138578.9	-3635.4	-2193.8	-153.5
	10	-728.0	2331.7	139953.9	-6932.5	-1576.5	-271.1
	11	-719.4	2400.4	139862.3	-6956.6	-1548.3	-266.9
	12	321.9	-2424.1	138470.2	4583.2	-1671.2	119.2
	13	315.5	-2441.6	138398.0	4586.5	-1633.2	118.6
	14	667.0	-3930.3	139356.4	8267.8	-454.6	246.2
	15	660.7	-3947.8	139284.2	8271.1	-416.6	245.7
	16	350.5	-2194.9	138164.9	4502.9	-1577.0	133.1
	17	344.1	-2212.4	138092.8	4506.2	-1539.0	132.5
	18	695.6	-3701.1	139051.1	8187.5	-360.4	260.1
	19	689.2	-3718.6	138978.9	8190.8	-322.4	259.6
	20	740.5	-3995.1	141864.8	8659.9	1706.5	267.6
	21	749.1	-3926.4	141773.3	8635.8	1734.8	271.8
	22	443.5	-2630.8	143148.3	5338.7	2352.0	154.2
	23	452.0	-2562.0	143056.7	5314.6	2380.3	158.4
	24	719.4	-4053.4	141624.3	8670.9	1833.3	265.9
	25	727.9	-3984.6	141532.7	8646.8	1861.5	270.1
	26	422.3	-2689.0	142907.7	5349.7	2478.8	152.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	27	430.9	-2620.3	142816.1	5325.6	2507.1	156.7
	28	-668.2	2123.8	142748.3	-6487.5	480.6	-258.9
	29	-674.5	2106.4	142676.1	-6484.2	518.7	-259.4
	30	-323.1	617.6	143634.4	-2802.8	1697.2	-131.8
	31	-329.4	600.2	143562.3	-2799.5	1735.3	-132.3
	32	-639.6	2353.1	142443.0	-6567.8	574.8	-245.0
	33	-645.9	2335.6	142370.8	-6564.5	612.8	-245.5
	34	-294.5	846.9	143329.1	-2883.1	1791.4	-117.9
	35	-300.8	829.4	143257.0	-2879.8	1829.4	-118.4
45	4	-410.5	1406.2	138538.9	-4541.1	-2349.6	-155.9
	5	-401.9	1490.5	138428.3	-4569.1	-2321.3	-151.8
	6	-707.6	3010.7	140101.9	-8461.2	-1704.0	-269.3
	7	-699.0	3095.0	139991.3	-8489.1	-1675.7	-265.2
	8	-431.7	1330.3	138247.3	-4514.0	-2222.8	-157.7
	9	-423.1	1414.6	138136.6	-4542.0	-2194.5	-153.5
	10	-728.7	2934.8	139810.3	-8434.1	-1577.2	-271.1
	11	-720.1	3019.1	139699.6	-8462.0	-1549.0	-266.9
	12	321.3	-2698.3	137989.1	5223.1	-1671.9	119.2
	13	314.9	-2721.0	137901.6	5231.3	-1633.9	118.6
	14	666.4	-4504.8	139057.7	9636.3	-455.3	246.2
	15	660.0	-4527.6	138970.2	9644.5	-417.3	245.7
	16	349.9	-2417.2	137620.2	5129.9	-1577.7	133.1
	17	343.5	-2439.9	137532.7	5138.1	-1539.7	132.5
	18	695.0	-4223.7	138688.8	9543.2	-361.1	260.1
	19	688.6	-4246.5	138601.3	9551.3	-323.1	259.6
	20	739.9	-4615.6	142100.9	10169.6	1705.8	267.6
	21	748.4	-4531.2	141990.2	10141.7	1734.1	271.8
	22	442.8	-3011.1	143663.9	6249.6	2351.4	154.2
	23	451.4	-2926.7	143553.2	6221.6	2379.6	158.4
	24	718.7	-4691.5	141809.2	10196.7	1832.6	265.9
	25	727.3	-4607.1	141698.5	10168.8	1860.9	270.1
	26	421.7	-3087.0	143372.2	6276.7	2478.2	152.5
	27	430.3	-3002.6	143261.5	6248.7	2506.4	156.7
	28	-668.9	2650.0	143199.2	-7843.7	479.9	-258.9
	29	-675.2	2627.3	143111.7	-7835.6	518.0	-259.4
	30	-323.8	843.5	144267.7	-3430.5	1696.6	-131.8
	31	-330.1	820.7	144180.3	-3422.3	1734.6	-132.3
	32	-640.3	2931.1	142830.3	-7936.9	574.1	-245.0
	33	-646.6	2908.4	142742.8	-7928.7	612.2	-245.5
	34	-295.2	1124.6	143898.8	-3523.7	1790.7	-117.9
	35	-301.5	1101.8	143811.3	-3515.5	1828.8	-118.4
44	4	-420.2	1753.3	142788.9	-5424.6	-2356.4	-155.9
	5	-411.4	1853.0	142647.9	-5455.9	-2328.1	-151.8
	6	-718.5	3598.0	144778.7	-9944.5	-1712.9	-269.3
	7	-709.7	3697.7	144637.6	-9975.8	-1684.6	-265.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	8	-441.9	1659.9	142409.2	-5381.5	-2229.9	-157.7
	9	-433.1	1759.6	142268.1	-5412.9	-2201.6	-153.5
	10	-740.2	3504.6	144398.9	-9901.4	-1586.3	-271.1
	11	-731.4	3604.3	144257.9	-9932.7	-1558.0	-266.9
	12	311.9	-3005.2	142007.3	5898.3	-1679.5	119.2
	13	305.4	-3033.2	141893.4	5911.2	-1641.6	118.6
	14	656.3	-5111.5	143300.0	11039.5	-465.4	246.2
	15	649.8	-5139.5	143186.1	11052.4	-427.4	245.7
	16	341.2	-2672.8	141537.1	5793.9	-1585.2	133.1
	17	334.7	-2700.8	141423.2	5806.8	-1547.2	132.5
	18	685.6	-4779.1	142829.8	10935.2	-371.0	260.1
	19	679.1	-4807.1	142715.9	10948.1	-333.1	259.6
	20	728.1	-5267.7	147097.9	11712.9	1690.7	267.6
	21	736.9	-5168.0	146956.8	11681.6	1719.0	271.8
	22	429.8	-3423.0	149087.6	7193.1	2334.2	154.2
	23	438.5	-3323.3	148946.6	7161.8	2362.5	158.4
	24	706.4	-5361.1	146718.1	11756.0	1817.2	265.9
	25	715.2	-5261.4	146577.1	11724.7	1845.5	270.1
	26	408.1	-3516.4	148707.9	7236.1	2460.8	152.5
	27	416.9	-3416.7	148566.8	7204.8	2489.1	156.7
	28	-682.5	3143.8	148639.9	-9167.9	465.7	-258.9
	29	-689.0	3115.8	148526.0	-9155.0	503.7	-259.4
	30	-338.0	1037.5	149932.5	-4026.6	1679.8	-131.8
	31	-344.5	1009.5	149818.6	-4013.7	1717.8	-132.3
	32	-653.2	3476.2	148169.7	-9272.2	560.1	-245.0
	33	-659.7	3448.1	148055.7	-9259.3	598.0	-245.5
	34	-308.7	1369.9	149462.3	-4131.0	1774.2	-117.9
	35	-315.2	1341.8	149348.4	-4118.0	1812.2	-118.4
43	4	-386.6	2191.2	143471.1	-6446.6	-2324.1	-155.9
	5	-378.0	2307.7	143344.7	-6481.6	-2295.9	-151.8
	6	-683.7	4296.8	145375.0	-11616.9	-1678.8	-269.3
	7	-675.1	4413.3	145248.6	-11651.9	-1650.5	-265.2
	8	-407.8	2078.4	138612.8	-6385.6	-2197.4	-157.7
	9	-399.2	2194.9	138486.5	-6420.5	-2169.1	-153.5
	10	-704.9	4183.9	140516.8	-11555.9	-1552.0	-271.1
	11	-696.3	4300.5	140390.4	-11590.8	-1523.8	-266.9
	12	345.1	-3279.4	139802.8	6568.3	-1646.6	119.2
	13	338.7	-3313.2	138345.3	6586.7	-1608.6	118.6
	14	690.0	-5712.5	139893.6	12500.5	-430.3	246.2
	15	683.7	-5746.4	138436.1	12518.8	-392.3	245.7
	16	373.8	-2891.0	139381.6	6451.9	-1552.4	133.1
	17	367.4	-2924.8	137924.1	6470.2	-1514.4	132.5
	18	718.7	-5324.2	139472.4	12384.0	-336.1	260.1
	19	712.4	-5358.0	138014.9	12402.3	-298.1	259.6
	20	763.3	-5919.4	143773.7	13327.2	1730.1	267.6
	21	771.9	-5802.9	143647.3	13292.2	1758.4	271.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	22	466.1	-3813.8	145677.6	8156.9	2375.5	154.2
	23	474.7	-3697.3	145551.3	8121.9	2403.7	158.4
	24	742.1	-6032.2	138915.5	13388.2	1856.9	265.9
	25	750.7	-5915.7	138789.1	13353.3	1885.2	270.1
	26	444.9	-3926.7	140819.4	8217.9	2502.2	152.5
	27	453.5	-3810.2	140693.0	8182.9	2530.5	156.7
	28	-645.4	3739.1	146149.2	-10666.0	504.4	-258.9
	29	-651.8	3705.2	144691.7	-10647.7	542.5	-259.4
	30	-300.5	1305.9	146240.0	-4733.9	1720.7	-131.8
	31	-306.8	1272.1	144782.5	-4715.6	1758.7	-132.3
	32	-616.8	4127.5	145728.0	-10782.5	598.6	-245.0
	33	-623.1	4093.6	144270.5	-10764.2	636.7	-245.5
	34	-271.8	1694.3	145818.8	-4850.3	1814.9	-117.9
	35	-278.2	1660.4	144361.3	-4832.0	1852.9	-118.4
42	4	-400.1	2601.3	128980.0	-7363.9	-2344.3	-155.9
	5	-391.9	2732.1	128814.3	-7401.5	-2316.1	-151.8
	6	-695.1	4933.0	131348.5	-13098.5	-1695.2	-269.3
	7	-686.9	5063.8	131182.9	-13136.2	-1667.1	-265.2
	8	-420.2	2472.2	128545.2	-7288.0	-2217.1	-157.7
	9	-412.0	2603.0	128379.5	-7325.6	-2188.9	-153.5
	10	-715.2	4803.9	130913.7	-13022.6	-1568.0	-271.1
	11	-707.0	4934.7	130748.1	-13060.3	-1539.8	-266.9
	12	332.0	-3483.9	128131.9	7115.0	-1664.9	119.2
	13	326.0	-3522.6	128001.5	7137.8	-1626.7	118.6
	14	678.9	-6198.5	129738.4	13730.5	-443.4	246.2
	15	672.8	-6237.3	129608.0	13753.2	-405.2	245.7
	16	359.4	-3047.8	127579.9	6989.6	-1570.9	133.1
	17	353.4	-3086.6	127449.4	7012.4	-1532.7	132.5
	18	706.3	-5762.5	129186.3	13605.1	-349.4	260.1
	19	700.2	-5801.2	129055.9	13627.8	-311.2	259.6
	20	756.0	-6447.5	134334.8	14687.6	1727.4	267.6
	21	764.2	-6316.7	134169.2	14650.0	1755.5	271.8
	22	461.0	-4115.8	136703.4	8953.0	2376.4	154.2
	23	469.2	-3985.0	136537.8	8915.3	2404.6	158.4
	24	735.9	-6576.6	133900.0	14763.5	1854.6	265.9
	25	744.1	-6445.8	133734.4	14725.9	1882.8	270.1
	26	440.9	-4245.0	136268.6	9028.8	2503.7	152.5
	27	449.1	-4114.1	136103.0	8991.2	2531.9	156.7
	28	-651.2	4288.4	136027.0	-12000.5	498.8	-258.9
	29	-657.3	4249.7	135896.6	-11977.7	537.0	-259.4
	30	-304.4	1573.8	137633.5	-5385.0	1720.3	-131.8
	31	-310.4	1535.0	137503.1	-5362.3	1758.5	-132.3
	32	-623.8	4724.5	135474.9	-12125.9	592.7	-245.0
	33	-629.9	4685.7	135344.5	-12103.1	630.9	-245.5
	34	-277.0	2009.8	137081.4	-5510.5	1814.2	-117.9
	35	-283.0	1971.1	136951.0	-5487.7	1852.4	-118.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

41	4	-315.0	3291.2	73231.4	-8568.4	-2206.1	-155.9
	5	-304.0	3435.7	72971.5	-8607.9	-2177.2	-151.8
	6	-629.0	5847.7	77050.1	-14863.3	-1585.3	-269.3
	7	-618.0	5992.1	76790.2	-14902.9	-1556.4	-265.2
	8	-343.3	3147.0	72666.2	-8479.2	-2082.4	-157.7
	9	-332.3	3291.4	72406.3	-8518.7	-2053.5	-153.5
	10	-657.3	5703.4	76484.9	-14774.2	-1461.5	-271.1
	11	-646.3	5847.9	76225.0	-14813.7	-1432.7	-266.9
	12	422.4	-3399.6	71845.7	7356.5	-1539.4	119.2
	13	413.9	-3442.9	71676.1	7383.3	-1502.3	118.6
	14	759.9	-6390.4	74386.3	14645.2	-355.4	246.2
	15	751.4	-6433.6	74216.7	14672.0	-318.3	245.7
	16	459.0	-2918.0	70979.4	7224.7	-1443.2	133.1
	17	450.6	-2961.2	70809.9	7251.5	-1406.1	132.5
	18	796.6	-5908.7	73520.0	14513.4	-259.2	260.1
	19	788.1	-5952.0	73350.5	14540.2	-222.0	259.6
	20	810.1	-6678.0	81700.1	15727.3	1740.7	267.6
	21	821.1	-6533.5	81440.2	15687.7	1769.6	271.8
	22	496.1	-4121.6	85518.8	9432.3	2361.5	154.2
	23	507.1	-3977.1	85258.9	9392.8	2390.4	158.4
	24	781.8	-6822.3	81134.9	15816.5	1864.4	265.9
	25	792.8	-6677.8	80875.0	15776.9	1893.3	270.1
	26	467.9	-4265.8	84953.5	9521.5	2485.2	152.5
	27	478.9	-4121.4	84693.7	9482.0	2514.1	156.7
	28	-624.2	5121.9	84574.6	-13626.6	530.1	-258.9
	29	-632.7	5078.6	84405.1	-13599.8	567.2	-259.4
	30	-286.7	2131.1	87115.2	-6337.9	1714.1	-131.8
	31	-295.2	2087.8	86945.7	-6311.1	1751.2	-132.3
	32	-587.6	5603.5	83708.4	-13758.4	626.3	-245.0
	33	-596.1	5560.2	83538.8	-13731.6	663.4	-245.5
	34	-250.0	2612.7	86249.0	-6469.7	1810.3	-117.9
	35	-258.5	2569.5	86079.4	-6442.9	1847.4	-118.4
40	4	-756.4	1474.1	140890.2	-2530.2	-3001.0	-155.9
	5	-746.8	1494.4	140908.3	-2535.2	-3059.2	-151.8
	6	-1086.7	2123.6	140332.2	-4072.6	-3998.8	-269.3
	7	-1077.1	2143.9	140350.2	-4077.6	-4057.1	-265.2
	8	-738.9	1469.0	140846.1	-2567.3	-2790.0	-157.7
	9	-729.4	1489.3	140864.2	-2572.3	-2848.3	-153.5
	10	-1069.2	2118.5	140288.1	-4109.7	-3787.8	-271.1
	11	-1059.7	2138.8	140306.1	-4114.7	-3846.1	-266.9
	12	259.9	-17.4	142315.0	1012.5	750.9	119.2
	13	265.1	-18.9	142301.8	1001.4	814.2	118.6
	14	804.8	-624.5	143009.5	2512.9	2847.3	246.2
	15	810.1	-626.0	142996.2	2501.8	2910.6	245.7
	16	291.6	50.3	142375.1	995.9	556.6	133.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	17	296.8	48.8	142361.9	984.8	619.8	132.5
	18	836.6	-556.8	143069.6	2496.3	2653.0	260.1
	19	841.8	-558.3	143056.4	2485.2	2716.3	259.6
	20	1060.3	-549.5	143205.1	2471.0	3987.1	267.6
	21	1069.8	-529.2	143223.1	2466.0	3928.8	271.8
	22	730.0	100.0	142647.0	928.6	2989.3	154.2
	23	739.5	120.3	142665.1	923.6	2931.0	158.4
	24	1077.8	-554.6	143161.0	2433.9	4198.1	265.9
	25	1087.3	-534.3	143179.0	2428.9	4139.8	270.1
	26	747.4	94.9	142602.9	891.5	3200.2	152.5
	27	757.0	115.2	142621.0	886.5	3142.0	156.7
	28	-841.2	2147.6	140454.8	-4128.9	-2575.3	-258.9
	29	-836.0	2146.1	140441.6	-4140.0	-2512.0	-259.4
	30	-296.2	1540.5	141149.3	-2628.5	-478.8	-131.8
	31	-291.0	1539.0	141136.1	-2639.6	-415.5	-132.3
	32	-809.5	2215.3	140515.0	-4145.5	-2769.6	-245.0
	33	-804.2	2213.8	140501.7	-4156.6	-2706.3	-245.5
	34	-264.5	1608.2	141209.4	-2645.1	-673.1	-117.9
	35	-259.2	1606.7	141196.2	-2656.2	-609.9	-118.4
39	4	-726.0	1836.8	142039.2	-3432.8	-2967.0	-155.9
	5	-716.4	1873.8	142091.9	-3446.4	-3025.0	-151.8
	6	-1048.9	2723.0	141309.1	-5562.7	-3956.6	-269.3
	7	-1039.3	2760.0	141361.9	-5576.3	-4014.7	-265.2
	8	-709.9	1814.0	142178.1	-3453.9	-2757.3	-157.7
	9	-700.3	1850.9	142230.8	-3467.6	-2815.4	-153.5
	10	-1032.8	2700.1	141448.0	-5583.8	-3746.9	-271.1
	11	-1023.2	2737.1	141500.8	-5597.5	-3805.0	-266.9
	12	265.6	-305.1	142264.9	1659.7	756.8	119.2
	13	270.5	-312.0	142306.5	1653.4	819.7	118.6
	14	797.5	-1211.1	141739.3	3887.6	2838.0	246.2
	15	802.3	-1218.0	141780.9	3881.2	2900.9	245.7
	16	297.7	-181.9	142440.6	1614.3	563.2	133.1
	17	302.5	-188.7	142482.3	1607.9	626.1	132.5
	18	829.5	-1087.9	141915.0	3842.1	2644.4	260.1
	19	834.4	-1094.7	141956.7	3835.8	2707.3	259.6
	20	1046.9	-1183.1	140287.1	3993.3	3970.2	267.6
	21	1056.5	-1146.2	140339.9	3979.7	3912.2	271.8
	22	724.0	-297.0	139557.1	1863.4	2980.6	154.2
	23	733.6	-260.0	139609.8	1849.8	2922.5	158.4
	24	1063.0	-1206.0	140426.0	3972.1	4179.9	265.9
	25	1072.6	-1169.0	140478.8	3958.5	4121.8	270.1
	26	740.1	-319.9	139696.0	1842.2	3190.2	152.5
	27	749.7	-282.9	139748.7	1828.6	3132.2	156.7
	28	-810.7	2648.7	139831.2	-5439.9	-2542.1	-258.9
	29	-805.9	2641.8	139872.9	-5446.3	-2479.2	-259.4
	30	-278.8	1742.7	139305.6	-3212.1	-460.9	-131.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	31	-274.0	1735.8	139347.3	-3218.4	-398.0	-132.3
	32	-778.6	2771.9	140007.0	-5485.4	-2735.7	-245.0
	33	-773.8	2765.1	140048.7	-5491.7	-2672.8	-245.5
	34	-246.8	1865.9	139481.4	-3257.5	-654.5	-117.9
	35	-242.0	1859.1	139523.0	-3263.9	-591.6	-118.4
38	4	-726.2	2217.2	142428.0	-4352.3	-2967.2	-155.9
	5	-716.6	2270.2	142500.1	-4371.8	-3025.3	-151.8
	6	-1049.2	3342.0	141424.5	-7076.3	-3956.9	-269.3
	7	-1039.6	3395.0	141496.7	-7095.8	-4015.0	-265.2
	8	-710.2	2176.6	142616.6	-4357.4	-2757.5	-157.7
	9	-700.5	2229.6	142688.8	-4376.9	-2815.6	-153.5
	10	-1033.1	3301.4	141613.2	-7081.4	-3747.2	-271.1
	11	-1023.5	3354.4	141685.3	-7100.9	-3805.3	-266.9
	12	265.7	-578.2	142756.6	2295.7	756.9	119.2
	13	270.5	-590.4	142813.2	2294.1	819.8	118.6
	14	797.7	-1784.3	142050.4	5251.9	2838.2	246.2
	15	802.5	-1796.5	142107.0	5250.4	2901.1	245.7
	16	297.7	-401.4	142997.0	2230.6	563.2	133.1
	17	302.5	-413.6	143053.6	2229.1	626.1	132.5
	18	829.7	-1607.5	142290.8	5186.8	2644.5	260.1
	19	834.5	-1619.7	142347.4	5185.3	2707.4	259.6
	20	1047.1	-1803.0	140074.0	5501.8	3970.5	267.6
	21	1056.8	-1749.9	140146.1	5482.3	3912.4	271.8
	22	724.2	-678.2	139070.6	2777.8	2980.7	154.2
	23	733.8	-625.1	139142.7	2758.3	2922.6	158.4
	24	1063.2	-1843.6	140262.7	5496.8	4180.2	265.9
	25	1072.8	-1790.6	140334.8	5477.2	4122.1	270.1
	26	740.2	-718.8	139259.3	2772.8	3190.4	152.5
	27	749.9	-665.8	139331.4	2753.2	3132.3	156.7
	28	-810.9	3171.1	139411.9	-6784.4	-2542.3	-258.9
	29	-806.1	3158.9	139468.5	-6785.9	-2479.4	-259.4
	30	-278.9	1965.1	138705.7	-3828.1	-461.0	-131.8
	31	-274.1	1952.9	138762.3	-3829.7	-398.1	-132.3
	32	-778.8	3347.9	139652.3	-6849.4	-2735.9	-245.0
	33	-774.0	3335.7	139708.9	-6851.0	-2673.0	-245.5
	34	-246.8	2141.8	138946.1	-3893.2	-654.6	-117.9
	35	-242.0	2129.7	139002.7	-3894.7	-591.7	-118.4
37	4	-726.2	2597.7	142832.6	-5271.3	-2967.2	-155.9
	5	-716.6	2666.5	142924.0	-5295.4	-3025.3	-151.8
	6	-1049.2	3962.1	141551.5	-8592.5	-3957.0	-269.3
	7	-1039.6	4030.9	141642.8	-8616.6	-4015.1	-265.2
	8	-710.1	2539.4	143072.2	-5260.3	-2757.5	-157.7
	9	-700.5	2608.2	143163.6	-5284.4	-2815.6	-153.5
	10	-1033.1	3903.8	141791.1	-8581.5	-3747.3	-271.1
	11	-1023.5	3972.6	141882.5	-8605.6	-3805.4	-266.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	12	265.7	-852.1	143269.9	2934.3	756.9	119.2
	13	270.5	-869.6	143341.8	2937.6	819.9	118.6
	14	797.8	-2358.4	142383.1	6619.0	2838.3	246.2
	15	802.6	-2375.9	142455.0	6622.3	2901.2	245.7
	16	297.7	-622.8	143574.5	2854.0	563.3	133.1
	17	302.6	-640.3	143646.3	2857.3	626.2	132.5
	18	829.8	-2129.1	142687.6	6538.7	2644.7	260.1
	19	834.6	-2146.6	142759.5	6542.0	2707.6	259.6
	20	1047.3	-2423.3	139876.5	7011.2	3970.7	267.6
	21	1056.9	-2354.5	139967.9	6987.1	3912.6	271.8
	22	724.3	-1058.9	138595.4	3690.0	2980.9	154.2
	23	733.9	-990.1	138686.7	3665.9	2922.8	158.4
	24	1063.4	-2481.6	140116.2	7022.2	4180.4	265.9
	25	1073.0	-2412.8	140207.5	6998.1	4122.3	270.1
	26	740.4	-1117.2	138835.0	3701.0	3190.6	152.5
	27	750.0	-1048.4	138926.4	3676.9	3132.5	156.7
	28	-810.8	3695.9	138999.5	-8136.4	-2542.3	-258.9
	29	-806.0	3678.5	139071.3	-8133.1	-2479.4	-259.4
	30	-278.8	2189.6	138112.6	-4451.7	-460.9	-131.8
	31	-274.0	2172.2	138184.5	-4448.3	-398.0	-132.3
	32	-778.8	3925.2	139304.0	-8216.7	-2735.9	-245.0
	33	-774.0	3907.7	139375.9	-8213.4	-2673.0	-245.5
	34	-246.8	2418.9	138417.2	-4532.0	-654.6	-117.9
	35	-241.9	2401.4	138489.1	-4528.7	-591.7	-118.4
36	4	-726.6	2980.5	143219.5	-6192.4	-2967.7	-155.9
	5	-717.1	3064.8	143331.3	-6220.3	-3025.8	-151.8
	6	-1049.5	4585.3	141643.8	-10112.8	-3957.6	-269.3
	7	-1039.9	4669.7	141755.6	-10140.8	-4015.7	-265.2
	8	-710.5	2904.6	143514.9	-6165.3	-2758.0	-157.7
	9	-700.9	2989.0	143626.7	-6193.3	-2816.1	-153.5
	10	-1033.3	4509.5	141939.2	-10085.8	-3747.8	-271.1
	11	-1023.7	4593.8	142051.0	-10113.7	-3805.9	-266.9
	12	265.3	-1124.6	143781.0	3572.6	756.8	119.2
	13	270.1	-1147.3	143869.6	3580.7	819.7	118.6
	14	797.4	-2931.3	142709.7	7986.0	2838.4	246.2
	15	802.3	-2954.0	142798.3	7994.1	2901.3	245.7
	16	297.2	-843.5	144153.6	3479.4	563.1	133.1
	17	302.1	-866.2	144242.3	3487.5	626.0	132.5
	18	829.4	-2650.2	143082.4	7892.8	2644.7	260.1
	19	834.2	-2672.9	143171.0	7900.9	2707.6	259.6
	20	1047.2	-3041.8	139648.7	8519.0	3970.8	267.6
	21	1056.7	-2957.5	139760.5	8491.1	3912.7	271.8
	22	724.3	-1437.0	138073.0	4598.6	2981.0	154.2
	23	733.9	-1352.6	138184.8	4570.6	2922.9	158.4
	24	1063.3	-3117.7	139944.0	8546.1	4180.6	265.9
	25	1072.9	-3033.3	140055.8	8518.1	4122.5	270.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	26	740.5	-1512.8	138368.3	4625.6	3190.7	152.5
	27	750.1	-1428.5	138480.1	4597.7	3132.6	156.7
	28	-810.8	4224.9	138528.7	-9495.6	-2542.7	-258.9
	29	-806.0	4202.1	138617.3	-9487.5	-2479.8	-259.4
	30	-278.7	2418.2	137457.4	-5082.2	-461.1	-131.8
	31	-273.8	2395.5	137546.0	-5074.1	-398.2	-132.3
	32	-778.9	4506.0	138901.3	-9588.8	-2736.4	-245.0
	33	-774.0	4483.3	138989.9	-9580.7	-2673.5	-245.5
	34	-246.7	2699.3	137830.1	-5175.4	-654.8	-117.9
	35	-241.9	2676.6	137918.7	-5167.3	-591.9	-118.4
35	4	-713.1	3471.2	147085.5	-7226.8	-2952.6	-155.9
	5	-703.3	3570.6	147242.5	-7257.6	-3010.6	-151.8
	6	-1037.0	5325.0	144878.3	-11757.9	-3942.0	-269.3
	7	-1027.3	5424.4	145035.3	-11788.7	-4000.0	-265.2
	8	-697.5	3379.1	147501.3	-7185.5	-2743.2	-157.7
	9	-687.8	3478.5	147658.3	-7216.3	-2801.2	-153.5
	10	-1021.5	5232.9	145294.1	-11716.6	-3732.6	-271.1
	11	-1011.7	5332.3	145451.1	-11747.4	-3790.6	-266.9
	12	279.7	-1303.1	147902.6	4115.2	769.7	119.2
	13	284.4	-1330.7	148027.3	4127.6	832.5	118.6
	14	811.8	-3414.6	146428.1	9262.7	2850.1	246.2
	15	816.4	-3442.2	146552.8	9275.1	2912.9	245.7
	16	312.2	-971.8	148426.0	4012.6	576.4	133.1
	17	316.8	-999.4	148550.8	4025.0	639.2	132.5
	18	844.2	-3083.2	146951.5	9160.1	2656.8	260.1
	19	848.9	-3110.8	147076.2	9172.5	2719.6	259.6
	20	1060.5	-3566.9	142170.4	9931.4	3982.1	267.6
	21	1070.2	-3467.5	142327.4	9900.6	3924.1	271.8
	22	736.5	-1713.2	139963.1	5400.3	2992.7	154.2
	23	746.3	-1613.8	140120.2	5369.5	2934.7	158.4
	24	1076.0	-3659.0	142586.1	9972.7	4191.5	265.9
	25	1085.8	-3559.6	142743.2	9941.9	4133.5	270.1
	26	752.1	-1805.2	140378.9	5441.6	3202.1	152.5
	27	761.8	-1705.8	140536.0	5410.8	3144.1	156.7
	28	-800.1	4876.2	140545.2	-10988.5	-2528.1	-258.9
	29	-795.5	4848.6	140670.0	-10976.1	-2465.3	-259.4
	30	-268.1	2764.7	139070.7	-5841.0	-447.7	-131.8
	31	-263.4	2737.1	139195.4	-5828.7	-384.9	-132.3
	32	-767.7	5207.5	141068.6	-11091.1	-2721.5	-245.0
	33	-763.0	5179.9	141193.4	-11078.7	-2658.6	-245.5
	34	-235.6	3096.1	139594.1	-5943.6	-641.0	-117.9
	35	-230.9	3068.5	139718.8	-5931.2	-578.2	-118.4
34	4	-711.5	3796.0	145152.0	-8129.8	-2952.0	-155.9
	5	-701.9	3912.4	145316.0	-8164.6	-3010.1	-151.8
	6	-1035.1	5904.0	142832.0	-13303.1	-3942.3	-269.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	7	-1025.4	6020.5	142996.0	-13338.0	-4000.4	-265.2
	8	-695.4	3683.2	145593.5	-8068.9	-2742.2	-157.7
	9	-685.8	3799.7	145757.5	-8103.8	-2800.3	-153.5
	10	-1018.9	5791.3	143273.5	-13242.3	-3732.6	-271.1
	11	-1009.3	5907.7	143437.5	-13277.1	-3790.7	-266.9
	12	282.0	-1680.6	146088.7	4892.1	773.9	119.2
	13	286.8	-1714.5	146221.1	4910.3	836.8	118.6
	14	814.8	-4116.6	144603.0	10827.2	2856.2	246.2
	15	819.6	-4150.4	144735.5	10845.4	2919.1	245.7
	16	314.0	-1292.5	146635.3	4776.0	580.2	133.1
	17	318.9	-1326.3	146767.7	4794.2	643.1	132.5
	18	846.8	-3728.4	145149.6	10711.1	2662.5	260.1
	19	851.7	-3762.2	145282.0	10729.4	2725.4	259.6
	20	1064.5	-4323.8	140199.8	11654.0	3988.9	267.6
	21	1074.1	-4207.3	140363.7	11619.2	3930.8	271.8
	22	741.0	-2215.7	137879.7	6480.7	2998.6	154.2
	23	750.6	-2099.3	138043.7	6445.8	2940.5	158.4
	24	1080.7	-4436.5	140641.3	11714.9	4198.7	265.9
	25	1090.3	-4320.0	140805.3	11680.0	4140.6	270.1
	26	757.1	-2328.4	138321.3	6541.5	3208.4	152.5
	27	766.7	-2212.0	138485.2	6506.7	3150.3	156.7
	28	-796.5	5346.2	138355.2	-12352.5	-2527.2	-258.9
	29	-791.6	5312.4	138487.7	-12334.2	-2464.2	-259.4
	30	-263.7	2910.3	136869.5	-6417.3	-444.9	-131.8
	31	-258.8	2876.4	137002.0	-6399.1	-382.0	-132.3
	32	-764.4	5734.4	138901.8	-12468.6	-2720.8	-245.0
	33	-759.6	5700.5	139034.2	-12450.3	-2657.9	-245.5
	34	-231.6	3298.4	137416.1	-6533.4	-638.6	-117.9
	35	-226.8	3264.6	137548.6	-6515.2	-575.6	-118.4
33	4	-723.2	4082.9	136126.0	-8917.9	-2964.7	-155.9
	5	-713.9	4213.7	136295.9	-8955.5	-3023.1	-151.8
	6	-1048.5	6414.6	133707.3	-14652.6	-3958.4	-269.3
	7	-1039.2	6545.4	133877.2	-14690.2	-4016.8	-265.2
	8	-706.0	3953.8	136578.1	-8842.0	-2754.1	-157.7
	9	-696.7	4084.6	136748.0	-8879.7	-2812.5	-153.5
	10	-1031.2	6285.5	134159.4	-14576.8	-3747.8	-271.1
	11	-1022.0	6416.3	134329.3	-14614.4	-3806.2	-266.9
	12	280.4	-2002.2	137030.3	5561.0	774.5	119.2
	13	285.6	-2040.9	137165.9	5583.7	837.7	118.6
	14	819.5	-4716.7	135420.9	12176.3	2864.2	246.2
	15	824.7	-4755.4	135556.6	12199.0	2927.4	245.7
	16	311.3	-1566.2	137596.6	5435.6	579.9	133.1
	17	316.5	-1604.9	137732.3	5458.4	643.1	132.5
	18	850.4	-4280.7	135987.3	12050.9	2669.6	260.1
	19	855.6	-4319.4	136122.9	12073.7	2732.7	259.6
	20	1073.8	-4965.4	130761.5	13133.2	4000.9	267.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	21	1083.1	-4834.6	130931.4	13095.6	3942.5	271.8
	22	748.5	-2633.7	128342.8	7398.4	3007.2	154.2
	23	757.8	-2502.9	128512.8	7360.8	2948.8	158.4
	24	1091.0	-5094.5	131213.7	13209.0	4211.5	265.9
	25	1100.3	-4963.7	131383.6	13171.4	4153.2	270.1
	26	765.8	-2762.8	128795.0	7474.3	3217.8	152.5
	27	775.0	-2632.0	128964.9	7436.7	3159.4	156.7
	28	-803.8	5770.3	128967.9	-13554.9	-2538.0	-258.9
	29	-798.6	5731.6	129103.6	-13532.2	-2474.8	-259.4
	30	-264.7	3055.8	127358.6	-6939.6	-448.3	-131.8
	31	-259.5	3017.1	127494.3	-6916.8	-385.2	-132.3
	32	-772.8	6206.3	129534.3	-13680.3	-2732.6	-245.0
	33	-767.7	6167.6	129670.0	-13657.5	-2669.5	-245.5
	34	-233.7	3491.8	127925.0	-7064.9	-643.0	-117.9
	35	-228.6	3453.1	128060.6	-7042.2	-579.8	-118.4
32	4	-585.6	4102.3	75945.1	-9418.5	-2814.5	-155.9
	5	-573.8	4247.2	76059.6	-9458.7	-2870.6	-151.8
	6	-895.9	6659.5	73637.0	-15712.7	-3778.8	-269.3
	7	-884.2	6804.4	73751.5	-15752.9	-3834.9	-265.2
	8	-577.3	3956.3	75822.5	-9327.1	-2610.7	-157.7
	9	-565.6	4101.2	75937.0	-9367.3	-2666.8	-153.5
	10	-887.6	6513.5	73514.4	-15621.2	-3575.1	-271.1
	11	-875.9	6658.5	73628.9	-15661.4	-3631.2	-266.9
	12	335.3	-2600.3	81387.2	6516.2	813.5	119.2
	13	337.8	-2644.0	81350.4	6543.7	874.6	118.6
	14	823.6	-5599.4	83895.0	13812.8	2841.6	246.2
	15	826.1	-5643.1	83858.2	13840.2	2902.7	245.7
	16	374.5	-2117.2	81768.9	6382.1	626.4	133.1
	17	377.0	-2161.0	81732.1	6409.6	687.6	132.5
	18	862.8	-5116.3	84276.7	13678.7	2654.6	260.1
	19	865.3	-5160.1	84239.9	13706.1	2715.7	259.6
	20	1042.1	-5894.7	84304.5	14903.3	3945.9	267.6
	21	1053.8	-5749.8	84419.0	14863.0	3889.8	271.8
	22	731.8	-3337.5	81996.4	8609.1	2981.6	154.2
	23	743.5	-3192.6	82110.9	8568.9	2925.4	158.4
	24	1050.4	-6040.7	84181.9	14994.7	4149.7	265.9
	25	1062.1	-5895.8	84296.4	14954.5	4093.5	270.1
	26	740.1	-3483.5	81873.8	8700.6	3185.3	152.5
	27	751.8	-3338.6	81988.3	8660.3	3129.2	156.7
	28	-699.1	5923.8	73693.5	-14464.3	-2401.0	-258.9
	29	-696.6	5880.0	73656.8	-14436.8	-2339.8	-259.4
	30	-210.8	2924.7	76201.4	-7167.7	-372.9	-131.8
	31	-208.3	2880.9	76164.6	-7140.3	-311.7	-132.3
	32	-659.9	6406.9	74075.2	-14598.4	-2588.0	-245.0
	33	-657.4	6363.1	74038.4	-14571.0	-2526.9	-245.5
	34	-171.6	3407.8	76583.0	-7301.9	-559.9	-117.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	35	-169.1	3364.0	76546.3	-7274.4	-498.8	-118.4
31	4	-1148.5	1393.2	78824.1	-1703.9	-2942.6	-48.6
	5	-1167.2	1395.3	78681.4	-1702.5	-2992.6	-47.3
	6	-1630.2	1599.5	80813.8	-2114.6	-4088.4	-83.9
	7	-1648.9	1601.6	80671.0	-2113.3	-4138.4	-82.6
	8	-1080.4	1396.0	78503.7	-1716.4	-2753.6	-49.1
	9	-1099.1	1398.1	78361.0	-1715.1	-2803.6	-47.8
	10	-1562.1	1602.3	80493.4	-2127.1	-3899.4	-84.4
	11	-1580.8	1604.4	80350.6	-2125.8	-3949.4	-83.1
	12	439.5	915.1	77979.5	-759.3	987.2	37.1
	13	459.9	915.9	77883.4	-763.1	1043.9	37.0
	14	1279.8	712.8	79198.6	-355.4	3103.2	76.7
	15	1300.2	713.6	79102.5	-359.1	3159.9	76.5
	16	377.1	922.1	77503.8	-754.8	820.7	41.4
	17	397.5	923.0	77407.6	-758.6	877.4	41.3
	18	1217.4	719.9	78722.9	-350.8	2936.7	81.0
	19	1237.8	720.7	78626.7	-354.6	2993.4	80.9
	20	1652.4	718.9	82887.7	-357.3	4110.7	83.4
	21	1633.7	721.0	82745.0	-355.9	4060.7	84.7
	22	1170.7	925.2	84877.4	-768.0	2964.9	48.0
	23	1152.0	927.3	84734.6	-766.6	2914.9	49.3
	24	1720.5	721.7	82567.3	-369.8	4299.7	82.8
	25	1701.8	723.8	82424.6	-368.4	4249.7	84.1
	26	1238.8	928.0	84556.9	-780.5	3153.9	47.5
	27	1220.1	930.1	84414.2	-779.2	3103.9	48.8
	28	-1166.2	1602.6	84611.6	-2128.5	-2832.1	-80.6
	29	-1145.7	1603.4	84515.5	-2132.2	-2775.4	-80.8
	30	-325.9	1400.3	85830.7	-1724.5	-716.1	-41.0
	31	-305.5	1401.2	85734.6	-1728.2	-659.4	-41.2
	32	-1228.6	1609.7	84135.9	-2124.0	-2998.6	-76.3
	33	-1208.1	1610.5	84039.8	-2127.7	-2941.9	-76.5
	34	-388.3	1407.4	85355.0	-1720.0	-882.6	-36.7
	35	-367.9	1408.2	85258.8	-1723.7	-825.9	-36.9
30	4	-1105.3	1538.6	77568.4	-1972.0	-2897.4	-48.6
	5	-1122.4	1542.7	77369.3	-1970.7	-2945.7	-47.3
	6	-1575.1	1823.8	80266.2	-2544.0	-4028.1	-83.9
	7	-1592.2	1827.9	80067.2	-2542.7	-4076.4	-82.6
	8	-1043.3	1538.6	77059.9	-1982.5	-2714.6	-49.1
	9	-1060.5	1542.7	76860.9	-1981.2	-2762.9	-47.8
	10	-1513.1	1823.8	79757.8	-2554.5	-3845.3	-84.4
	11	-1530.3	1827.9	79558.7	-2553.2	-3893.6	-83.1
	12	420.2	850.2	76717.5	-610.3	963.0	37.1
	13	438.8	850.2	76565.0	-613.4	1017.8	37.0
	14	1222.3	549.5	78639.6	-10.6	3038.1	76.7
	15	1240.9	549.5	78487.1	-13.7	3092.9	76.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	16	363.0	863.9	76054.1	-605.9	802.0	41.4
	17	381.6	863.9	75901.5	-609.1	856.8	41.3
	18	1165.1	563.1	77976.1	-6.2	2877.1	81.0
	19	1183.7	563.1	77823.6	-9.4	2931.9	80.9
	20	1568.2	536.2	83975.3	27.0	4019.5	83.4
	21	1551.0	540.3	83776.2	28.3	3971.2	84.7
	22	1098.3	821.4	86673.1	-545.0	2888.8	48.0
	23	1081.2	825.5	86474.1	-543.7	2840.5	49.3
	24	1630.1	536.2	83466.8	16.4	4202.3	82.8
	25	1612.9	540.3	83267.7	17.8	4153.9	84.1
	26	1160.3	821.4	86164.6	-555.5	3071.6	47.5
	27	1143.1	825.5	85965.6	-554.2	3023.2	48.8
	28	-1145.8	1801.0	85710.4	-2516.9	-2806.0	-80.6
	29	-1127.2	1801.0	85557.9	-2520.0	-2751.2	-80.8
	30	-343.8	1500.2	87632.5	-1917.2	-730.9	-41.0
	31	-325.2	1500.2	87479.9	-1920.3	-676.1	-41.2
	32	-1203.0	1814.6	85046.9	-2512.5	-2967.0	-76.3
	33	-1184.4	1814.6	84894.4	-2515.6	-2912.2	-76.5
	34	-401.0	1513.9	86969.0	-1912.8	-892.0	-36.7
	35	-382.4	1513.9	86816.4	-1915.9	-837.1	-36.9
29	4	-1105.1	1664.8	76038.6	-2219.2	-2897.2	-48.6
	5	-1122.3	1670.6	75764.3	-2217.2	-2945.5	-47.3
	6	-1575.3	2028.7	79743.4	-2953.2	-4028.3	-83.9
	7	-1592.4	2034.6	79469.1	-2951.2	-4076.6	-82.6
	8	-1043.1	1661.6	75346.5	-2227.3	-2714.4	-49.1
	9	-1060.3	1667.5	75072.2	-2225.3	-2762.7	-47.8
	10	-1513.3	2025.6	79051.3	-2961.4	-3845.5	-84.4
	11	-1530.4	2031.4	78777.0	-2959.3	-3893.8	-83.1
	12	421.8	766.3	74808.9	-439.8	964.7	37.1
	13	440.4	765.4	74601.3	-442.2	1019.5	37.0
	14	1224.7	366.9	77393.1	355.8	3040.7	76.7
	15	1243.3	366.0	77185.5	353.4	3095.5	76.5
	16	364.6	785.7	73894.8	-433.1	803.6	41.4
	17	383.2	784.8	73687.1	-435.5	858.5	41.3
	18	1167.4	386.3	76479.0	362.5	2879.6	81.0
	19	1186.1	385.4	76271.3	360.1	2934.4	80.9
	20	1571.2	333.5	84652.6	432.8	4022.7	83.4
	21	1554.0	339.3	84378.3	434.8	3974.4	84.7
	22	1101.0	697.4	88357.4	-301.2	2891.6	48.0
	23	1083.9	703.3	88083.2	-299.2	2843.3	49.3
	24	1633.2	330.3	83960.5	424.7	4205.5	82.8
	25	1616.0	336.1	83686.2	426.7	4157.2	84.1
	26	1163.1	694.3	87665.3	-309.3	3074.4	47.5
	27	1145.9	700.1	87391.1	-307.3	3026.1	48.8
	28	-1145.3	1979.5	87158.3	-2886.6	-2805.5	-80.6
	29	-1126.7	1978.5	86950.7	-2889.1	-2750.7	-80.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	30	-342.4	1580.1	89742.5	-2091.0	-729.6	-41.0
	31	-323.8	1579.1	89534.9	-2093.4	-674.7	-41.2
	32	-1202.6	1998.9	86244.1	-2879.9	-2966.6	-76.3
	33	-1184.0	1998.0	86036.5	-2882.3	-2911.8	-76.5
	34	-399.7	1599.5	88828.4	-2084.3	-890.7	-36.7
	35	-381.1	1598.6	88620.7	-2086.7	-835.8	-36.9
28	4	-1104.9	1790.0	74545.6	-2465.2	-2897.0	-48.6
	5	-1122.1	1797.4	74197.3	-2462.1	-2945.3	-47.3
	6	-1575.1	2233.0	79265.2	-3362.2	-4028.1	-83.9
	7	-1592.3	2240.4	78916.8	-3359.1	-4076.5	-82.6
	8	-1042.9	1783.7	73670.5	-2470.9	-2714.1	-49.1
	9	-1060.1	1791.1	73322.2	-2467.8	-2762.5	-47.8
	10	-1513.1	2226.7	78390.1	-3367.8	-3845.3	-84.4
	11	-1530.3	2234.1	78041.7	-3364.7	-3893.6	-83.1
	12	422.4	681.4	72941.8	-267.7	965.3	37.1
	13	441.0	679.5	72679.3	-269.4	1020.2	37.0
	14	1225.5	183.4	76200.9	723.8	3041.5	76.7
	15	1244.1	181.5	75938.4	722.1	3096.3	76.5
	16	365.1	706.0	71780.6	-257.3	804.2	41.4
	17	383.7	704.1	71518.1	-259.0	859.1	41.3
	18	1168.2	208.0	75039.7	734.1	2880.4	81.0
	19	1186.8	206.1	74777.2	732.4	2935.2	80.9
	20	1572.0	130.0	85409.1	839.6	4023.6	83.4
	21	1554.9	137.4	85060.8	842.7	3975.3	84.7
	22	1101.8	573.0	90128.7	-57.3	2892.4	48.0
	23	1084.6	580.4	89780.3	-54.2	2844.1	49.3
	24	1634.1	123.7	84534.1	833.9	4206.5	82.8
	25	1616.9	131.1	84185.7	837.0	4158.1	84.1
	26	1163.9	566.6	89253.6	-63.0	3075.3	47.5
	27	1146.7	574.0	88905.3	-59.9	3026.9	48.8
	28	-1145.0	2158.0	88673.7	-3257.5	-2805.2	-80.6
	29	-1126.4	2156.1	88411.2	-3259.2	-2750.4	-80.8
	30	-341.9	1660.0	91932.8	-2266.1	-729.1	-41.0
	31	-323.3	1658.1	91670.2	-2267.8	-674.2	-41.2
	32	-1202.3	2182.6	87512.5	-3247.2	-2966.4	-76.3
	33	-1183.7	2180.7	87250.0	-3248.9	-2911.5	-76.5
	34	-399.2	1684.6	90771.6	-2255.7	-890.2	-36.7
	35	-380.6	1682.7	90509.1	-2257.4	-835.3	-36.9
27	4	-1100.8	1910.2	71929.9	-2705.7	-2892.8	-48.6
	5	-1118.4	1919.0	71519.8	-2701.3	-2941.6	-47.3
	6	-1572.1	2430.8	77560.0	-3764.3	-4025.8	-83.9
	7	-1589.7	2439.7	77150.0	-3760.0	-4074.6	-82.6
	8	-1037.5	1900.7	70938.7	-2709.0	-2708.8	-49.1
	9	-1055.1	1909.6	70528.6	-2704.7	-2757.6	-47.8
	10	-1508.8	2421.4	76568.8	-3767.7	-3841.8	-84.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	11	-1526.4	2430.2	76158.8	-3763.3	-3890.6	-83.1
	12	435.4	595.8	70187.8	-94.6	980.0	37.1
	13	454.4	593.0	69890.5	-95.6	1035.2	37.0
	14	1244.3	1.5	74212.1	1090.2	3062.6	76.7
	15	1263.2	-1.3	73914.8	1089.2	3117.8	76.5
	16	376.8	625.3	68821.1	-80.0	817.5	41.4
	17	395.8	622.5	68523.7	-81.0	872.7	41.3
	18	1185.7	31.0	72845.4	1104.8	2900.1	81.0
	19	1204.6	28.2	72548.0	1103.8	2955.3	80.9
	20	1595.4	-70.8	85344.2	1243.7	4049.2	83.4
	21	1577.9	-62.0	84934.2	1248.1	4000.4	84.7
	22	1124.2	449.8	90974.3	185.1	2916.1	48.0
	23	1106.6	458.7	90564.3	189.4	2867.4	49.3
	24	1658.7	-80.3	84353.0	1240.4	4233.2	82.8
	25	1641.1	-71.4	83943.0	1244.7	4184.4	84.1
	26	1187.4	440.4	89983.1	181.7	3100.1	47.5
	27	1169.8	449.2	89573.1	186.1	3051.4	48.8
	28	-1135.6	2331.2	88955.0	-3623.4	-2796.7	-80.6
	29	-1116.6	2328.4	88657.6	-3624.4	-2741.5	-80.8
	30	-326.7	1736.9	92979.3	-2438.6	-714.1	-41.0
	31	-307.8	1734.1	92681.9	-2439.6	-658.9	-41.2
	32	-1194.2	2360.8	87588.2	-3608.8	-2959.2	-76.3
	33	-1175.2	2357.9	87290.9	-3609.8	-2904.0	-76.5
	34	-385.3	1766.5	91612.5	-2424.0	-876.6	-36.7
	35	-366.4	1763.6	91315.2	-2425.0	-821.4	-36.9
26	4	-750.8	1862.4	65137.1	-2766.9	-2522.7	-48.6
	5	-769.1	1874.9	65102.9	-2763.5	-2571.7	-47.3
	6	-1234.2	2410.1	71327.6	-3930.9	-3664.9	-83.9
	7	-1252.5	2422.6	71293.5	-3927.5	-3713.9	-82.6
	8	-689.6	1849.4	64645.0	-2767.3	-2340.2	-49.1
	9	-707.9	1861.9	64610.9	-2763.9	-2389.3	-47.8
	10	-1173.0	2397.2	70835.5	-3931.2	-3482.4	-84.4
	11	-1191.3	2409.7	70801.4	-3927.8	-3531.5	-83.1
	12	812.4	472.1	46415.0	115.5	1370.3	37.1
	13	830.7	468.2	46267.4	115.4	1425.0	37.0
	14	1632.2	-155.4	36671.5	1425.7	3461.2	76.7
	15	1650.5	-159.3	36523.8	1425.6	3515.9	76.5
	16	751.4	513.8	46301.2	126.9	1206.8	41.4
	17	769.8	509.9	46153.5	126.8	1261.5	41.3
	18	1571.2	-113.8	36557.7	1437.2	3297.6	81.0
	19	1589.6	-117.7	36410.0	1437.1	3352.4	80.9
	20	1981.9	-229.4	32658.7	1600.6	4446.9	83.4
	21	1963.6	-216.9	32624.6	1604.0	4397.8	84.7
	22	1498.5	318.4	38849.3	436.6	3304.7	48.0
	23	1480.2	330.9	38815.1	440.0	3255.6	49.3
	24	2043.1	-242.4	32166.6	1600.2	4629.3	82.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	25	2024.8	-229.9	32132.5	1603.6	4580.2	84.1
	26	1559.6	305.4	38357.2	436.3	3487.1	47.5
	27	1541.4	317.9	38323.0	439.7	3438.0	48.8
	28	-799.0	2297.9	67050.1	-3764.3	-2437.0	-80.6
	29	-780.7	2294.0	66902.4	-3764.4	-2382.3	-80.8
	30	20.8	1670.4	57306.6	-2454.0	-346.1	-41.0
	31	39.1	1666.5	57158.9	-2454.1	-291.4	-41.2
	32	-860.0	2339.6	66936.3	-3752.9	-2600.5	-76.3
	33	-841.6	2335.7	66788.6	-3753.0	-2545.8	-76.5
	34	-40.2	1712.1	57192.8	-2442.6	-509.7	-36.7
	35	-21.8	1708.2	57045.1	-2442.7	-454.9	-36.9
25	4	-1230.5	784.7	35486.7	-1633.8	-3025.3	-48.6
	5	-1249.8	811.6	35453.0	-1649.5	-3075.4	-47.3
	6	-1715.3	1134.7	30469.4	-2550.1	-4170.0	-83.9
	7	-1734.7	1161.6	30435.8	-2565.8	-4220.1	-82.6
	8	-1167.3	760.9	36202.2	-1616.6	-2841.0	-49.1
	9	-1186.6	787.8	36168.5	-1632.2	-2891.1	-47.8
	10	-1652.1	1111.0	31184.9	-2532.9	-3985.7	-84.4
	11	-1671.5	1137.9	31151.3	-2548.5	-4035.8	-83.1
	12	348.6	-109.0	50378.0	682.6	885.4	37.1
	13	367.5	-116.1	50592.6	687.8	940.7	37.0
	14	1178.8	-491.0	57876.4	1731.0	2987.3	76.7
	15	1197.8	-498.1	58091.1	1736.2	3042.6	76.5
	16	284.0	-19.4	50265.9	630.5	718.2	41.4
	17	303.0	-26.5	50480.5	635.6	773.5	41.3
	18	1114.3	-401.3	57764.3	1678.8	2820.1	81.0
	19	1133.3	-408.4	57979.0	1684.0	2875.4	80.9
	20	1537.1	-488.4	60481.5	1860.8	3981.0	83.4
	21	1517.7	-461.5	60447.9	1845.2	3930.9	84.7
	22	1052.2	-138.4	55464.2	944.5	2836.3	48.0
	23	1032.9	-111.5	55430.6	928.8	2786.2	49.3
	24	1600.3	-512.2	61197.0	1878.1	4165.4	82.8
	25	1580.9	-485.3	61163.4	1862.4	4115.2	84.1
	26	1115.4	-162.1	56179.7	961.8	3020.7	47.5
	27	1096.1	-135.2	56146.1	946.1	2970.5	48.8
	28	-1267.7	1057.8	33653.8	-2371.7	-2930.2	-80.6
	29	-1248.7	1050.7	33868.5	-2366.6	-2874.9	-80.8
	30	-437.4	675.9	41152.3	-1323.3	-828.3	-41.0
	31	-418.4	668.8	41366.9	-1318.2	-773.0	-41.2
	32	-1332.2	1147.5	33541.7	-2423.9	-3097.4	-76.3
	33	-1313.2	1140.4	33756.4	-2418.7	-3042.1	-76.5
	34	-501.9	765.6	41040.2	-1375.5	-995.5	-36.7
	35	-482.9	758.4	41254.8	-1370.3	-940.2	-36.9
24	4	-1177.7	2147.3	67110.3	-3192.5	-2973.7	-48.6
	5	-1195.2	2159.5	66544.9	-3185.6	-3022.5	-47.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	6	-1662.6	2825.7	74801.0	-4583.8	-4120.9	-83.9
	7	-1680.1	2837.9	74235.6	-4576.8	-4169.7	-82.6
	8	-1112.9	2130.8	65666.0	-3190.2	-2788.1	-49.1
	9	-1130.4	2143.0	65100.5	-3183.3	-2836.9	-47.8
	10	-1597.8	2809.2	73356.6	-4581.5	-3935.2	-84.4
	11	-1615.3	2821.4	72791.2	-4574.6	-3984.0	-83.1
	12	401.5	412.1	64245.4	271.7	944.5	37.1
	13	421.0	407.1	63812.1	272.3	1000.2	37.0
	14	1233.4	-379.8	69348.3	1855.9	3051.3	76.7
	15	1252.8	-384.7	68915.0	1856.6	3107.0	76.5
	16	343.2	452.8	62360.7	294.8	781.9	41.4
	17	362.6	447.8	61927.4	295.5	837.6	41.3
	18	1175.0	-339.1	67463.6	1879.0	2888.7	81.0
	19	1194.5	-344.0	67030.3	1879.7	2944.3	80.9
	20	1595.0	-492.1	84120.0	2088.4	4049.0	83.4
	21	1577.5	-479.9	83554.6	2095.3	4000.2	84.7
	22	1110.2	186.3	91810.7	697.1	2901.8	48.0
	23	1092.7	198.5	91245.3	704.0	2853.0	49.3
	24	1659.9	-508.6	82675.6	2090.6	4234.6	82.8
	25	1642.4	-496.4	82110.2	2097.6	4185.8	84.1
	26	1175.0	169.7	90366.3	699.4	3087.4	47.5
	27	1157.5	181.9	89800.9	706.3	3038.6	48.8
	28	-1214.7	2673.3	89880.9	-4365.9	-2879.4	-80.6
	29	-1195.3	2668.3	89447.6	-4365.2	-2823.7	-80.8
	30	-382.9	1881.5	94983.8	-2781.7	-772.6	-41.0
	31	-363.5	1876.5	94550.5	-2781.0	-716.9	-41.2
	32	-1273.1	2714.0	87996.2	-4342.8	-3042.1	-76.3
	33	-1253.6	2709.0	87562.9	-4342.1	-2986.4	-76.5
	34	-441.2	1922.2	93099.1	-2758.6	-935.3	-36.7
	35	-421.8	1917.2	92665.8	-2757.9	-879.6	-36.9
23	4	-1109.0	2207.0	62511.4	-3361.1	-2901.2	-48.6
	5	-1126.7	2220.0	61866.0	-3352.3	-2950.1	-47.3
	6	-1592.1	2969.3	71318.3	-4916.8	-4046.3	-83.9
	7	-1609.8	2982.4	70672.9	-4907.9	-4095.2	-82.6
	8	-1044.5	2187.8	60909.3	-3357.0	-2715.9	-49.1
	9	-1062.2	2200.9	60263.9	-3348.1	-2764.8	-47.8
	10	-1527.7	2950.2	69716.2	-4912.6	-3861.0	-84.4
	11	-1545.4	2963.2	69070.8	-4903.8	-3909.9	-83.1
	12	464.6	251.7	59431.4	520.8	1010.2	37.1
	13	483.9	245.9	58950.8	522.1	1065.8	37.0
	14	1293.2	-643.2	65433.6	2300.2	3113.3	76.7
	15	1312.6	-648.9	64953.0	2301.4	3168.9	76.5
	16	405.6	295.1	57280.1	550.3	847.2	41.4
	17	425.0	289.4	56799.5	551.6	902.8	41.3
	18	1234.3	-599.7	63282.3	2329.7	2950.3	81.0
	19	1253.6	-605.5	62801.7	2330.9	3005.9	80.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	20	1653.1	-775.8	82518.7	2570.0	4109.1	83.4
	21	1635.4	-762.8	81873.3	2578.9	4060.1	84.7
	22	1170.0	-13.5	91325.6	1014.4	2964.0	48.0
	23	1152.3	-0.5	90680.2	1023.2	2915.1	49.3
	24	1717.5	-795.0	80916.6	2574.2	4294.3	82.8
	25	1699.8	-782.0	80271.3	2583.1	4245.4	84.1
	26	1234.4	-32.7	89723.6	1018.6	3149.3	47.5
	27	1216.7	-19.6	89078.2	1027.4	3100.3	48.8
	28	-1145.8	2792.8	88787.8	-4664.7	-2806.7	-80.6
	29	-1126.5	2787.1	88307.2	-4663.4	-2751.1	-80.8
	30	-317.2	1898.0	94790.0	-2885.3	-703.6	-41.0
	31	-297.9	1892.2	94309.4	-2884.1	-648.0	-41.2
	32	-1204.8	2836.3	86636.5	-4635.2	-2969.7	-76.3
	33	-1185.5	2830.5	86155.9	-4633.9	-2914.1	-76.5
	34	-376.2	1941.4	92638.7	-2855.8	-866.7	-36.7
	35	-356.9	1935.7	92158.1	-2854.6	-811.1	-36.9
22	4	-555.4	1856.4	30215.3	-3088.9	-2319.5	-48.6
	5	-568.5	1870.6	29518.1	-3078.5	-2363.1	-47.3
	6	-940.7	2695.7	40416.9	-4800.1	-3355.6	-83.9
	7	-953.8	2709.9	39719.6	-4789.7	-3399.2	-82.6
	8	-512.3	1833.8	28799.5	-3081.9	-2155.6	-49.1
	9	-525.4	1847.9	28102.3	-3071.5	-2199.2	-47.8
	10	-897.6	2673.0	39001.0	-4793.1	-3191.7	-84.4
	11	-910.7	2687.2	38303.8	-4782.7	-3235.3	-83.1
	12	652.7	-305.6	26704.0	1193.5	1197.4	37.1
	13	665.6	-312.3	26279.3	1195.6	1246.6	37.0
	14	1276.9	-1298.4	33623.3	3161.2	3083.1	76.7
	15	1289.9	-1305.2	33198.6	3163.3	3132.3	76.5
	16	609.1	-258.3	24379.9	1228.1	1052.2	41.4
	17	622.0	-265.0	23955.1	1230.2	1101.4	41.3
	18	1233.3	-1251.1	31299.2	3195.9	2937.9	81.0
	19	1246.2	-1257.9	30874.4	3198.0	2987.1	80.9
	20	1525.3	-1453.0	53279.7	3470.2	3966.1	83.4
	21	1512.3	-1438.8	52582.5	3480.6	3922.5	84.7
	22	1140.0	-613.7	63481.3	1759.0	2930.0	48.0
	23	1127.0	-599.5	62784.0	1769.4	2886.4	49.3
	24	1568.4	-1475.6	51863.9	3477.2	4130.0	82.8
	25	1555.3	-1461.4	51166.7	3487.6	4086.5	84.1
	26	1183.1	-636.3	62065.4	1766.0	3093.9	47.5
	27	1170.1	-622.1	61368.2	1776.4	3050.4	48.8
	28	-631.6	2492.1	60709.1	-4510.5	-2256.3	-80.6
	29	-618.7	2485.3	60284.4	-4508.4	-2207.1	-80.8
	30	-7.4	1499.3	67628.4	-2542.7	-370.6	-41.0
	31	5.5	1492.5	67203.7	-2540.6	-321.4	-41.2
	32	-675.2	2539.4	58385.0	-4475.8	-2401.5	-76.3
	33	-662.3	2532.6	57960.2	-4473.7	-2352.3	-76.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	34	-51.0	1546.6	65304.3	-2508.1	-515.8	-36.7
	35	-38.1	1539.8	64879.5	-2506.0	-466.6	-36.9
21	4	-3979.3	-9850.0	33145.6	17588.0	-11291.6	-466.5
	5	-3880.7	-9770.4	33221.7	17446.5	-11057.4	-461.7
	6	-2557.5	-6523.8	34640.3	11591.7	-8060.8	-315.2
	7	-2459.0	-6444.2	34716.4	11450.2	-7826.7	-310.3
	8	-3791.6	-9239.7	33379.5	16497.8	-10874.8	-438.2
	9	-3693.1	-9160.1	33455.6	16356.3	-10640.7	-433.4
	10	-2369.9	-5913.5	34874.2	10501.5	-7644.1	-286.9
	11	-2271.3	-5833.9	34950.3	10360.0	-7409.9	-282.0
	12	-2342.6	-8273.7	34471.8	14698.8	-7467.1	-375.5
	13	-2286.3	-8090.6	34541.9	14371.8	-7342.0	-367.0
	14	524.2	-3700.0	37109.0	6411.7	-849.1	-149.8
	15	580.5	-3516.9	37179.2	6084.7	-724.1	-141.3
	16	-2014.1	-8008.6	34725.3	14227.4	-6686.6	-359.4
	17	-1957.9	-7825.5	34795.5	13900.3	-6561.6	-350.9
	18	852.7	-3434.8	37362.5	5940.3	-68.7	-133.7
	19	909.0	-3251.7	37432.7	5613.2	56.4	-125.2
	20	5576.9	5395.8	41936.5	-10035.6	10768.4	285.8
	21	5675.5	5475.4	42012.5	-10177.1	11002.5	290.6
	22	6998.7	8722.0	43431.2	-16031.9	13999.1	437.1
	23	7097.2	8801.6	43507.2	-16173.4	14233.2	441.9
	24	5764.6	6006.2	42170.4	-11125.8	11185.1	314.1
	25	5863.1	6085.7	42246.4	-11267.3	11419.2	318.9
	26	7186.3	9332.3	43665.0	-17122.2	14415.9	465.4
	27	7284.9	9411.9	43741.1	-17263.6	14650.0	470.2
	28	2396.6	2813.6	39454.0	-5288.8	3302.1	128.9
	29	2452.9	2996.7	39524.2	-5615.9	3427.1	137.4
	30	5263.4	7387.4	42091.3	-13575.9	9920.0	354.6
	31	5319.7	7570.5	42161.4	-13903.0	10045.1	363.1
	32	2725.1	3078.8	39707.6	-5760.3	4082.5	145.1
	33	2781.3	3261.9	39777.7	-6087.4	4207.5	153.5
	34	5591.9	7652.5	42344.8	-14047.4	10700.5	370.7
	35	5648.2	7835.6	42415.0	-14374.5	10825.5	379.2
20	4	325.5	-2579.9	70591.7	4653.2	-1098.8	-145.3
	5	317.7	-2567.7	70078.3	4624.2	-1085.7	-143.8
	6	38.2	-1951.2	65517.5	3339.5	-1504.0	-98.2
	7	30.5	-1939.0	65004.2	3310.5	-1491.0	-96.7
	8	347.6	-2483.6	70196.6	4433.2	-1078.7	-136.5
	9	339.9	-2471.4	69683.2	4404.2	-1065.7	-135.0
	10	60.4	-1855.0	65122.4	3119.6	-1484.0	-89.4
	11	52.6	-1842.8	64609.0	3090.5	-1470.9	-87.8
	12	309.0	-2197.8	62929.3	3905.2	-14.6	-117.0
	13	315.7	-2168.9	62810.7	3839.2	-8.6	-114.3
	14	-6.7	-1258.3	50892.5	1987.3	516.4	-46.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	15	-0.0	-1229.5	50773.9	1921.3	522.4	-44.0
	16	283.2	-2157.2	61218.0	3808.4	28.8	-111.9
	17	289.9	-2128.3	61099.4	3742.4	34.9	-109.3
	18	-32.5	-1217.7	49181.2	1890.5	559.8	-41.6
	19	-25.9	-1188.8	49062.7	1824.5	565.9	-39.0
	20	-727.0	551.7	30469.1	-1739.7	671.2	89.0
	21	-734.7	563.9	29955.7	-1768.7	684.3	90.5
	22	-1014.3	1180.4	25394.9	-3053.4	265.9	136.1
	23	-1022.0	1192.6	24881.5	-3082.4	279.0	137.6
	24	-704.8	648.0	30073.9	-1959.7	691.3	97.8
	25	-712.6	660.2	29560.5	-1988.7	704.3	99.3
	26	-992.1	1276.6	24999.8	-3273.3	286.0	145.0
	27	-999.8	1288.8	24486.4	-3302.4	299.0	146.5
	28	-648.5	-102.3	46015.4	-473.7	-1365.6	40.2
	29	-641.8	-73.4	45896.9	-539.7	-1359.6	42.8
	30	-964.2	837.2	33978.6	-2391.6	-834.6	110.4
	31	-957.6	866.1	33860.1	-2457.6	-828.6	113.1
	32	-674.3	-61.6	44304.1	-570.5	-1322.1	45.2
	33	-667.7	-32.7	44185.6	-636.5	-1316.1	47.8
	34	-990.1	877.9	32267.4	-2488.4	-791.1	115.5
	35	-983.4	906.7	32148.8	-2554.4	-785.1	118.1
19	4	538.4	-2752.8	93258.4	4510.2	-939.4	-145.3
	5	539.3	-2743.0	93143.6	4487.0	-929.2	-143.8
	6	269.7	-2228.0	86818.6	3413.1	-1384.5	-98.2
	7	270.7	-2218.2	86703.7	3390.0	-1374.3	-96.7
	8	540.4	-2674.0	91813.6	4328.9	-926.1	-136.5
	9	541.4	-2664.3	91698.7	4305.8	-915.9	-135.0
	10	271.8	-2149.3	85373.7	3231.9	-1371.2	-89.4
	11	272.7	-2139.5	85258.8	3208.8	-1361.0	-87.8
	12	538.5	-2443.2	93740.1	3905.6	315.0	-117.0
	13	539.2	-2419.6	93306.6	3851.3	319.0	-114.3
	14	270.3	-1666.9	88031.7	2321.6	951.3	-46.7
	15	270.9	-1643.3	87598.2	2267.3	955.2	-44.0
	16	541.6	-2410.7	93357.2	3828.5	348.9	-111.9
	17	542.2	-2387.1	92923.7	3774.2	352.9	-109.3
	18	273.4	-1634.4	87648.7	2244.6	985.2	-41.6
	19	274.0	-1610.8	87215.3	2190.2	989.2	-39.0
	20	-355.7	-165.2	74230.3	-769.8	1181.5	89.0
	21	-354.8	-155.5	74115.4	-792.9	1191.7	90.5
	22	-624.3	359.6	67790.4	-1866.8	736.5	136.1
	23	-623.4	369.3	67675.5	-1889.9	746.6	137.6
	24	-353.7	-86.5	72785.4	-951.0	1194.8	97.8
	25	-352.7	-76.8	72670.5	-974.1	1205.0	99.3
	26	-622.3	438.3	66345.5	-2048.0	749.7	145.0
	27	-621.4	448.0	66230.6	-2071.2	759.9	146.5
	28	-357.0	-693.9	72273.8	248.8	-1168.7	40.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	29	-356.4	-670.3	71840.3	194.4	-1164.7	42.8
	30	-625.2	82.4	66565.4	-1335.2	-532.4	110.4
	31	-624.6	106.0	66131.9	-1389.5	-528.4	113.1
	32	-353.9	-661.4	71890.9	171.7	-1134.7	45.2
	33	-353.3	-637.8	71457.4	117.4	-1130.7	47.8
	34	-622.2	114.9	66182.4	-1412.2	-498.4	115.5
	35	-621.5	138.5	65749.0	-1466.6	-494.4	118.1
18	4	556.6	-2443.4	92162.2	3847.2	-909.9	-145.3
	5	557.5	-2436.3	92073.7	3830.0	-900.1	-143.8
	6	292.0	-2019.9	87170.2	2964.5	-1353.4	-98.2
	7	292.9	-2012.7	87081.8	2947.3	-1343.6	-96.7
	8	558.7	-2380.8	91073.4	3703.4	-897.4	-136.5
	9	559.6	-2373.6	90985.0	3686.2	-887.6	-135.0
	10	294.1	-1957.3	86081.5	2820.7	-1340.9	-89.4
	11	295.0	-1950.1	85993.0	2803.5	-1331.1	-87.8
	12	556.0	-2212.8	92343.1	3394.7	341.2	-117.0
	13	556.6	-2194.0	92016.5	3351.5	344.9	-114.3
	14	291.2	-1603.1	87744.5	2150.1	976.0	-46.7
	15	291.9	-1584.3	87417.9	2106.9	979.8	-44.0
	16	559.1	-2188.8	92048.4	3337.5	373.9	-111.9
	17	559.8	-2170.0	91721.8	3294.3	377.6	-109.3
	18	294.3	-1579.1	87449.8	2092.9	1008.7	-41.6
	19	295.0	-1560.3	87123.2	2049.8	1012.4	-39.0
	20	-326.1	-411.1	76833.4	-301.4	1206.2	89.0
	21	-325.1	-404.0	76745.0	-318.5	1216.0	90.5
	22	-590.6	12.4	71841.4	-1184.1	762.6	136.1
	23	-589.7	19.6	71753.0	-1201.2	772.4	137.6
	24	-323.9	-348.5	75744.7	-445.2	1218.7	97.8
	25	-323.0	-341.3	75656.2	-462.3	1228.5	99.3
	26	-588.5	75.1	70752.7	-1327.9	775.1	145.0
	27	-587.6	82.2	70664.3	-1345.0	784.9	146.5
	28	-326.0	-800.9	75703.3	452.4	-1137.4	40.2
	29	-325.4	-782.1	75376.7	409.2	-1133.6	42.8
	30	-590.8	-191.2	71104.7	-792.2	-502.5	110.4
	31	-590.1	-172.4	70778.0	-835.3	-498.8	113.1
	32	-322.9	-776.9	75408.5	395.2	-1104.7	45.2
	33	-322.2	-758.1	75081.9	352.1	-1100.9	47.8
	34	-587.7	-167.2	70809.9	-849.4	-469.9	115.5
	35	-587.0	-148.4	70483.3	-892.5	-466.1	118.1
17	4	558.6	-2108.7	89344.2	3157.4	-907.8	-145.3
	5	559.6	-2103.8	89283.8	3145.7	-898.0	-143.8
	6	294.0	-1785.1	85708.2	2487.2	-1351.6	-98.2
	7	295.0	-1780.3	85647.8	2475.6	-1341.7	-96.7
	8	560.6	-2062.1	88580.1	3050.9	-895.3	-136.5
	9	561.6	-2057.2	88519.7	3039.2	-885.5	-135.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	10	296.0	-1738.5	84944.1	2380.7	-1339.1	-89.4
	11	297.0	-1733.7	84883.7	2369.1	-1329.2	-87.8
	12	558.1	-1957.4	89463.4	2858.3	343.7	-117.0
	13	558.7	-1943.4	89234.2	2826.3	347.4	-114.3
	14	293.4	-1513.3	86098.6	1952.0	978.7	-46.7
	15	294.0	-1499.3	85869.3	1920.1	982.4	-44.0
	16	561.4	-1941.2	89262.1	2819.5	376.4	-111.9
	17	562.0	-1927.2	89032.9	2787.5	380.2	-109.3
	18	296.7	-1497.1	85897.2	1913.2	1011.5	-41.6
	19	297.3	-1483.1	85668.0	1881.3	1015.2	-39.0
	20	-323.6	-628.4	78127.9	136.6	1208.9	89.0
	21	-322.6	-623.5	78067.5	125.0	1218.8	90.5
	22	-588.2	-304.9	74492.0	-533.5	765.2	136.1
	23	-587.2	-300.0	74431.6	-545.2	775.0	137.6
	24	-321.6	-581.8	77363.8	30.2	1221.4	97.8
	25	-320.6	-576.9	77303.4	18.5	1231.3	99.3
	26	-586.2	-258.3	73727.9	-640.0	777.7	145.0
	27	-585.2	-253.4	73667.5	-651.6	787.5	146.5
	28	-323.9	-879.0	77343.6	624.4	-1135.5	40.2
	29	-323.3	-865.0	77114.4	592.5	-1131.8	42.8
	30	-588.6	-434.9	73978.7	-281.8	-500.5	110.4
	31	-588.0	-420.9	73749.5	-313.7	-496.7	113.1
	32	-320.6	-862.8	77142.3	585.6	-1102.7	45.2
	33	-320.0	-848.8	76913.1	553.7	-1099.0	47.8
	34	-585.3	-418.7	73777.4	-320.6	-467.7	115.5
	35	-584.7	-404.7	73548.2	-352.5	-464.0	118.1
16	4	298.8	-1745.0	86776.1	2437.6	-920.1	-145.3
	5	298.2	-1742.0	86744.9	2430.4	-907.8	-143.8
	6	581.6	-1522.4	83583.7	1979.6	-1360.5	-98.2
	7	580.9	-1519.3	83552.5	1972.5	-1348.2	-96.7
	8	300.5	-1715.0	79274.7	2369.1	-902.7	-136.5
	9	299.9	-1711.9	79243.5	2361.9	-890.4	-135.0
	10	583.3	-1492.3	76082.3	1911.1	-1343.1	-89.4
	11	582.6	-1489.3	76051.1	1904.0	-1330.8	-87.8
	12	-352.7	-1674.6	87686.4	2295.4	325.6	-117.0
	13	-352.2	-1665.6	85436.0	2274.9	330.8	-114.3
	14	-629.6	-1397.6	87493.5	1729.0	960.1	-46.7
	15	-629.1	-1388.6	85243.1	1708.5	965.3	-44.0
	16	-355.0	-1664.5	87582.4	2271.6	366.6	-111.9
	17	-354.4	-1655.5	85332.0	2251.1	371.8	-109.3
	18	-631.9	-1387.4	87389.5	1705.2	1001.1	-41.6
	19	-631.3	-1378.4	85139.1	1684.7	1006.3	-39.0
	20	-624.2	-821.6	86133.0	549.6	1194.8	89.0
	21	-624.9	-818.5	86101.8	542.4	1207.1	90.5
	22	-341.4	-598.9	82940.6	91.6	754.4	136.1
	23	-342.1	-595.9	82909.4	84.4	766.7	137.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	24	-622.5	-791.5	78631.6	481.1	1212.2	97.8
	25	-623.1	-788.5	78600.5	473.9	1224.5	99.3
	26	-339.7	-568.9	75439.2	23.1	771.8	145.0
	27	-340.4	-565.8	75408.0	16.0	784.1	146.5
	28	589.8	-932.4	77045.1	768.8	-1142.3	40.2
	29	590.3	-923.4	74794.6	748.3	-1137.0	42.8
	30	312.9	-655.4	76852.1	202.4	-507.8	110.4
	31	313.4	-646.4	74601.7	181.9	-502.6	113.1
	32	587.6	-922.3	76941.1	745.0	-1101.3	45.2
	33	588.1	-913.3	74690.7	724.5	-1096.1	47.8
	34	310.7	-645.2	76748.2	178.6	-466.8	115.5
	35	311.2	-636.2	74497.7	158.1	-461.6	118.1
15	4	324.4	-5907.4	83940.7	14888.9	-3945.0	-466.5
	5	341.0	-5885.0	84021.3	14791.3	-3886.4	-461.7
	6	817.8	-4148.5	86905.3	10157.9	-2953.8	-315.2
	7	834.4	-4126.1	86985.9	10060.3	-2895.3	-310.3
	8	337.0	-5702.7	83787.7	14136.1	-3825.6	-438.2
	9	353.6	-5680.3	83868.3	14038.5	-3767.0	-433.4
	10	830.4	-3943.8	86752.3	9405.2	-2834.4	-286.9
	11	847.0	-3921.5	86832.9	9307.6	-2775.9	-282.0
	12	-756.8	-4804.1	78478.4	12084.8	-2908.2	-375.5
	13	-753.0	-4742.7	78432.5	11859.0	-2872.4	-367.0
	14	-1177.2	-2138.6	76887.5	5078.6	-1005.7	-149.8
	15	-1173.5	-2077.2	76841.6	4852.8	-969.8	-141.3
	16	-701.3	-4729.5	78747.1	11759.5	-2713.1	-359.4
	17	-697.5	-4668.1	78701.2	11533.7	-2677.2	-350.9
	18	-1121.8	-2063.9	77156.2	4753.4	-810.5	-133.7
	19	-1118.0	-2002.6	77110.3	4527.6	-774.7	-125.2
	20	-1077.1	2977.7	78637.7	-8465.0	2396.8	285.8
	21	-1060.5	3000.1	78718.3	-8562.6	2455.4	290.6
	22	-583.7	4736.6	81602.3	-13195.9	3388.0	437.1
	23	-567.0	4759.0	81682.9	-13293.5	3446.5	441.9
	24	-1064.5	3182.3	78484.8	-9217.8	2516.2	314.1
	25	-1047.8	3204.7	78565.4	-9315.3	2574.8	318.9
	26	-571.1	4941.2	81449.3	-13948.7	3507.4	465.4
	27	-554.4	4963.6	81529.9	-14046.3	3565.9	470.2
	28	887.9	1058.8	88360.3	-3685.0	395.6	128.9
	29	891.7	1120.2	88314.4	-3910.8	431.4	137.4
	30	467.5	3724.3	86769.4	-10691.1	2298.2	354.6
	31	471.3	3785.7	86723.5	-10916.9	2334.0	363.1
	32	943.4	1133.5	88629.0	-4010.2	590.8	145.1
	33	947.2	1194.8	88583.1	-4236.1	626.6	153.5
	34	523.0	3799.0	87038.1	-11016.4	2493.3	370.7
	35	526.7	3860.4	86992.2	-11242.2	2529.1	379.2
14	4	-954.7	-5368.5	136124.4	12815.2	-3928.2	-466.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	5	-939.3	-5350.8	136154.5	12737.8	-3867.1	-461.7
	6	-455.4	-3887.6	137879.2	8849.4	-2917.9	-315.2
	7	-440.0	-3869.9	137909.3	8772.0	-2856.8	-310.3
	8	448.0	-5198.7	136506.7	12190.7	-3808.2	-438.2
	9	463.4	-5181.0	136536.8	12113.4	-3747.2	-433.4
	10	947.3	-3717.8	138261.5	8224.9	-2798.0	-286.9
	11	962.6	-3700.1	138291.6	8147.6	-2736.9	-282.0
	12	-1063.7	-4491.1	136099.3	10566.8	-2848.2	-375.5
	13	-642.9	-4440.2	136214.1	10379.5	-2812.2	-367.0
	14	-1063.4	-2291.4	137748.1	4783.8	-887.1	-149.8
	15	-642.6	-2240.5	137862.8	4596.5	-851.1	-141.3
	16	-1012.5	-4432.2	136199.8	10308.9	-2644.6	-359.4
	17	-591.7	-4381.3	136314.5	10121.6	-2608.6	-350.9
	18	-1012.2	-2232.5	137848.5	4526.0	-683.5	-133.7
	19	-591.4	-2181.6	137963.2	4338.6	-647.5	-125.2
	20	-953.5	1963.8	141620.2	-6461.4	2608.7	285.8
	21	-938.1	1981.4	141650.3	-6538.8	2669.8	290.6
	22	-454.2	3444.7	143374.9	-10427.2	3619.0	437.1
	23	-438.9	3462.3	143405.1	-10504.6	3680.1	441.9
	24	449.2	2133.5	142002.5	-7085.9	2728.6	314.1
	25	464.5	2151.2	142032.6	-7163.3	2789.7	318.9
	26	948.4	3614.4	143757.3	-11051.7	3738.9	465.4
	27	963.8	3632.1	143787.4	-11129.1	3800.0	470.2
	28	600.5	445.2	141948.6	-2652.5	519.4	128.9
	29	1021.3	496.2	142063.3	-2839.8	555.3	137.4
	30	600.9	2644.9	143597.3	-8435.5	2480.4	354.6
	31	1021.6	2695.8	143712.0	-8622.8	2516.4	363.1
	32	651.7	504.1	142049.0	-2910.4	723.0	145.1
	33	1072.5	555.1	142163.7	-3097.7	758.9	153.5
	34	652.1	2703.8	143697.7	-8693.4	2684.0	370.7
	35	1072.9	2754.7	143812.4	-8880.7	2720.0	379.2
13	4	-963.3	-4314.5	137972.6	10185.6	-3902.4	-466.5
	5	-947.6	-4301.1	137994.6	10127.7	-3842.2	-461.7
	6	-468.3	-3099.0	139362.5	6973.5	-2900.4	-315.2
	7	-452.6	-3085.6	139384.5	6915.6	-2840.2	-310.3
	8	443.2	-4175.8	138274.5	9686.4	-3783.3	-438.2
	9	458.9	-4162.5	138296.5	9628.6	-3723.1	-433.4
	10	938.2	-2960.4	139664.4	6474.3	-2781.3	-286.9
	11	953.9	-2947.0	139686.4	6416.4	-2721.1	-282.0
	12	-1068.2	-3662.8	137871.7	8501.6	-2834.9	-375.5
	13	-646.3	-3621.2	137962.3	8351.8	-2799.1	-367.0
	14	-1069.5	-1917.0	139106.4	3937.9	-893.4	-149.8
	15	-647.5	-1875.4	139197.0	3788.1	-857.7	-141.3
	16	-1015.9	-3618.2	137945.0	8308.6	-2634.2	-359.4
	17	-593.9	-3576.6	138035.6	8158.9	-2598.5	-350.9
	18	-1017.1	-1872.4	139179.7	3744.9	-692.7	-133.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	19	-595.2	-1830.8	139270.3	3595.2	-657.0	-125.2
	20	-967.4	1504.9	142088.5	-5026.7	2569.2	285.8
	21	-951.6	1518.3	142110.5	-5084.6	2629.4	290.6
	22	-472.4	2720.4	143478.3	-8238.8	3571.2	437.1
	23	-456.7	2733.7	143500.3	-8296.7	3631.4	441.9
	24	439.1	1643.6	142390.4	-5525.9	2688.3	314.1
	25	454.8	1656.9	142412.4	-5583.7	2748.5	318.9
	26	934.1	2859.0	143780.3	-8738.0	3690.3	465.4
	27	949.8	2872.4	143802.3	-8795.9	3750.4	470.2
	28	581.7	388.7	142504.5	-2205.5	505.1	128.9
	29	1003.6	430.3	142595.1	-2355.2	540.8	137.4
	30	580.5	2134.6	143739.3	-6769.2	2446.6	354.6
	31	1002.4	2176.2	143829.9	-6918.9	2482.3	363.1
	32	634.0	433.3	142577.9	-2398.4	705.8	145.1
	33	1056.0	474.9	142668.5	-2548.2	741.5	153.5
	34	632.8	2179.1	143812.6	-6962.1	2647.2	370.7
	35	1054.8	2220.7	143903.2	-7111.9	2683.0	379.2
12	4	-962.4	-3364.9	138764.1	7666.2	-3902.3	-466.5
	5	-946.7	-3355.5	138778.8	7626.5	-3842.1	-461.7
	6	-467.4	-2425.8	139789.8	5218.1	-2900.2	-315.2
	7	-451.7	-2416.4	139804.4	5178.4	-2840.0	-310.3
	8	443.7	-3260.1	138979.3	7295.4	-3783.2	-438.2
	9	459.4	-3250.7	138994.0	7255.8	-3723.0	-433.4
	10	938.7	-2320.9	140005.0	4847.3	-2781.1	-286.9
	11	954.4	-2311.5	140019.6	4807.6	-2720.9	-282.0
	12	-1067.5	-2949.5	138672.0	6560.2	-2834.5	-375.5
	13	-645.6	-2918.1	138736.6	6449.0	-2798.8	-367.0
	14	-1068.6	-1676.3	139568.8	3235.7	-892.6	-149.8
	15	-646.8	-1644.9	139633.4	3124.4	-856.9	-141.3
	16	-1015.1	-2918.2	138720.8	6427.9	-2633.8	-359.4
	17	-593.3	-2886.7	138785.4	6316.7	-2598.1	-350.9
	18	-1016.3	-1645.0	139617.6	3103.3	-691.9	-133.7
	19	-594.5	-1613.5	139682.2	2992.1	-656.2	-125.2
	20	-966.4	879.1	141753.4	-3415.7	2570.6	285.8
	21	-950.7	888.5	141768.1	-3455.4	2630.8	290.6
	22	-471.4	1818.2	142779.1	-5863.8	3572.7	437.1
	23	-455.7	1827.6	142793.7	-5903.5	3633.0	441.9
	24	439.8	983.9	141968.6	-3786.5	2689.7	314.1
	25	455.5	993.3	141983.3	-3826.2	2749.9	318.9
	26	934.8	1923.1	142994.3	-6234.6	3691.8	465.4
	27	950.5	1932.5	143008.9	-6274.3	3752.0	470.2
	28	582.5	181.0	142090.8	-1600.2	505.9	128.9
	29	1004.4	212.5	142155.4	-1711.4	541.6	137.4
	30	581.3	1454.2	142987.6	-4924.8	2447.8	354.6
	31	1003.2	1485.7	143052.2	-5036.0	2483.5	363.1
	32	634.8	212.4	142139.6	-1732.5	706.6	145.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	33	1056.7	243.8	142204.2	-1843.7	742.3	153.5
	34	633.7	1485.6	143036.4	-5057.1	2648.5	370.7
	35	1055.5	1517.0	143101.0	-5168.3	2684.2	379.2
11	4	-958.6	-2435.3	139800.3	5172.6	-3888.7	-466.5
	5	-942.7	-2428.3	139807.6	5147.1	-3828.6	-461.7
	6	-460.7	-1769.2	140595.6	3478.6	-2884.7	-315.2
	7	-444.8	-1762.2	140602.9	3453.2	-2824.6	-310.3
	8	463.7	-2364.5	141698.7	4930.6	-3769.3	-438.2
	9	479.7	-2357.5	141706.0	4905.1	-3709.1	-433.4
	10	961.6	-1698.5	142494.0	3236.7	-2765.2	-286.9
	11	977.6	-1691.4	142501.3	3211.2	-2705.1	-282.0
	12	-1062.0	-2260.8	139581.3	4659.3	-2823.7	-375.5
	13	-635.3	-2239.6	140150.8	4586.7	-2787.8	-367.0
	14	-1063.5	-1459.3	139626.7	2572.6	-882.5	-149.8
	15	-636.8	-1438.1	140196.2	2500.0	-846.6	-141.3
	16	-1008.9	-2237.4	139605.7	4574.5	-2623.2	-359.4
	17	-582.1	-2216.2	140175.2	4501.9	-2587.4	-350.9
	18	-1010.4	-1435.9	139651.0	2487.8	-682.0	-133.7
	19	-583.6	-1414.7	140220.5	2415.2	-646.2	-125.2
	20	-963.6	236.2	139951.5	-1783.2	2582.0	285.8
	21	-947.7	243.3	139958.8	-1808.6	2642.1	290.6
	22	-465.7	902.3	140746.8	-3477.1	3586.0	437.1
	23	-449.8	909.3	140754.1	-3502.5	3646.1	441.9
	24	458.7	307.0	141849.8	-2025.1	2701.5	314.1
	25	474.7	314.0	141857.1	-2050.6	2761.6	318.9
	26	956.6	973.1	142645.1	-3719.0	3705.5	465.4
	27	972.6	980.1	142652.4	-3744.5	3765.6	470.2
	28	597.6	-40.5	142232.2	-987.1	523.1	128.9
	29	1024.3	-19.3	142801.7	-1059.7	558.9	137.4
	30	596.1	760.9	142277.6	-3073.8	2464.3	354.6
	31	1022.8	782.2	142847.1	-3146.4	2500.1	363.1
	32	650.8	-17.1	142256.6	-1071.9	723.5	145.1
	33	1077.5	4.1	142826.1	-1144.5	759.3	153.5
	34	649.3	784.3	142301.9	-3158.6	2664.7	370.7
	35	1076.0	805.6	142871.4	-3231.2	2700.5	379.2
10	4	-3193.7	-4910.2	97642.1	13866.5	-9373.0	-466.5
	5	-3174.3	-4879.4	97441.2	13760.2	-9239.5	-461.7
	6	-2409.9	-2866.1	93605.8	8805.1	-7171.5	-315.2
	7	-2390.5	-2835.3	93404.8	8698.7	-7038.0	-310.3
	8	-3067.2	-4644.2	97035.5	13048.1	-9070.1	-438.2
	9	-3047.8	-4613.5	96834.5	12941.7	-8936.6	-433.4
	10	-2283.4	-2600.1	92999.1	7986.6	-6868.6	-286.9
	11	-2264.0	-2569.3	92798.2	7880.3	-6735.1	-282.0
	12	-2791.2	-3627.7	93928.2	10905.4	-7039.1	-375.5
	13	-2753.3	-3547.9	93746.2	10659.9	-6948.2	-367.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	14	-1680.9	-533.4	86689.5	3445.1	-2794.5	-149.8
	15	-1643.0	-453.6	86507.5	3199.6	-2703.6	-141.3
	16	-2726.4	-3525.2	93258.3	10551.0	-6594.2	-359.4
	17	-2688.5	-3445.4	93076.3	10305.4	-6503.3	-350.9
	18	-1616.1	-430.8	86019.6	3090.7	-2349.6	-133.7
	19	-1578.2	-351.0	85837.6	2845.1	-2258.7	-125.2
	20	507.2	5404.4	73513.3	-11001.2	4775.7	285.8
	21	526.7	5435.1	73312.3	-11107.5	4909.1	290.6
	22	1291.0	7448.5	69476.9	-16062.6	6977.2	437.1
	23	1310.5	7479.3	69276.0	-16169.0	7110.6	441.9
	24	633.7	5670.4	72906.6	-11819.6	5078.6	314.1
	25	653.2	5701.1	72705.6	-11926.0	5212.1	318.9
	26	1417.5	7714.5	68870.3	-16881.1	7280.1	465.4
	27	1437.0	7745.3	68669.3	-16987.4	7413.6	470.2
	28	-178.6	3186.1	80473.8	-5966.0	299.3	128.9
	29	-140.6	3265.9	80291.8	-6211.6	390.1	137.4
	30	931.7	6280.5	73235.2	-13426.3	4543.9	354.6
	31	969.7	6360.3	73053.1	-13671.9	4634.7	363.1
	32	-113.8	3288.6	79803.9	-6320.5	744.2	145.1
	33	-75.8	3368.4	79621.9	-6566.0	835.1	153.5
	34	996.5	6383.0	72565.2	-13780.8	4988.8	370.7
	35	1034.5	6462.8	72383.2	-14026.3	5079.7	379.2
9	4	-1686.9	-2883.5	145129.0	10230.8	-7791.1	-466.5
	5	-1668.0	-2857.9	145082.5	10145.1	-7658.3	-461.7
	6	-922.6	-1121.4	142173.2	5941.2	-5609.7	-315.2
	7	-903.7	-1095.8	142126.6	5855.5	-5476.8	-310.3
	8	-1563.8	-2654.9	144486.6	9543.3	-7491.5	-438.2
	9	-1544.9	-2629.2	144440.1	9457.7	-7358.6	-433.4
	10	-799.5	-892.8	141530.8	5253.7	-5310.0	-286.9
	11	-780.6	-867.1	141484.3	5168.1	-5177.2	-282.0
	12	-1298.0	-1833.6	145216.6	7829.7	-5472.9	-375.5
	13	-1261.1	-1765.0	145023.9	7623.5	-5383.0	-367.0
	14	-218.4	785.5	142482.0	1602.6	-1261.6	-149.8
	15	-181.5	854.1	142289.3	1396.4	-1171.7	-141.3
	16	-1235.0	-1748.2	145061.4	7544.3	-5030.1	-359.4
	17	-1198.1	-1679.6	144868.7	7338.0	-4940.3	-350.9
	18	-155.4	870.9	142326.8	1317.2	-818.8	-133.7
	19	-118.5	939.5	142134.1	1111.0	-728.9	-125.2
	20	1911.7	5846.7	136013.6	-10526.1	6246.8	285.8
	21	1930.6	5872.3	135967.1	-10611.7	6379.6	290.6
	22	2676.0	7608.8	133057.8	-14815.7	8428.2	437.1
	23	2694.9	7634.4	133011.3	-14901.3	8561.0	441.9
	24	2034.9	6075.3	135371.3	-11213.6	6546.4	314.1
	25	2053.8	6101.0	135324.7	-11299.2	6679.3	318.9
	26	2799.2	7837.4	132415.5	-15503.2	8727.9	465.4
	27	2818.1	7863.1	132368.9	-15588.8	8860.7	470.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	28	1249.6	4040.1	135363.8	-6469.0	1798.5	128.9
	29	1286.6	4108.7	135171.1	-6675.2	1888.4	137.4
	30	2329.2	6659.1	132629.2	-12696.1	6009.8	354.6
	31	2366.2	6727.7	132436.5	-12902.3	6099.7	363.1
	32	1312.6	4125.5	135208.7	-6754.4	2241.3	145.1
	33	1349.6	4194.1	135015.9	-6960.7	2331.2	153.5
	34	2392.2	6744.5	132474.0	-12981.5	6452.6	370.7
	35	2429.1	6813.1	132281.3	-13187.7	6542.5	379.2
8	4	-1447.4	-4085.7	149975.6	9945.7	-7379.3	-466.5
	5	-1441.9	-4072.3	149953.5	9887.8	-7271.9	-461.7
	6	-833.0	-2869.6	148583.5	6732.8	-5401.5	-315.2
	7	-827.5	-2856.2	148561.5	6674.9	-5294.1	-310.3
	8	-1365.3	-3946.9	149674.1	9446.5	-7096.6	-438.2
	9	-1359.7	-3933.5	149652.0	9388.5	-6989.2	-433.4
	10	-750.8	-2730.8	148282.1	6233.5	-5118.9	-286.9
	11	-745.3	-2717.4	148260.0	6175.6	-5011.5	-282.0
	12	-1390.8	-3433.5	150060.3	8261.3	-5434.3	-375.5
	13	-1366.1	-3391.9	149969.8	8111.5	-5349.5	-367.0
	14	-747.0	-1686.6	148809.2	3696.4	-1766.8	-149.8
	15	-722.3	-1644.9	148718.8	3546.6	-1682.0	-141.3
	16	-1372.4	-3388.9	149986.7	8068.3	-5076.3	-359.4
	17	-1347.8	-3347.2	149896.3	7918.5	-4991.5	-350.9
	18	-728.6	-1641.9	148735.7	3503.4	-1408.8	-133.7
	19	-704.0	-1600.3	148645.3	3353.6	-1324.0	-125.2
	20	698.7	1737.4	145805.4	-5270.5	4845.7	285.8
	21	704.2	1750.8	145783.4	-5328.4	4953.1	290.6
	22	1313.1	2953.5	144413.4	-8483.4	6823.4	437.1
	23	1318.6	2966.9	144391.3	-8541.4	6930.8	441.9
	24	780.8	1876.2	145504.0	-5769.8	5128.3	314.1
	25	786.3	1889.6	145481.9	-5827.7	5235.7	318.9
	26	1395.2	3092.3	144111.9	-8982.7	7106.1	465.4
	27	1400.7	3105.7	144089.9	-9040.6	7213.5	470.2
	28	657.3	620.3	145420.2	-2448.5	1158.2	128.9
	29	681.9	661.9	145329.8	-2598.3	1243.0	137.4
	30	1301.1	2367.2	144169.2	-7013.4	4825.7	354.6
	31	1325.7	2408.8	144078.7	-7163.2	4910.5	363.1
	32	675.7	664.9	145346.6	-2641.5	1516.2	145.1
	33	700.3	706.5	145256.2	-2791.3	1601.0	153.5
	34	1319.5	2411.8	144095.6	-7206.4	5183.7	370.7
	35	1344.1	2453.5	144005.2	-7356.2	5268.5	379.2
7	4	-1444.5	-3172.0	149265.8	7463.8	-7379.1	-466.5
	5	-1438.9	-3162.6	149251.0	7424.1	-7271.5	-461.7
	6	-828.6	-2232.8	148243.4	5015.8	-5399.2	-315.2
	7	-823.0	-2223.4	148228.6	4976.0	-5291.6	-310.3
	8	-1361.6	-3067.2	149052.5	7093.1	-7096.3	-438.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	9	-1356.0	-3057.7	149037.8	7053.4	-6988.6	-433.4
	10	-745.7	-2128.0	148030.1	4645.0	-5116.4	-286.9
	11	-740.2	-2118.6	148015.4	4605.3	-5008.7	-282.0
	12	-1385.0	-2756.4	149342.8	6357.6	-5430.4	-375.5
	13	-1360.1	-2725.0	149278.8	6246.4	-5345.5	-367.0
	14	-737.5	-1483.1	148435.6	3032.9	-1757.3	-149.8
	15	-712.6	-1451.6	148371.6	2921.7	-1672.4	-141.3
	16	-1366.3	-2725.0	149293.6	6225.3	-5071.5	-359.4
	17	-1341.5	-2693.6	149229.6	6114.1	-4986.6	-350.9
	18	-718.8	-1451.7	148386.4	2900.6	-1398.4	-133.7
	19	-694.0	-1420.3	148322.4	2789.4	-1313.6	-125.2
	20	714.0	1072.4	146241.8	-3618.5	4864.4	285.8
	21	719.6	1081.8	146227.1	-3658.2	4972.1	290.6
	22	1329.8	2011.6	145219.5	-6066.6	6844.3	437.1
	23	1335.4	2021.0	145204.7	-6106.3	6952.0	441.9
	24	796.9	1177.2	146028.6	-3989.3	5147.3	314.1
	25	802.5	1186.6	146013.9	-4029.0	5255.0	318.9
	26	1412.7	2116.4	145006.2	-6437.4	7127.2	465.4
	27	1418.3	2125.8	144991.5	-6477.1	7234.9	470.2
	28	667.8	374.1	145934.8	-1802.6	1169.3	128.9
	29	692.6	405.5	145870.9	-1913.8	1254.1	137.4
	30	1315.3	1647.4	145027.7	-5127.3	4842.4	354.6
	31	1340.2	1678.8	144963.7	-5238.5	4927.2	363.1
	32	686.4	405.5	145885.6	-1934.9	1528.2	145.1
	33	711.3	436.9	145821.7	-2046.2	1613.0	153.5
	34	1334.0	1678.8	144978.5	-5259.6	5201.2	370.7
	35	1358.8	1710.2	144914.5	-5370.9	5286.1	379.2
6	4	-1445.8	-2209.8	149050.7	4935.9	-7376.9	-466.5
	5	-1440.2	-2202.8	149043.8	4910.5	-7269.5	-461.7
	6	-823.0	-1544.3	148324.6	3242.8	-5390.9	-315.2
	7	-817.3	-1537.3	148317.7	3217.4	-5283.5	-310.3
	8	-1362.1	-2139.1	148914.7	4694.0	-7092.7	-438.2
	9	-1356.5	-2132.1	148907.8	4668.7	-6985.3	-433.4
	10	-739.3	-1473.6	148188.5	3000.9	-5106.7	-286.9
	11	-733.7	-1466.6	148181.7	2975.5	-4999.3	-282.0
	12	-1387.9	-2037.2	149134.4	4424.6	-5429.9	-375.5
	13	-1362.8	-2016.0	149093.5	4352.0	-5344.6	-367.0
	14	-734.9	-1238.1	148513.9	2340.3	-1753.0	-149.8
	15	-709.8	-1216.9	148473.1	2267.7	-1667.7	-141.3
	16	-1369.2	-2014.1	149111.5	4340.0	-5072.1	-359.4
	17	-1344.1	-1992.9	149070.7	4267.4	-4986.8	-350.9
	18	-716.2	-1214.9	148491.0	2255.7	-1395.2	-133.7
	19	-691.1	-1193.7	148450.2	2183.2	-1309.9	-125.2
	20	730.8	454.0	146982.5	-2011.6	4879.5	285.8
	21	736.4	460.9	146975.6	-2037.0	4986.9	290.6
	22	1353.6	1119.5	146256.3	-3704.8	6865.5	437.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	23	1359.2	1126.4	146249.5	-3730.2	6972.9	441.9
	24	814.5	524.7	146846.4	-2253.5	5163.7	314.1
	25	820.1	531.6	146839.6	-2278.9	5271.1	318.9
	26	1437.3	1190.2	146120.3	-3946.7	7149.7	465.4
	27	1442.9	1197.1	146113.4	-3972.0	7257.1	470.2
	28	688.2	181.1	146713.9	-1219.3	1190.1	128.9
	29	713.3	202.3	146673.1	-1291.8	1275.3	137.4
	30	1341.2	980.2	146093.5	-3303.5	4867.0	354.6
	31	1366.3	1001.4	146052.7	-3376.1	4952.3	363.1
	32	706.9	204.3	146691.0	-1303.9	1547.9	145.1
	33	732.0	225.5	146650.2	-1376.4	1633.2	153.5
	34	1359.9	1003.4	146070.6	-3388.1	5224.8	370.7
	35	1385.0	1024.6	146029.8	-3460.7	5310.1	379.2
5	4	-3300.8	-2175.5	53435.9	4220.1	-8297.3	-145.3
	5	-3281.1	-2160.4	53683.3	4188.1	-8193.8	-143.8
	6	-2591.8	-1484.5	60648.6	2839.8	-6340.0	-98.2
	7	-2572.0	-1469.4	60896.0	2807.7	-6236.5	-96.7
	8	-3191.6	-2071.5	53649.2	3991.9	-8011.8	-136.5
	9	-3171.9	-2056.4	53896.6	3959.8	-7908.3	-135.0
	10	-2482.6	-1380.5	60861.9	2611.5	-6054.4	-89.4
	11	-2462.8	-1365.4	61109.3	2579.5	-5950.9	-87.8
	12	-2810.1	-1729.1	39250.9	3402.9	-6385.3	-117.0
	13	-2777.3	-1697.9	39314.9	3334.4	-6299.7	-114.3
	14	-1693.3	-671.5	34488.4	1358.5	-2771.3	-46.7
	15	-1660.6	-640.3	34552.4	1290.0	-2685.6	-44.0
	16	-2744.2	-1678.7	40075.4	3296.0	-6040.3	-111.9
	17	-2711.4	-1647.5	40139.4	3227.6	-5954.6	-109.3
	18	-1627.5	-621.1	35312.8	1251.6	-2426.2	-41.6
	19	-1594.7	-589.9	35376.8	1183.2	-2340.6	-39.0
	20	421.5	1349.7	37560.8	-2594.6	3749.5	89.0
	21	441.3	1364.9	37808.1	-2626.6	3853.0	90.5
	22	1130.6	2040.7	44773.5	-3974.9	5706.9	136.1
	23	1150.3	2055.9	45020.8	-4006.9	5810.4	137.6
	24	530.7	1453.7	37774.1	-2822.8	4035.1	97.8
	25	550.5	1468.9	38021.4	-2854.8	4138.6	99.3
	26	1239.8	2144.7	44986.8	-4203.1	5992.4	145.0
	27	1259.5	2159.9	45234.1	-4235.2	6095.9	146.5
	28	-446.6	574.3	63293.2	-1198.2	139.2	40.2
	29	-413.8	605.5	63357.2	-1266.7	224.8	42.8
	30	670.1	1631.8	58530.7	-3242.6	3753.2	110.4
	31	702.9	1663.0	58594.7	-3311.1	3838.9	113.1
	32	-380.7	624.7	64117.7	-1305.1	484.2	45.2
	33	-348.0	655.9	64181.7	-1373.5	569.9	47.8
	34	736.0	1682.2	59355.1	-3349.5	4098.2	115.5
	35	768.8	1713.4	59419.1	-3417.9	4183.9	118.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

4	4	-2341.2	-1762.8	64368.7	3450.6	-7303.2	-145.3
	5	-2311.0	-1751.2	64502.5	3425.5	-7188.3	-143.8
	6	-1499.7	-1160.6	71478.1	2269.7	-5200.2	-98.2
	7	-1469.4	-1148.9	71612.0	2244.6	-5085.4	-96.7
	8	-2211.5	-1670.5	65912.4	3254.9	-6997.3	-136.5
	9	-2181.3	-1658.9	66046.3	3229.7	-6882.5	-135.0
	10	-1369.9	-1068.3	73021.8	2073.9	-4894.4	-89.4
	11	-1339.7	-1056.6	73155.7	2048.8	-4779.5	-87.8
	12	-1685.4	-1408.8	64740.0	2799.4	-5219.9	-117.0
	13	-1646.5	-1381.1	65203.1	2740.7	-5128.2	-114.3
	14	-290.3	-519.1	71838.5	1093.9	-1308.2	-46.7
	15	-251.4	-491.4	72301.6	1035.1	-1216.5	-44.0
	16	-1584.6	-1370.0	65186.2	2715.6	-4837.0	-111.9
	17	-1545.6	-1342.3	65649.3	2656.8	-4745.3	-109.3
	18	-189.5	-480.3	72284.6	1010.1	-925.3	-41.6
	19	-150.6	-452.6	72747.8	951.3	-833.6	-39.0
	20	2309.0	1202.7	88030.2	-2234.4	5735.8	89.0
	21	2339.2	1214.4	88164.0	-2259.6	5850.7	90.5
	22	3150.6	1805.0	95139.6	-3415.4	7838.8	136.1
	23	3180.8	1816.6	95273.5	-3440.5	7953.6	137.6
	24	2438.7	1295.0	89573.9	-2430.2	6041.7	97.8
	25	2469.0	1306.7	89707.7	-2455.4	6156.5	99.3
	26	3280.3	1897.3	96683.3	-3611.2	8144.6	145.0
	27	3310.5	1908.9	96817.2	-3636.3	8259.5	146.5
	28	1119.9	598.7	88438.1	-1137.0	1789.9	40.2
	29	1158.8	626.4	88901.2	-1195.7	1881.7	42.8
	30	2514.9	1488.4	95536.5	-2842.5	5701.6	110.4
	31	2553.8	1516.1	95999.7	-2901.2	5793.4	113.1
	32	1220.7	637.5	88884.3	-1220.8	2172.8	45.2
	33	1259.6	665.2	89347.4	-1279.5	2264.5	47.8
	34	2615.7	1527.2	95982.7	-2926.3	6084.5	115.5
	35	2654.7	1554.9	96445.9	-2985.1	6176.2	118.1
3	4	-2684.6	708.6	76748.1	471.6	-7655.2	-145.3
	5	-2659.6	715.8	76835.0	454.4	-7546.3	-143.8
	6	-1875.6	1134.9	81775.1	-414.0	-5590.9	-98.2
	7	-1850.7	1142.1	81862.0	-431.2	-5482.0	-96.7
	8	-2558.2	771.6	77852.4	327.3	-7352.1	-136.5
	9	-2533.3	778.9	77939.3	310.1	-7243.3	-135.0
	10	-1749.2	1197.9	82879.4	-558.3	-5287.8	-89.4
	11	-1724.3	1205.2	82966.3	-575.5	-5179.0	-87.8
	12	-2109.3	940.9	76444.5	17.3	-5654.7	-117.0
	13	-2071.4	959.9	76775.8	-26.0	-5563.8	-114.3
	14	-820.3	1554.7	80966.9	-1231.6	-1857.8	-46.7
	15	-782.4	1573.7	81298.2	-1274.9	-1766.9	-44.0
	16	-2026.2	965.1	76734.2	-40.1	-5292.0	-111.9
	17	-1988.3	984.0	77065.4	-83.4	-5201.0	-109.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	18	-737.1	1578.9	81256.6	-1289.0	-1495.1	-41.6
	19	-699.2	1597.8	81587.8	-1332.3	-1404.2	-39.0
	20	1612.3	2754.5	91822.7	-3691.6	5001.1	89.0
	21	1637.2	2761.8	91909.6	-3708.8	5109.9	90.5
	22	2421.2	3180.8	96849.7	-4577.2	7065.4	136.1
	23	2446.2	3188.1	96936.6	-4594.4	7174.2	137.6
	24	1738.6	2817.6	92927.0	-3835.9	5304.2	97.8
	25	1763.6	2824.9	93013.9	-3853.1	5413.0	99.3
	26	2547.6	3243.9	97954.0	-4721.5	7368.5	145.0
	27	2572.6	3251.1	98040.9	-4738.7	7477.3	146.5
	28	587.2	2361.9	93201.1	-2934.8	1226.3	40.2
	29	625.1	2380.8	93532.4	-2978.0	1317.2	42.8
	30	1876.3	2975.7	97723.5	-4183.7	5023.2	110.4
	31	1914.2	2994.6	98054.8	-4227.0	5114.1	113.1
	32	670.4	2386.1	93490.8	-2992.2	1589.0	45.2
	33	708.3	2405.0	93822.1	-3035.5	1680.0	47.8
	34	1959.4	2999.8	98013.2	-4241.1	5385.9	115.5
	35	1997.3	3018.8	98344.5	-4284.4	5476.8	118.1
2	4	-2651.9	1119.9	79902.8	-300.2	-7621.4	-145.3
	5	-2626.7	1124.8	79960.7	-311.9	-7512.3	-143.8
	6	-1842.3	1443.6	83586.5	-970.5	-5556.1	-98.2
	7	-1817.1	1448.4	83644.4	-982.1	-5447.0	-96.7
	8	-2525.5	1166.6	80692.1	-406.7	-7318.4	-136.5
	9	-2500.3	1171.4	80750.0	-418.4	-7209.2	-135.0
	10	-1715.9	1490.2	84375.9	-1077.0	-5253.1	-89.4
	11	-1690.7	1495.0	84433.8	-1088.6	-5143.9	-87.8
	12	-2072.7	1271.4	79577.1	-599.5	-5617.0	-117.0
	13	-2034.8	1285.4	79813.9	-631.5	-5526.0	-114.3
	14	-779.3	1715.7	82802.7	-1506.0	-1815.3	-46.7
	15	-741.4	1729.7	83039.5	-1537.9	-1724.4	-44.0
	16	-1988.6	1287.6	79770.0	-638.3	-5253.1	-111.9
	17	-1950.7	1301.6	80006.8	-670.3	-5162.2	-109.3
	18	-695.2	1731.9	82995.6	-1544.8	-1451.5	-41.6
	19	-657.3	1745.9	83232.4	-1576.7	-1360.6	-39.0
	20	1659.4	2601.0	90654.8	-3321.8	5050.7	89.0
	21	1684.6	2605.9	90712.7	-3333.5	5159.9	90.5
	22	2469.0	2924.6	94338.5	-3992.1	7116.0	136.1
	23	2494.2	2929.5	94396.4	-4003.7	7225.2	137.6
	24	1785.8	2647.6	91444.2	-3428.3	5353.8	97.8
	25	1811.0	2652.5	91502.0	-3439.9	5462.9	99.3
	26	2595.4	2971.2	95127.9	-4098.6	7419.1	145.0
	27	2620.6	2976.1	95185.8	-4110.2	7528.3	146.5
	28	626.0	2350.1	91856.2	-2833.7	1267.4	40.2
	29	664.0	2364.1	92093.0	-2865.6	1358.3	42.8
	30	1919.4	2794.4	95081.8	-3740.2	5069.1	110.4
	31	1957.3	2808.4	95318.6	-3772.1	5160.0	113.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	32	710.1	2366.4	92049.1	-2872.5	1631.2	45.2
	33	748.0	2380.3	92285.9	-2904.5	1722.1	47.8
	34	2003.5	2810.7	95274.7	-3779.0	5432.9	115.5
	35	2041.4	2824.7	95511.5	-3810.9	5523.8	118.1
1	4	-2582.0	1413.1	79525.0	-944.6	-7543.6	-145.3
	5	-2558.7	1416.1	79576.8	-951.6	-7436.1	-143.8
	6	-1799.9	1635.7	82814.6	-1402.5	-5508.5	-98.2
	7	-1776.6	1638.7	82866.5	-1409.6	-5400.9	-96.7
	8	-2460.8	1443.5	80084.3	-1013.4	-7245.1	-136.5
	9	-2437.5	1446.4	80136.2	-1020.4	-7137.6	-135.0
	10	-1678.7	1666.0	83374.0	-1471.4	-5210.0	-89.4
	11	-1655.4	1669.0	83425.8	-1478.4	-5102.4	-87.8
	12	-2024.5	1482.2	80182.4	-1085.2	-5563.6	-117.0
	13	-1988.1	1491.3	80350.2	-1105.8	-5474.1	-114.3
	14	-777.5	1757.9	83919.6	-1650.0	-1813.4	-46.7
	15	-741.1	1767.0	84087.4	-1670.7	-1723.8	-44.0
	16	-1946.7	1492.1	80355.2	-1108.7	-5205.2	-111.9
	17	-1910.4	1501.2	80523.0	-1129.3	-5115.7	-109.3
	18	-699.7	1767.7	84092.4	-1673.5	-1455.0	-41.6
	19	-663.4	1776.8	84260.2	-1694.2	-1365.4	-39.0
	20	1574.5	2331.9	91982.3	-2827.5	4957.3	89.0
	21	1597.9	2334.9	92034.2	-2834.6	5064.8	90.5
	22	2356.6	2554.5	95272.0	-3285.5	6992.4	136.1
	23	2380.0	2557.4	95323.8	-3292.5	7100.0	137.6
	24	1695.7	2362.3	92541.7	-2896.3	5255.8	97.8
	25	1719.1	2365.2	92593.5	-2903.4	5363.3	99.3
	26	2477.8	2584.8	95831.3	-3354.3	7290.9	145.0
	27	2501.2	2587.8	95883.2	-3361.3	7398.5	146.5
	28	582.5	2224.1	91148.0	-2611.7	1220.3	40.2
	29	618.9	2233.2	91315.8	-2632.4	1309.8	42.8
	30	1829.5	2499.7	94885.2	-3176.6	4970.5	110.4
	31	1865.9	2508.8	95053.0	-3197.3	5060.1	113.1
	32	660.3	2234.0	91320.8	-2635.2	1578.6	45.2
	33	696.6	2243.1	91488.6	-2655.9	1668.2	47.8
	34	1907.2	2509.6	95058.0	-3200.1	5328.9	115.5
	35	1943.6	2518.7	95225.8	-3220.8	5418.5	118.1
Tot.	4	-932242.2	-310324.6	8579328.0	143666.3	-747584.4	-16432.3
Tot.	5	-949818.2	-303784.9	8571930.0	127470.4	-750699.9	-16149.2
Tot.	6	-989176.6	381458.0	8640726.0	-341961.6	-786609.5	-17199.0
Tot.	7	-1006752.4	387997.8	8633323.0	-358157.5	-789725.3	-16915.8
Tot.	8	-903573.8	-282280.7	8554871.0	139248.8	-726713.8	-15717.6
Tot.	9	-921149.5	-275740.9	8547473.0	123053.0	-729829.4	-15434.5
Tot.	10	-960507.9	409501.8	8616269.0	-346379.1	-765739.4	-16484.2
Tot.	11	-978083.3	416041.8	8608868.0	-362574.9	-768854.9	-16201.1
Tot.	12	-166666.7	-1152220.0	8382615.5	801733.3	-158075.2	-4143.6
Tot.	13	-158065.9	-1143806.1	8375279.5	800407.9	-151814.0	-3929.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Tot.	14	406431.2	-1183935.1	8275333.5	865291.9	298816.2	5691.6
Tot.	15	415031.8	-1175521.4	8267997.5	863967.1	305077.2	5906.1
Tot.	16	-225251.8	-1130420.5	8357944.5	747747.2	-168460.3	-3199.9
Tot.	17	-216651.3	-1122007.6	8350608.5	746421.8	-162199.2	-2985.5
Tot.	18	347845.9	-1162136.0	8250662.5	811306.1	288431.1	6635.4
Tot.	19	356446.6	-1153722.0	8243326.5	809980.6	294692.3	6849.8
Tot.	20	978083.3	-416041.8	8221725.0	355529.5	775386.9	16351.9
Tot.	21	960508.1	-409502.0	8214324.5	339333.6	772271.1	16635.0
Tot.	22	921149.6	275740.8	8283120.5	-130098.3	736361.6	15585.3
Tot.	23	903573.8	282280.7	8275718.5	-146294.2	733246.0	15868.4
Tot.	24	1006752.4	-387997.9	8197268.0	351112.1	796257.1	17066.6
Tot.	25	989176.5	-381458.1	8189867.0	334916.3	793141.6	17349.8
Tot.	26	949818.3	303784.8	8258666.0	-134515.8	757231.6	16300.0
Tot.	27	932242.8	310324.5	8251263.5	-150711.6	754116.0	16583.1
Tot.	28	-356446.4	1153722.8	8587265.0	-817026.2	-288160.1	-6699.0
Tot.	29	-347845.5	1162135.4	8579928.0	-818351.3	-281898.8	-6484.6
Tot.	30	216651.6	1122007.8	8479983.0	-753467.3	168731.3	3136.3
Tot.	31	225252.1	1130420.4	8472646.0	-754792.3	174992.4	3350.7
Tot.	32	-415031.6	1175521.6	8562596.0	-871012.6	-298545.1	-5755.3
Tot.	33	-406430.8	1183935.6	8555258.0	-872337.8	-292283.9	-5540.8
Tot.	34	158066.4	1143806.6	8455312.0	-807453.4	158346.3	4080.0
Tot.	35	166667.0	1152220.1	8447977.0	-808778.9	164607.3	4294.4
Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
59	4	-9852.5	220.5	28184.5	1018.1	-23166.5	-845.5
	5	-9198.0	92.5	29700.0	1316.2	-21676.0	-698.9
	6	-9852.5	4162.4	44629.0	-8625.1	-23166.5	-845.5
	7	-9198.0	4034.4	46144.5	-8327.1	-21676.0	-698.9
	8	-6093.2	-1293.3	43375.1	4457.7	-14516.0	247.9
	9	-5438.7	-1421.3	44890.6	4755.8	-13025.4	394.5
	10	-6093.2	2648.6	59819.6	-5185.5	-14516.0	247.9
	11	-5438.7	2520.6	61335.0	-4887.5	-13025.4	394.5
	12	-3838.7	-4976.4	44887.6	13620.5	-9095.5	-476.1
	13	-2710.9	-5430.5	49444.8	14652.4	-6500.4	-148.1
	14	842.7	-5162.8	72607.4	14045.4	1860.6	-340.8
	15	1970.4	-5617.0	77164.5	15077.3	4455.8	-12.8
	16	-1657.1	-5403.1	49939.3	14613.9	-4127.1	12.8
	17	-529.3	-5857.3	54496.4	15645.8	-1532.0	340.8
	18	3024.3	-5589.6	77659.0	15038.9	6829.0	148.1
	19	4152.1	-6043.7	82216.1	16070.8	9424.2	476.1
	20	5752.1	-401.0	120583.6	2434.6	13354.1	-394.5
	21	6406.6	-529.0	122099.1	2732.6	14844.6	-247.9
	22	5752.1	3540.9	137028.1	-7208.7	13354.1	-394.5
	23	6406.6	3412.9	138543.5	-6910.7	14844.6	-247.9
	24	9511.4	-1914.9	135774.0	5874.2	22004.7	698.9
	25	10165.8	-2042.9	137289.5	6172.2	23495.2	845.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	26	9511.4	2027.0	152218.5	-3769.0	22004.7	698.9
	27	10165.8	1899.0	153733.9	-3471.0	23495.2	845.5
	28	-3838.7	8163.3	99702.6	-18523.7	-9095.6	-476.1
	29	-2710.9	7709.2	104259.8	-17491.8	-6500.4	-148.1
	30	842.7	7976.9	127422.3	-18098.8	1860.6	-340.8
	31	1970.4	7522.7	131979.4	-17066.9	4455.8	-12.8
	32	-1657.1	7736.6	104754.2	-17530.2	-4127.2	12.8
	33	-529.3	7282.4	109311.4	-16498.4	-1532.0	340.8
	34	3024.3	7550.1	132473.9	-17105.3	6829.0	148.1
	35	4152.0	7096.0	137031.0	-16073.4	9424.2	476.1
60	4	-10165.8	-2042.8	137290.0	6172.1	-23495.2	-845.5
	5	-9511.3	-1914.8	135774.5	5874.1	-22004.7	-698.9
	6	-10165.8	1899.1	153734.5	-3471.2	-23495.2	-845.5
	7	-9511.4	2027.1	152219.0	-3769.2	-22004.7	-698.9
	8	-6406.6	-529.1	122098.7	2732.7	-14844.6	247.9
	9	-5752.1	-401.1	120583.2	2434.6	-13354.1	394.5
	10	-6406.6	3412.8	138543.2	-6910.6	-14844.6	247.9
	11	-5752.1	3540.9	137027.7	-7208.6	-13354.1	394.5
	12	-4152.0	-6043.7	82216.2	16070.7	-9424.2	-476.1
	13	-3024.3	-5589.6	77658.8	15038.9	-6829.0	-148.1
	14	529.3	-5857.3	54496.5	15645.8	1532.0	-340.8
	15	1657.1	-5403.1	49939.1	14614.0	4127.2	-12.8
	16	-1970.4	-5617.0	77164.6	15077.3	-4455.8	12.8
	17	-842.7	-5162.8	72607.2	14045.4	-1860.6	340.8
	18	2710.9	-5430.5	49444.9	14652.3	6500.4	148.1
	19	3838.7	-4976.4	44887.5	13620.5	9095.6	476.1
	20	5438.7	-1421.3	44890.9	4755.7	13025.4	-394.5
	21	6093.2	-1293.3	43375.4	4457.6	14516.0	-247.9
	22	5438.7	2520.6	61335.4	-4887.6	13025.4	-394.5
	23	6093.2	2648.6	59819.9	-5185.6	14516.0	-247.9
	24	9198.0	92.4	29699.5	1316.3	21676.0	698.9
	25	9852.5	220.5	28184.0	1018.3	23166.5	845.5
	26	9198.0	4034.3	46144.0	-8326.9	21676.0	698.9
	27	9852.5	4162.4	44628.5	-8625.0	23166.5	845.5
	28	-4152.1	7096.0	137031.2	-16073.5	-9424.2	-476.1
	29	-3024.3	7550.1	132473.8	-17105.3	-6829.0	-148.1
	30	529.3	7282.4	109311.5	-16498.4	1532.0	-340.8
	31	1657.1	7736.5	104754.0	-17530.2	4127.1	-12.8
	32	-1970.4	7522.7	131979.6	-17066.9	-4455.8	12.8
	33	-842.7	7976.8	127422.2	-18098.7	-1860.6	340.8
	34	2710.9	7709.2	104259.9	-17491.8	6500.4	148.1
	35	3838.7	8163.3	99702.4	-18523.6	9095.5	476.1
61	4	-7373.0	-1193.7	74278.6	2506.2	-17520.6	-845.5
	5	-7184.4	-1362.4	74502.6	2846.2	-17088.6	-698.9
	6	-7373.0	4225.1	72819.9	-8696.4	-17520.6	-845.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	7	-7184.4	4056.4	73043.8	-8356.3	-17088.6	-698.9
	8	-6564.2	-3148.1	78510.0	6409.3	-15641.0	247.9
	9	-6375.6	-3316.8	78733.9	6749.3	-15209.0	394.5
	10	-6564.2	2270.7	77051.2	-4793.2	-15641.0	247.9
	11	-6375.6	2102.0	77275.2	-4453.2	-15209.0	394.5
	12	-2388.3	-8284.3	107727.8	17108.0	-5796.4	-476.1
	13	-2145.6	-8870.6	108997.2	18279.0	-5232.5	-148.1
	14	1830.3	-8525.5	133894.3	17590.5	4121.1	-340.8
	15	2072.9	-9111.9	135163.7	18761.4	4685.0	-12.8
	16	-1759.6	-8846.6	108474.4	18241.5	-4356.3	12.8
	17	-1517.0	-9432.9	109743.8	19412.4	-3792.4	340.8
	18	2459.0	-9087.9	134640.9	18723.9	5561.2	148.1
	19	2701.6	-9674.2	135910.3	19894.8	6125.1	476.1
	20	6688.9	-1997.9	161500.3	4114.3	15537.7	-394.5
	21	6877.5	-2166.6	161724.3	4454.3	15969.7	-247.9
	22	6688.9	3420.9	160041.5	-7088.3	15537.7	-394.5
	23	6877.5	3252.2	160265.5	-6748.3	15969.7	-247.9
	24	7497.7	-3952.3	165731.7	8017.5	17417.3	698.9
	25	7686.3	-4121.0	165955.6	8357.5	17849.3	845.5
	26	7497.7	1466.5	164272.9	-3185.1	17417.3	698.9
	27	7686.3	1297.8	164496.8	-2845.1	17849.3	845.5
	28	-2388.3	9778.3	102865.2	-20233.8	-5796.4	-476.1
	29	-2145.6	9192.0	104134.6	-19062.8	-5232.5	-148.1
	30	1830.3	9537.0	129031.7	-19751.4	4121.1	-340.8
	31	2072.9	8950.7	130301.1	-18580.4	4685.0	-12.8
	32	-1759.6	9215.9	103611.8	-19100.4	-4356.3	12.8
	33	-1517.0	8629.6	104881.2	-17929.4	-3792.4	340.8
	34	2459.0	8974.7	129778.3	-18618.0	5561.2	148.1
	35	2701.6	8388.4	131047.7	-17447.0	6125.1	476.1
62	4	-7686.3	-4120.9	165955.6	8357.3	-17849.3	-845.5
	5	-7497.7	-3952.2	165731.6	8017.3	-17417.3	-698.9
	6	-7686.3	1297.8	164496.8	-2845.2	-17849.3	-845.5
	7	-7497.7	1466.5	164272.8	-3185.3	-17417.2	-698.9
	8	-6877.5	-2166.6	161724.3	4454.4	-15969.7	247.9
	9	-6688.9	-1997.9	161500.3	4114.4	-15537.7	394.5
	10	-6877.5	3252.1	160265.5	-6748.2	-15969.7	247.9
	11	-6688.9	3420.8	160041.5	-7088.2	-15537.7	394.5
	12	-2701.6	-9674.2	135910.3	19894.8	-6125.1	-476.1
	13	-2459.0	-9087.9	134640.9	18723.9	-5561.2	-148.1
	14	1517.0	-9432.9	109743.8	19412.4	3792.4	-340.8
	15	1759.6	-8846.6	108474.4	18241.5	4356.3	-12.8
	16	-2072.9	-9111.8	135163.7	18761.4	-4684.9	12.8
	17	-1830.3	-8525.5	133894.3	17590.5	-4121.1	340.8
	18	2145.6	-8870.6	108997.2	18278.9	5232.5	148.1
	19	2388.3	-8284.3	107727.8	17108.1	5796.4	476.1
	20	6375.6	-3316.8	78733.9	6749.2	15209.0	-394.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	21	6564.2	-3148.1	78509.9	6409.2	15641.0	-247.9
	22	6375.6	2102.0	77275.1	-4453.3	15209.0	-394.5
	23	6564.2	2270.7	77051.1	-4793.3	15641.0	-247.9
	24	7184.4	-1362.5	74502.7	2846.4	17088.6	698.9
	25	7373.0	-1193.8	74278.7	2506.4	17520.6	845.5
	26	7184.4	4056.3	73043.9	-8356.2	17088.6	698.9
	27	7373.0	4225.0	72819.9	-8696.2	17520.6	845.5
	28	-2701.6	8388.4	131047.7	-17447.0	-6125.1	-476.1
	29	-2459.0	8974.7	129778.3	-18617.9	-5561.2	-148.1
	30	1517.0	8629.6	104881.1	-17929.5	3792.4	-340.8
	31	1759.6	9215.9	103611.8	-19100.3	4356.3	-12.8
	32	-2072.9	8950.7	130301.1	-18580.5	-4684.9	12.8
	33	-1830.3	9537.0	129031.7	-19751.3	-4121.1	340.8
	34	2145.6	9192.0	104134.5	-19062.9	5232.5	148.1
	35	2388.3	9778.2	102865.2	-20233.7	5796.4	476.1
63	4	-5293.6	-1106.4	82651.3	2414.6	-12640.3	-845.5
	5	-5662.8	-1275.1	81890.3	2754.6	-13503.9	-698.9
	6	-5293.6	4313.3	85013.8	-8788.9	-12640.3	-845.5
	7	-5662.8	4144.6	84252.8	-8448.8	-13503.9	-698.9
	8	-7052.4	-3061.1	71834.6	6318.0	-16815.9	247.9
	9	-7421.6	-3229.8	71073.5	6658.0	-17679.5	394.5
	10	-7052.4	2358.6	74197.1	-4885.5	-16815.9	247.9
	11	-7421.6	2189.9	73436.0	-4545.4	-17679.5	394.5
	12	-918.4	-8198.1	105467.6	17017.7	-2367.3	-476.1
	13	-1446.0	-8784.5	102222.6	18188.7	-3620.0	-148.1
	14	2990.2	-8439.5	129870.9	17500.2	6827.2	-340.8
	15	2462.5	-9025.9	126625.9	18671.2	5574.5	-12.8
	16	-2149.2	-8760.5	102930.7	18151.1	-5245.9	12.8
	17	-2676.8	-9346.9	99685.7	19322.1	-6498.6	340.8
	18	1759.4	-9001.8	127334.0	18633.6	3948.6	148.1
	19	1231.7	-9588.2	124089.0	19804.6	2696.0	476.1
	20	7735.0	-1910.8	163995.7	4022.9	18008.2	-394.5
	21	7365.7	-2079.5	163234.6	4362.9	17144.6	-247.9
	22	7735.0	3508.9	166358.2	-7180.6	18008.2	-394.5
	23	7365.7	3340.2	165597.1	-6840.5	17144.6	-247.9
	24	5976.2	-3865.5	153178.9	7926.4	13832.6	698.9
	25	5606.9	-4034.2	152417.8	8266.4	12969.0	845.5
	26	5976.2	1554.2	155541.4	-3277.1	13832.6	698.9
	27	5606.9	1385.5	154780.3	-2937.0	12969.0	845.5
	28	-918.4	9867.3	113342.7	-20327.2	-2367.3	-476.1
	29	-1446.0	9280.9	110097.6	-19156.1	-3620.0	-148.1
	30	2990.2	9626.0	137746.0	-19844.7	6827.2	-340.8
	31	2462.5	9039.6	134500.9	-18673.6	5574.6	-12.8
	32	-2149.2	9305.0	110805.8	-19193.7	-5245.9	12.8
	33	-2676.8	8718.6	107560.7	-18022.7	-6498.6	340.8
	34	1759.4	9063.7	135209.1	-18711.3	3948.7	148.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

	35	1231.8	8477.3	131964.0	-17540.2	2696.0	476.1
64	4	-5607.0	-4034.1	152417.9	8266.2	-12969.0	-845.5
	5	-5976.2	-3865.4	153178.9	7926.2	-13832.6	-698.9
	6	-5606.9	1385.6	154780.4	-2937.2	-12969.0	-845.5
	7	-5976.2	1554.3	155541.4	-3277.2	-13832.6	-698.9
	8	-7365.7	-2079.5	163234.6	4363.0	-17144.6	247.9
	9	-7735.0	-1910.8	163995.6	4023.0	-18008.2	394.5
	10	-7365.7	3340.1	165597.1	-6840.4	-17144.6	247.9
	11	-7735.0	3508.8	166358.1	-7180.4	-18008.2	394.5
	12	-1231.8	-9588.2	124089.1	19804.6	-2696.0	-476.1
	13	-1759.4	-9001.8	127334.1	18633.6	-3948.7	-148.1
	14	2676.8	-9346.9	99685.8	19322.1	6498.6	-340.8
	15	2149.2	-8760.5	102930.8	18151.1	5245.9	-12.8
	16	-2462.5	-9025.8	126625.9	18671.1	-5574.6	12.8
	17	-2990.2	-8439.5	129870.9	17500.2	-6827.2	340.8
	18	1446.0	-8784.5	102222.6	18188.6	3620.0	148.1
	19	918.4	-8198.2	105467.6	17017.7	2367.3	476.1
	20	7421.6	-3229.7	71073.5	6657.9	17679.5	-394.5
	21	7052.4	-3061.0	71834.6	6317.9	16815.9	-247.9
	22	7421.6	2189.9	73436.0	-4545.5	17679.5	-394.5
	23	7052.4	2358.6	74197.1	-4885.6	16815.9	-247.9
	24	5662.8	-1275.2	81890.2	2754.8	13503.9	698.9
	25	5293.6	-1106.5	82651.3	2414.8	12640.3	845.5
	26	5662.8	4144.5	84252.7	-8448.7	13503.9	698.9
	27	5293.6	4313.2	85013.8	-8788.7	12640.3	845.5
	28	-1231.7	8477.3	131964.1	-17540.2	-2696.0	-476.1
	29	-1759.4	9063.7	135209.1	-18711.2	-3948.6	-148.1
	30	2676.8	8718.6	107560.8	-18022.7	6498.6	-340.8
	31	2149.2	9305.0	110805.8	-19193.7	5245.9	-12.8
	32	-2462.5	9039.6	134500.9	-18673.7	-5574.5	12.8
	33	-2990.2	9626.0	137745.9	-19844.6	-6827.2	340.8
	34	1446.0	9280.9	110097.6	-19156.2	3620.0	148.1
	35	918.4	9867.3	113342.6	-20327.1	2367.3	476.1
65	4	-3997.3	-2091.1	50100.9	3443.2	-9566.1	-845.5
	5	-4857.0	-2219.5	47359.1	3741.5	-11545.5	-698.9
	6	-3997.3	1852.5	33557.8	-6202.7	-9566.1	-845.5
	7	-4857.0	1724.1	30816.0	-5904.4	-11545.5	-698.9
	8	-7679.7	-3605.3	31006.9	6883.3	-18264.2	247.9
	9	-8539.4	-3733.7	28265.1	7181.6	-20243.6	394.5
	10	-7679.7	338.3	14463.8	-2762.6	-18264.2	247.9
	11	-8539.4	209.9	11722.0	-2464.3	-20243.5	394.5
	12	214.4	-7289.8	93714.4	16048.5	247.2	-476.1
	13	-890.3	-7744.1	87986.2	17080.5	-2362.2	-148.1
	14	4069.4	-7476.3	117540.7	16473.5	9288.7	-340.8
	15	2964.7	-7930.6	111812.6	17505.5	6679.3	-12.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	16	-2651.3	-7717.7	84575.0	17042.8	-6350.7	12.8
	17	-3756.1	-8171.9	78846.8	18074.9	-8960.1	340.8
	18	1203.7	-7904.2	108401.3	17467.8	2690.8	148.1
	19	98.9	-8358.4	102673.2	18499.8	81.4	476.1
	20	8852.7	-2712.8	129521.9	4859.7	20572.2	-394.5
	21	7993.0	-2841.1	126780.0	5158.0	18592.8	-247.9
	22	8852.7	1230.8	112978.8	-4786.2	20572.2	-394.5
	23	7993.0	1102.5	110236.9	-4487.9	18592.8	-247.9
	24	5170.3	-4227.0	110428.1	8299.9	11874.1	698.9
	25	4310.6	-4355.4	107686.3	8598.2	9894.7	845.5
	26	5170.3	-283.4	93885.0	-1346.0	11874.1	698.9
	27	4310.6	-411.7	91143.2	-1047.7	9894.7	845.5
	28	214.4	5855.6	38570.7	-16104.5	247.3	-476.1
	29	-890.3	5401.3	32842.5	-15072.4	-2362.1	-148.1
	30	4069.4	5669.1	62397.0	-15679.5	9288.8	-340.8
	31	2964.7	5214.8	56668.8	-14647.4	6679.4	-12.8
	32	-2651.3	5427.7	29431.3	-15110.1	-6350.7	12.8
	33	-3756.0	4973.5	23703.1	-14078.1	-8960.1	340.8
	34	1203.7	5241.2	53257.6	-14685.2	2690.8	148.1
	35	99.0	4787.0	47529.4	-13653.1	81.4	476.1
66	4	-4310.6	-4355.3	107685.7	8598.0	-9894.7	-845.5
	5	-5170.3	-4226.9	110427.6	8299.7	-11874.1	-698.9
	6	-4310.6	-411.7	91142.6	-1047.8	-9894.7	-845.5
	7	-5170.3	-283.3	93884.4	-1346.1	-11874.1	-698.9
	8	-7993.0	-2841.2	126780.4	5158.1	-18592.8	247.9
	9	-8852.7	-2712.8	129522.2	4859.8	-20572.2	394.5
	10	-7993.0	1102.4	110237.2	-4487.8	-18592.8	247.9
	11	-8852.7	1230.8	112979.1	-4786.1	-20572.2	394.5
	12	-99.0	-8358.4	102673.0	18499.8	-81.4	-476.1
	13	-1203.7	-7904.2	108401.5	17467.8	-2690.8	-148.1
	14	3756.0	-8171.9	78846.8	18074.8	8960.1	-340.8
	15	2651.3	-7717.7	84575.2	17042.9	6350.7	-12.8
	16	-2964.7	-7930.5	111812.5	17505.5	-6679.4	12.8
	17	-4069.4	-7476.3	117540.9	16473.5	-9288.8	340.8
	18	890.3	-7744.0	87986.2	17080.5	2362.1	148.1
	19	-214.4	-7289.8	93714.6	16048.5	-247.3	476.1
	20	8539.4	-3733.7	28264.8	7181.5	20243.5	-394.5
	21	7679.7	-3605.3	31006.6	6883.2	18264.2	-247.9
	22	8539.4	210.0	11721.6	-2464.4	20243.6	-394.5
	23	7679.7	338.3	14463.4	-2762.7	18264.2	-247.9
	24	4857.0	-2219.5	47359.7	3741.6	11545.5	698.9
	25	3997.3	-2091.2	50101.5	3443.3	9566.1	845.5
	26	4857.0	1724.1	30816.5	-5904.3	11545.5	698.9
	27	3997.3	1852.4	33558.4	-6202.6	9566.1	845.5
	28	-98.9	4787.0	47529.2	-13653.2	-81.4	-476.1
	29	-1203.7	5241.2	53257.6	-14685.1	-2690.8	-148.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	30	3756.1	4973.5	23702.9	-14078.1	8960.1	-340.8
	31	2651.3	5427.7	29431.3	-15110.1	6350.7	-12.8
	32	-2964.7	5214.8	56668.6	-14647.5	-6679.3	12.8
	33	-4069.4	5669.1	62397.0	-15679.5	-9288.7	340.8
	34	890.3	5401.3	32842.3	-15072.5	2362.2	148.1
	35	-214.4	5855.6	38570.8	-16104.4	-247.2	476.1
Tot.	4	-54286.1	-18723.8	798564.6	40775.8	-127101.8	-6764.2
Tot.	5	-55057.8	-18723.8	798564.5	40775.8	-128942.6	-5590.8
Tot.	6	-54286.1	18724.0	800174.6	-42614.5	-127101.8	-6764.2
Tot.	7	-55057.8	18724.0	800174.6	-42614.5	-128942.6	-5590.8
Tot.	8	-56032.3	-18724.2	798564.6	40776.6	-131788.8	1983.0
Tot.	9	-56804.1	-18724.2	798564.5	40776.6	-133629.6	3156.4
Tot.	10	-56032.3	18723.7	800174.7	-42613.7	-131788.8	1983.0
Tot.	11	-56804.0	18723.7	800174.6	-42613.7	-133629.6	3156.4
Tot.	12	-15115.4	-62413.1	796686.1	138064.6	-35338.7	-3808.8
Tot.	13	-15639.2	-62413.2	796686.1	138064.8	-36744.8	-1184.7
Tot.	14	18211.7	-62413.1	796686.1	138064.6	42880.7	-2726.5
Tot.	15	17687.8	-62413.3	796686.2	138065.0	41474.6	-102.3
Tot.	16	-17687.8	-62413.1	796686.0	138064.5	-41474.7	102.3
Tot.	17	-18211.7	-62413.2	796686.0	138064.8	-42880.8	2726.5
Tot.	18	15639.2	-62413.1	796686.1	138064.5	36744.7	1184.7
Tot.	19	15115.3	-62413.2	796686.1	138064.9	35338.6	3808.8
Tot.	20	56804.0	-18723.8	798564.6	40775.7	133629.6	-3156.4
Tot.	21	56032.3	-18723.8	798564.6	40775.7	131788.8	-1983.0
Tot.	22	56804.1	18724.0	800174.8	-42614.5	133629.6	-3156.4
Tot.	23	56032.3	18724.0	800174.7	-42614.6	131788.8	-1983.0
Tot.	24	55057.8	-18724.4	798564.7	40777.1	128942.6	5590.8
Tot.	25	54286.1	-18724.4	798564.6	40777.0	127101.8	6764.2
Tot.	26	55057.8	18723.5	800174.8	-42613.2	128942.6	5590.8
Tot.	27	54286.1	18723.5	800174.8	-42613.2	127101.8	6764.2
Tot.	28	-15115.3	62413.1	802053.3	-139903.0	-35338.6	-3808.8
Tot.	29	-15639.2	62413.0	802053.2	-139902.8	-36744.7	-1184.7
Tot.	30	18211.7	62413.1	802053.2	-139903.0	42880.8	-2726.5
Tot.	31	17687.8	62412.9	802053.3	-139902.6	41474.7	-102.3
Tot.	32	-17687.8	62413.1	802053.1	-139903.0	-41474.6	102.3
Tot.	33	-18211.7	62413.0	802053.1	-139902.8	-42880.7	2726.5
Tot.	34	15639.3	62413.1	802053.1	-139903.0	36744.8	1184.7
Tot.	35	15115.4	62413.0	802053.1	-139902.6	35338.7	3808.8

- Combinazioni RARE Stati Limite di Esercizio

- Squilibri nodali

Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1085	36	-1449.9	-26.1	32050.4	56.9	2673.9	6.1
	37	-1439.1	-25.9	32002.8	56.4	2669.2	6.1
	38	-1357.7	-26.0	31670.0	54.9	2656.1	5.9
1084	36	-3121.5	-13.8	43126.0	51.8	-3965.3	0.1
	37	-3104.0	-12.7	42971.8	49.7	-3950.2	0.1
	38	-3022.1	-14.6	41914.6	50.5	-3873.4	0.0
1083	36	-21.3	4999.9	-1660.7	-2883.4	-37.1	2.4
	37	-21.5	4976.1	-1648.4	-2869.1	-37.5	2.4
	38	-20.4	4800.8	-1608.7	-2768.2	-35.6	2.4
1082	36	-289.5	1592.2	26961.5	5617.0	-457.3	0.6
	37	-288.4	1591.4	26888.4	5598.5	-455.8	0.6
	38	-278.2	1480.5	26287.2	5502.3	-440.0	0.6
1081	36	289.1	209.5	34989.6	8124.8	487.2	1.4
	37	288.1	212.1	34845.4	8088.8	485.4	1.4
	38	284.6	162.2	33759.6	7829.7	478.8	1.4
1080	36	2543.9	-1.8	3695.0	4.3	1066.5	-0.5
	37	2542.4	-1.7	3692.0	4.2	1065.9	-0.5
	38	2509.1	-1.8	3628.6	4.3	1054.0	-0.5
1079	36	-3778.4	-10.1	6019.4	12.6	-1454.9	-0.8
	37	-3760.8	-10.1	5995.8	12.5	-1447.3	-0.8
	38	-3644.8	-9.8	5784.7	12.1	-1408.2	-0.8
1078	36	-4631.7	661.6	33627.5	4766.3	-1637.2	-7.2
	37	-4611.8	644.4	33521.5	4759.7	-1629.2	-7.2
	38	-4435.9	800.8	32285.6	4474.0	-1554.4	-6.6
1077	36	4147.3	1.4	8374.5	3.0	1113.8	-2.4
	37	4131.4	1.3	8343.8	3.1	1109.8	-2.4
	38	3963.6	1.8	8022.7	2.1	1057.5	-2.3
1076	36	-6616.7	-9.6	14166.5	16.2	-1549.6	0.3
	37	-6577.3	-9.9	14086.8	16.7	-1540.9	0.3
	38	-6250.4	-8.7	13400.2	14.6	-1457.8	0.2
1075	36	6523.5	-2172.5	59212.2	7166.6	1741.2	3.2
	37	6480.3	-2171.7	58861.3	7132.3	1727.3	3.3
	38	6178.4	-1980.6	56019.3	6718.5	1643.5	2.9
1074	36	15633.9	-41.0	26725.2	52.5	5845.1	6.4
	37	15537.3	-39.8	26586.8	50.6	5806.0	6.4
	38	14673.4	-42.2	24820.9	53.9	5526.0	6.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

1073	36	-8141.6	10.6	14510.9	-14.5	-2952.9	-1.0
	37	-8104.1	10.7	14446.6	-14.6	-2939.3	-1.0
	38	-7811.1	10.0	13961.7	-13.8	-2830.4	-1.0
1072	36	-4872.4	-6609.7	82413.3	-51720.4	3506.1	19.1
	37	-4859.5	-6580.5	82109.6	-51534.5	3484.6	18.9
	38	-4576.7	-6308.9	78965.9	-49637.3	3422.7	17.9
1071	36	-281.5	2.2	49155.7	4.2	-4949.1	8.7
	37	-267.9	2.1	48917.5	4.2	-4922.0	8.6
	38	-268.8	1.3	46812.2	3.8	-4740.3	8.6
1070	36	-3232.1	10.5	59545.7	-15.1	5649.6	-8.8
	37	-3212.4	9.1	59212.5	-12.9	5610.5	-8.7
	38	-3013.4	10.1	56428.7	-15.3	5377.5	-8.4
1069	36	8349.5	-8868.1	115159.3	-68941.0	-4247.0	-12.0
	37	8306.0	-8816.7	114449.1	-68514.8	-4214.6	-11.9
	38	7816.1	-8344.4	108847.4	-65164.2	-4115.5	-11.1
1068	36	-2579.1	106.9	80451.9	46896.2	-4113.0	3.9
	37	-2577.9	109.0	80164.1	46721.6	-4111.8	3.9
	38	-2297.4	124.2	77321.1	45011.2	-3661.6	3.8
1067	36	2461.8	-2734.0	110848.2	64840.8	4026.0	-1.7
	37	2460.3	-2718.7	110170.5	64438.7	4023.2	-1.7
	38	2179.9	-2564.4	104824.7	61298.2	3566.6	-1.6
1066	36	15.1	458.2	25477.5	-3286.4	47.6	0.4
	37	15.4	452.7	25419.2	-3286.3	47.9	0.4
	38	13.3	287.6	24648.9	-3097.7	43.1	0.4
1065	36	-8.0	7191.9	15824.9	-1262.3	-6.8	-2.6
	37	-8.7	7154.0	15728.7	-1258.8	-7.9	-2.6
	38	-6.3	6757.6	14990.7	-1161.7	-4.4	-2.4
1064	36	13.3	1313.5	28934.4	3251.9	49.6	0.3
	37	13.3	1298.3	28880.1	3243.6	49.2	0.3
	38	12.6	1301.6	27966.3	3076.8	46.6	0.3
1063	36	11.6	-4849.9	20213.4	-2365.3	21.4	-0.7
	37	11.5	-4827.4	20128.5	-2356.5	21.3	-0.7
	38	11.4	-4628.6	19302.3	-2258.4	20.8	-0.7
1062	36	-30.6	-1126.7	20643.1	-1525.5	-26.5	0.1
	37	-30.7	-1130.2	20627.4	-1522.2	-26.8	0.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	38	-30.1	-1146.3	20109.4	-1459.4	-27.2	0.1
1061	36	154.5	-1982.0	12109.7	-2223.8	252.8	-1.7
	37	153.7	-1979.1	12077.8	-2215.3	251.6	-1.7
	38	150.4	-1899.2	11658.6	-2153.0	246.0	-1.7
1060	36	360.0	1496.2	36265.0	-10.9	606.2	2.3
	37	358.0	1490.1	36120.6	-10.1	602.9	2.3
	38	350.5	1392.6	34576.2	-7.6	589.6	2.2
1059	36	13.0	-904.8	34187.5	-3948.8	57.5	0.1
	37	12.9	-903.0	34172.1	-3949.3	57.1	0.1
	38	12.7	-924.3	33456.6	-3892.4	54.7	0.1
1058	36	-6262.1	8410.0	38767.0	-1252.7	3868.5	-5.4
	37	-6239.4	8379.5	38644.6	-1244.0	3855.1	-5.4
	38	-6006.7	8101.8	37299.1	-1222.3	3709.8	-5.2
1057	36	5189.1	1884.2	72283.0	-7000.0	-4486.4	-1.5
	37	5170.1	1879.8	71993.5	-6973.6	-4470.3	-1.4
	38	4967.0	1741.6	69220.3	-6696.9	-4312.1	-1.4
1056	36	-2517.2	-163.4	49099.8	-3160.7	-969.4	-0.1
	37	-2516.2	-160.8	49090.4	-3165.9	-970.0	-0.1
	38	-2484.2	-221.4	48454.0	-3230.5	-962.3	-0.1
1055	36	31.7	-4127.3	22183.5	-6070.6	63.1	3.2
	37	31.3	-4114.1	22118.8	-6054.0	62.4	3.2
	38	31.6	-4022.7	21591.5	-5900.2	62.2	3.1
1054	36	3518.2	-688.1	61319.8	487.9	1130.0	-5.0
	37	3503.5	-684.4	61068.1	485.1	1126.4	-4.9
	38	3397.9	-715.9	58956.8	442.7	1097.5	-4.8
1053	36	-4448.4	3277.2	33950.9	10723.5	-843.2	-1.5
	37	-4446.7	3279.6	33950.4	10721.2	-843.9	-1.4
	38	-4456.0	3225.8	33806.6	10644.6	-858.3	-1.4
1052	36	-1366.5	3512.0	54104.7	-312.1	-1267.3	-3.1
	37	-1354.0	3503.0	53955.6	-313.5	-1265.5	-3.1
	38	-1264.8	3428.1	52945.4	-299.6	-1237.2	-2.9
1051	36	10039.1	4196.8	29889.3	-142.9	3185.1	1.0
	37	9997.9	4178.4	29766.7	-142.5	3171.7	1.0
	38	9754.0	4038.3	28930.2	-127.6	3096.8	1.1
1022	36	-14224.1	6801.0	161262.5	111789.2	-4435.6	-0.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	37	-14128.7	6741.0	160272.5	111061.0	-4397.5	-0.6
	38	-13402.4	6311.2	150613.2	104608.7	-4234.5	-0.2
1021	36	7775.6	-7.1	19596.3	4.2	838.5	3.3
	37	7712.1	-7.7	19451.2	5.1	830.3	3.3
	38	7317.7	-6.0	18356.8	3.3	803.6	2.9
1020	36	-7594.1	-2728.8	192007.0	-97954.1	-865.7	1.5
	37	-7522.2	-2732.2	190633.6	-97351.6	-845.3	1.5
	38	-7227.3	-2561.2	180150.3	-91361.6	-896.0	1.0
1019	36	-17.4	-8230.0	45043.1	-14029.7	-37.1	-1.0
	37	-17.2	-8170.2	44665.6	-13907.8	-36.5	-1.0
	38	-17.6	-7679.7	42570.6	-13314.7	-37.4	-1.1
1018	36	8.9	10881.6	11265.1	-4987.4	8.2	2.8
	37	9.4	10833.7	11202.9	-4967.7	9.0	2.8
	38	7.0	10091.1	10593.4	-4598.6	5.7	2.6
1017	36	8249.2	-17.1	19496.5	23.4	1308.0	1.8
	37	8207.3	-17.5	19403.1	24.1	1301.9	1.8
	38	7730.8	-15.6	18277.7	21.4	1219.9	1.6
1016	36	-8026.8	-4356.3	69711.4	13671.9	-1483.5	-3.4
	37	-7981.6	-4350.2	69349.6	13610.6	-1472.4	-3.4
	38	-7558.2	-3968.7	65478.0	12758.9	-1403.1	-3.1
1015	36	-2580.7	-2946.8	121255.6	61320.3	-4219.8	2.8
	37	-2579.0	-2934.5	120531.8	60920.8	-4216.7	2.8
	38	-2287.2	-2836.3	114377.9	58049.3	-3741.7	2.4
1014	36	-8152.6	-7388.9	105083.2	-68543.2	2799.2	1.1
	37	-8109.2	-7341.1	104365.4	-68103.8	2766.0	1.1
	38	-7582.8	-7061.5	99667.8	-64761.9	2847.5	0.9
1013	36	2544.5	34.8	50303.1	-121.7	-4186.7	9.9
	37	2523.3	33.1	49971.6	-118.8	-4148.8	9.8
	38	2431.6	31.9	47987.4	-111.9	-4046.7	8.8
1012	36	-449.3	39.8	36746.6	-121.2	3934.5	0.7
	37	-464.1	39.5	36529.3	-120.6	3907.5	0.8
	38	-355.3	36.4	35551.5	-111.7	3831.5	-0.7
1011	36	2950.5	-4624.7	68538.0	-49537.2	-3299.4	-1.1
	37	2940.6	-4608.0	68266.1	-49352.4	-3278.0	-1.0
	38	2869.6	-4444.6	66354.7	-47691.8	-3208.6	-2.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

1010	36	2705.9	2018.1	85192.1	39854.7	4313.0	-0.2
	37	2704.8	2010.4	84888.3	39699.8	4311.9	-0.2
	38	2409.0	1926.4	81799.7	38527.4	3836.5	-0.9
1009	36	-4978.9	12.6	10904.1	-14.5	-990.3	3.2
	37	-4960.2	12.4	10860.7	-14.3	-987.3	3.2
	38	-4733.9	12.1	10421.4	-14.3	-932.0	3.0
1008	36	6010.3	3706.2	40693.3	5307.8	1894.5	11.1
	37	5987.0	3692.0	40555.0	5291.7	1887.1	11.1
	38	5691.1	3582.8	38892.6	5036.9	1761.7	10.0
1007	36	-16.7	847.9	31085.8	-3734.3	-47.9	1.7
	37	-17.0	856.8	30963.0	-3717.8	-48.2	1.7
	38	-15.8	639.9	29900.7	-3588.5	-45.7	1.4
1006	36	-25.0	4502.4	49162.8	-5503.3	-76.3	0.7
	37	-25.5	4495.7	48967.4	-5472.7	-76.5	0.7
	38	-24.6	4188.4	47292.9	-5357.4	-74.8	0.2
1005	36	-4135.1	4.7	9702.4	-9.5	-606.6	-0.7
	37	-4111.4	4.7	9650.6	-9.5	-602.7	-0.7
	38	-3997.8	4.4	9403.6	-8.9	-585.5	-0.7
1004	36	5361.6	-5493.7	59920.9	8897.7	1587.6	3.1
	37	5328.5	-5460.2	59645.9	8851.2	1575.1	3.1
	38	5170.6	-5371.8	57873.5	8656.3	1521.5	2.5
1003	36	-17.4	-395.2	32231.6	2944.2	-44.3	2.5
	37	-17.9	-393.5	32085.3	2931.6	-44.8	2.5
	38	-16.3	-360.0	31070.9	2826.9	-42.5	2.2
1002	36	-62.4	-6704.5	34488.5	-7007.1	-111.2	-1.2
	37	-63.2	-6676.8	34345.4	-6978.0	-112.3	-1.2
	38	-60.0	-6439.0	33142.8	-6727.3	-108.1	-1.5
1001	36	7727.8	10323.3	53680.1	7507.5	2625.3	8.3
	37	7690.1	10277.7	53453.8	7476.6	2610.4	8.3
	38	7408.9	9914.4	51545.3	7211.5	2511.3	7.9
67	36	-818.2	-40.6	18404.3	-14.9	-888.0	0.9
	37	-817.9	-41.1	18387.7	-14.5	-887.5	0.9
	38	-744.8	-47.2	16863.9	2.2	-809.7	0.6
58	36	31.6	-1319.9	89384.4	1416.4	78.3	0.1
	37	31.9	-1319.7	88652.7	1416.2	78.2	0.1
	38	33.2	-1205.3	84868.1	1293.4	76.7	0.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

57	36	18.4	-1343.6	89407.5	1442.0	64.4	0.1
	37	18.2	-1343.5	88652.8	1441.9	63.7	0.1
	38	17.0	-1227.1	84851.3	1317.1	59.7	0.1
56	36	19.6	-1344.8	89338.9	1443.5	65.7	0.1
	37	19.3	-1344.6	88585.0	1443.4	65.0	0.1
	38	18.3	-1228.2	84788.0	1318.5	61.1	0.1
55	36	19.3	-1345.2	89332.8	1444.2	65.4	0.1
	37	19.1	-1345.1	88578.9	1444.1	64.7	0.1
	38	18.1	-1228.6	84782.8	1319.2	60.8	0.1
54	36	18.5	-1346.9	89432.8	1446.3	64.6	0.1
	37	18.3	-1346.8	88676.9	1446.2	63.9	0.1
	38	17.4	-1230.3	84875.5	1321.2	60.2	0.1
53	36	-33.9	-1394.7	92575.4	1497.7	9.6	0.1
	37	-34.1	-1394.5	91791.0	1497.6	8.9	0.1
	38	-35.1	-1273.5	87839.9	1367.7	5.1	0.1
52	36	111.4	-1357.2	90008.1	1457.8	162.0	0.1
	37	111.1	-1357.1	89249.9	1457.7	161.2	0.1
	38	109.6	-1239.6	85425.6	1331.7	156.9	0.1
51	36	56.5	-1247.9	82760.2	1341.0	104.4	0.1
	37	55.9	-1247.7	82079.5	1340.9	103.3	0.1
	38	52.4	-1140.6	78606.4	1226.0	96.9	0.1
50	36	310.2	-702.4	49558.6	757.0	370.5	0.1
	37	309.6	-702.4	49180.7	757.1	369.5	0.1
	38	307.0	-646.5	47333.7	697.0	363.9	0.1
49	36	-2.8	-918.5	160112.0	976.7	73.8	0.3
	37	-2.7	-918.3	158669.9	976.4	73.2	0.3
	38	-1.7	-837.9	148527.7	891.0	69.6	0.4
48	36	11.6	-900.9	159055.1	959.4	88.9	0.3
	37	11.5	-900.7	157626.3	959.2	88.0	0.3
	38	11.0	-822.0	147563.6	875.5	82.9	0.4
47	36	11.5	-901.7	159040.9	961.4	88.8	0.3
	37	11.4	-901.6	157612.2	961.3	87.9	0.3
	38	10.9	-822.8	147550.5	877.6	82.8	0.4
46	36	11.5	-902.8	159041.6	963.7	88.8	0.3
	37	11.4	-902.7	157613.0	963.6	87.9	0.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	38	10.9	-823.9	147551.0	879.8	82.8	0.4
45	36	10.7	-903.6	159084.4	965.7	88.0	0.3
	37	10.6	-903.6	157655.3	965.6	87.1	0.3
	38	10.2	-824.7	147589.9	881.9	82.1	0.4
44	36	-0.8	-941.8	164609.8	1006.8	75.9	0.3
	37	-0.9	-941.7	163122.5	1006.8	75.1	0.3
	38	-1.3	-859.3	152641.9	919.4	70.0	0.4
43	36	34.8	-916.3	160451.2	981.3	113.2	0.3
	37	34.6	-916.2	159007.7	981.3	112.4	0.3
	38	34.0	-836.2	148839.6	896.4	107.0	0.4
42	36	27.5	-855.3	149420.3	918.4	105.6	0.3
	37	27.3	-855.2	148093.9	918.4	104.6	0.3
	38	25.7	-781.2	138750.8	839.8	98.3	0.4
41	36	84.4	-463.9	87470.4	508.9	165.3	0.3
	37	84.2	-464.0	86801.4	509.1	164.3	0.3
	38	82.9	-427.2	82092.9	469.6	158.3	0.4
40	36	-1.3	900.7	160080.5	-931.4	77.3	0.3
	37	-1.2	900.6	158639.4	-931.3	76.7	0.3
	38	-0.3	821.4	148498.5	-849.4	73.1	0.4
39	36	12.9	880.6	159076.8	-909.1	92.2	0.3
	37	12.8	880.4	157647.9	-909.0	91.4	0.3
	38	12.3	803.0	147583.0	-829.0	86.2	0.4
38	36	12.8	879.3	159060.1	-906.6	92.2	0.3
	37	12.7	879.1	157631.4	-906.5	91.4	0.3
	38	12.2	801.8	147567.8	-826.5	86.2	0.4
37	36	12.9	878.2	159059.6	-904.4	92.2	0.3
	37	12.8	878.1	157630.9	-904.2	91.4	0.3
	38	12.3	800.8	147567.5	-824.2	86.3	0.4
36	36	12.7	879.8	159027.3	-904.9	92.0	0.3
	37	12.6	879.6	157599.0	-904.7	91.2	0.3
	38	12.1	802.2	147536.7	-824.5	86.1	0.4
35	36	26.4	999.7	162528.0	-1029.5	106.4	0.3
	37	26.3	999.1	161060.0	-1028.9	105.6	0.3
	38	25.0	912.9	150692.0	-939.4	99.6	0.4
34	36	28.7	897.9	160163.9	-921.6	108.8	0.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	37	28.6	897.7	158722.1	-921.3	108.0	0.3
	38	28.0	818.8	148567.6	-839.5	102.8	0.4
33	36	29.0	822.3	149423.4	-841.2	109.1	0.3
	37	28.8	822.1	148097.1	-840.9	108.2	0.3
	38	27.1	750.0	138754.4	-766.2	101.8	0.4
32	36	85.7	428.6	87472.7	-427.2	168.5	0.3
	37	85.4	428.5	86804.0	-427.0	167.6	0.3
	38	84.1	393.7	82096.3	-391.4	161.5	0.4
31	36	32.5	1314.1	89048.3	-1404.4	82.2	0.1
	37	32.9	1313.9	88320.6	-1404.3	82.2	0.1
	38	34.4	1200.0	84568.0	-1282.5	81.1	0.1
30	36	21.1	1336.9	89340.9	-1428.6	70.3	0.1
	37	21.0	1336.8	88586.3	-1428.5	69.7	0.1
	38	19.7	1220.9	84792.2	-1304.7	65.6	0.1
29	36	22.5	1337.4	89282.5	-1428.9	71.7	0.1
	37	22.3	1337.3	88528.5	-1428.7	71.1	0.1
	38	21.1	1221.4	84737.6	-1304.8	67.1	0.1
28	36	23.1	1337.0	89294.9	-1428.2	72.3	0.1
	37	22.9	1336.9	88540.8	-1428.1	71.7	0.1
	38	21.7	1221.0	84748.9	-1304.2	67.7	0.1
27	36	38.9	1334.4	88208.3	-1425.2	88.9	0.1
	37	38.4	1334.2	87469.9	-1425.0	88.0	0.1
	38	36.3	1218.6	83723.2	-1301.4	83.1	0.1
26	36	417.0	1232.7	56331.3	-1316.0	485.5	0.1
	37	416.5	1232.2	55905.9	-1315.5	484.5	0.1
	38	401.5	1126.5	53518.3	-1202.5	466.1	0.1
25	36	-50.7	367.1	49668.7	-389.0	-5.0	0.1
	37	-50.7	367.0	49243.3	-388.9	-5.4	0.1
	38	-63.1	335.5	47417.7	-355.3	-21.2	0.1
24	36	-12.3	1317.3	85860.2	-1406.3	35.2	0.1
	37	-12.2	1317.1	85131.4	-1406.1	35.0	0.1
	38	-10.8	1203.1	81400.0	-1284.2	33.6	0.1
23	36	60.5	1236.1	82696.1	-1319.2	111.6	0.1
	37	60.0	1236.0	82015.5	-1319.0	110.6	0.1
	38	56.4	1129.5	78541.1	-1205.2	104.1	0.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

22	36	312.6	691.0	49511.4	-735.2	376.0	0.1
	37	312.1	691.0	49133.8	-735.1	375.1	0.1
	38	309.3	635.7	47288.2	-676.1	369.4	0.1
21	36	1895.7	-234.9	43570.1	159.6	1933.9	2.8
	37	1896.6	-236.7	43538.2	161.3	1935.9	2.8
	38	1712.1	-220.3	39772.8	158.9	1739.9	2.1
20	36	-342.2	-720.0	51439.2	750.4	-411.9	0.9
	37	-341.7	-719.9	51037.0	750.2	-411.0	0.9
	38	-339.1	-664.3	49117.3	694.4	-404.3	0.6
19	36	-47.2	-1300.6	87042.6	1374.1	-102.6	0.9
	37	-46.7	-1300.4	86316.0	1373.8	-101.6	0.9
	38	-43.7	-1189.7	82658.9	1258.5	-94.5	0.6
18	36	-17.8	-1334.7	88936.0	1412.6	-71.7	0.9
	37	-17.6	-1334.5	88181.6	1412.4	-71.0	0.9
	38	-16.3	-1219.4	84425.5	1291.7	-65.8	0.6
17	36	-15.5	-1335.8	89043.3	1415.8	-69.3	0.9
	37	-15.3	-1335.7	88288.3	1415.6	-68.7	0.9
	38	-14.1	-1219.9	84522.7	1293.8	-63.4	0.6
16	36	-17.7	-1307.6	88478.0	1387.5	-71.6	0.9
	37	-18.0	-1307.4	87750.2	1387.4	-71.5	0.9
	38	-19.5	-1193.7	84030.3	1267.2	-69.1	0.6
15	36	-120.1	-518.4	91828.3	447.8	-202.2	2.8
	37	-119.8	-517.9	91115.8	447.1	-201.1	2.8
	38	-116.6	-484.1	86077.3	428.9	-194.4	2.1
14	36	7.1	-971.4	157985.5	932.1	-68.8	2.8
	37	7.4	-970.8	156570.9	931.3	-67.6	2.8
	38	4.8	-894.9	146585.1	866.5	-67.0	2.1
13	36	-5.9	-777.1	159028.5	737.5	-82.5	2.8
	37	-5.8	-776.8	157600.1	737.1	-81.5	2.8
	38	-6.7	-735.5	147565.3	706.1	-79.1	2.1
12	36	-5.0	-772.9	159027.0	742.3	-81.5	2.8
	37	-4.9	-772.7	157598.3	742.0	-80.6	2.8
	38	-5.9	-730.7	147564.6	708.0	-78.2	2.1
11	36	10.5	-788.0	159428.7	767.4	-65.2	2.8
	37	10.4	-787.8	157993.6	767.2	-64.4	2.8
	38	8.0	-743.0	147929.5	727.7	-63.6	2.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

10	36	-998.1	1584.3	92493.7	-1757.7	-1107.4	2.8
	37	-997.1	1581.7	91788.6	-1755.2	-1105.4	2.8
	38	-909.8	1463.1	86547.9	-1613.5	-1014.6	2.1
9	36	653.6	2747.1	157500.4	-2968.2	625.0	2.8
	37	654.5	2741.7	156106.0	-2962.7	627.0	2.8
	38	586.1	2562.3	145528.4	-2759.6	554.4	2.1
8	36	-23.4	-1244.3	169393.9	1227.5	-85.0	2.8
	37	-23.2	-1244.3	167965.1	1227.4	-83.9	2.8
	38	-23.6	-678.5	154766.2	646.4	-85.2	2.1
7	36	-11.0	-1290.6	169518.2	1285.4	-72.1	2.8
	37	-10.8	-1290.6	168089.3	1285.3	-70.9	2.8
	38	-12.8	-714.9	154869.4	691.4	-73.9	2.1
6	36	3.9	-1271.5	170063.2	1274.6	-56.5	2.8
	37	3.9	-1271.7	168626.8	1274.7	-55.5	2.8
	38	-0.1	-697.5	155357.1	679.9	-60.5	2.1
5	36	-1128.8	6.5	53691.2	-27.6	-1212.9	0.9
	37	-1128.1	8.3	53297.3	-29.7	-1211.6	0.9
	38	-1048.6	-7.0	51014.8	-9.5	-1130.7	0.6
4	36	562.4	145.7	88879.7	-174.8	560.9	0.9
	37	563.1	148.9	88168.2	-178.2	562.3	0.9
	38	503.1	86.5	83731.8	-108.2	496.8	0.6
3	36	-61.8	2687.1	98599.0	-2894.4	-93.8	0.9
	37	-61.4	2687.1	97846.1	-2894.5	-92.8	0.9
	38	-58.0	2156.6	91324.9	-2323.7	-91.6	0.6
2	36	-13.2	2777.3	98797.7	-2989.1	-42.9	0.9
	37	-12.9	2777.3	98043.5	-2989.0	-41.9	0.9
	38	-15.5	2230.5	91488.8	-2401.3	-47.1	0.6
1	36	-32.2	2711.5	98869.7	-2916.6	-62.7	0.9
	37	-32.3	2711.4	98138.6	-2916.5	-62.2	0.9
	38	-38.2	2178.4	91592.2	-2344.1	-70.9	0.6
Tot.	36	-0.0	0.0	9299234.0	-3699.9	3804.6	98.3
Tot.	37	-0.0	0.0	9230225.0	-3687.1	3794.2	98.9
Tot.	38	-0.0	0.0	8739796.0	-3586.2	3416.2	80.1
Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
59	36	156.7	1138.5	96409.7	-1317.7	164.3	-0.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	37	156.7	1138.2	95956.3	-1317.1	164.3	-0.0
	38	156.7	1080.1	93002.1	-1250.2	164.3	-0.0
60	36	-156.7	1138.5	96409.7	-1317.7	-164.3	-0.0
	37	-156.7	1138.2	95956.3	-1317.1	-164.3	-0.0
	38	-156.7	1080.1	93002.1	-1250.2	-164.3	-0.0
61	36	156.7	56.3	127097.7	-182.6	164.3	-0.0
	37	156.7	55.8	126453.8	-181.9	164.3	-0.0
	38	156.7	53.8	122281.0	-173.8	164.3	-0.0
62	36	-156.7	56.3	127097.7	-182.6	-164.3	-0.0
	37	-156.7	55.8	126453.8	-181.9	-164.3	-0.0
	38	-156.7	53.8	122281.0	-173.8	-164.3	-0.0
63	36	156.7	149.6	126371.3	-280.5	164.3	-0.0
	37	156.7	150.0	125733.3	-280.7	164.3	-0.0
	38	156.7	141.5	121586.7	-265.8	164.3	-0.0
64	36	-156.7	149.6	126371.3	-280.5	-164.3	-0.0
	37	-156.7	150.0	125733.3	-280.7	-164.3	-0.0
	38	-156.7	141.5	121586.7	-265.8	-164.3	-0.0
65	36	156.7	-1344.4	74457.1	1286.6	164.3	-0.0
	37	156.7	-1344.0	74138.1	1286.3	164.3	-0.0
	38	156.7	-1275.3	72059.1	1220.3	164.3	-0.0
66	36	-156.7	-1344.4	74457.1	1286.6	-164.3	-0.0
	37	-156.7	-1344.0	74138.1	1286.3	-164.3	-0.0
	38	-156.7	-1275.3	72059.1	1220.3	-164.3	-0.0
Tot.	36	0.0	0.0	848671.6	-988.4	0.0	-0.0
Tot.	37	0.0	0.0	844563.1	-986.9	0.0	-0.0
Tot.	38	0.0	0.0	817857.9	-938.7	0.0	-0.0

- Combinazioni FREQUENTI Stati Limite di Esercizio

- Squilibri nodali

Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
1085	39	-1336.1	-25.5	31574.9	53.8	2646.7	5.9
	40	-1309.7	-25.5	31467.2	53.4	2642.7	5.8
1084	39	-2987.2	-12.2	41606.2	46.4	-3843.2	0.0
	40	-2961.0	-12.9	41264.0	46.8	-3818.6	0.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

1083	39	-21.0	4753.3	-1584.2	-2739.6	-36.4	2.3
	40	-20.6	4696.4	-1571.8	-2706.9	-35.7	2.4
1082	39	-276.2	1479.0	26140.9	5465.3	-436.9	0.6
	40	-272.9	1442.1	25945.4	5434.4	-431.7	0.6
1081	39	282.6	167.4	33471.0	7757.7	475.2	1.4
	40	281.5	150.5	33118.7	7673.8	473.2	1.3
1080	39	2506.0	-1.7	3622.6	4.1	1052.7	-0.5
	40	2495.1	-1.8	3601.7	4.1	1048.8	-0.5
1079	39	-3609.7	-9.7	5737.5	12.0	-1393.0	-0.8
	40	-3572.2	-9.6	5668.7	11.8	-1380.5	-0.8
1078	39	-4396.0	766.4	32073.6	4460.8	-1538.3	-6.6
	40	-4338.7	819.6	31668.7	4366.0	-1513.9	-6.4
1077	39	3931.7	1.6	7961.4	2.3	1049.4	-2.2
	40	3876.8	1.8	7856.4	2.0	1032.3	-2.2
1076	39	-6171.5	-9.3	13240.9	15.6	-1440.3	0.2
	40	-6065.2	-8.9	13017.3	14.9	-1413.2	0.2
1075	39	6092.1	-1978.9	55317.6	6650.0	1615.8	2.9
	40	5994.3	-1915.3	54393.7	6514.3	1588.8	2.8
1074	39	14480.2	-39.9	24544.2	50.1	5447.6	6.4
	40	14198.6	-40.8	23964.8	51.3	5356.9	6.4
1073	39	-7736.0	10.1	13833.1	-14.0	-2803.1	-1.0
	40	-7640.8	9.8	13675.7	-13.7	-2767.7	-1.0
1072	39	-4551.0	-6250.4	78358.6	-49265.5	3379.7	17.7
	40	-4457.6	-6161.9	77330.9	-48645.5	3360.5	17.3
1071	39	-241.5	1.2	46335.8	3.8	-4686.1	8.4
	40	-242.7	1.0	45649.9	3.7	-4627.3	8.4
1070	39	-2973.9	7.4	55762.2	-10.9	5299.2	-8.2
	40	-2908.9	7.9	54856.5	-11.8	5224.2	-8.1
1069	39	7729.3	-8241.7	107426.9	-64311.8	-4050.6	-10.9
	40	7568.9	-8087.6	105607.1	-63223.3	-4019.8	-10.7
1068	39	-2295.1	128.5	76745.5	44662.1	-3659.0	3.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	-2201.7	133.4	75817.0	44103.6	-3509.0	3.7
1067	39	2177.0	-2533.9	103469.3	60494.0	3561.2	-1.6
	40	2083.6	-2483.5	101732.5	59474.0	3409.2	-1.6
1066	39	13.9	276.8	24532.4	-3097.4	43.8	0.4
	40	13.2	222.1	24279.5	-3034.6	42.2	0.4
1065	39	-7.6	6682.0	14798.2	-1154.5	-6.7	-2.4
	40	-6.8	6552.4	14558.6	-1122.4	-5.5	-2.3
1064	39	12.4	1271.1	27857.5	3060.2	45.8	0.4
	40	12.2	1273.2	27556.5	3005.1	44.9	0.4
1063	39	11.2	-4583.5	19132.4	-2240.7	20.5	-0.7
	40	11.2	-4518.8	18862.7	-2208.6	20.3	-0.7
1062	39	-30.2	-1153.3	20078.0	-1452.9	-27.9	0.1
	40	-30.0	-1158.4	19906.4	-1432.2	-28.0	0.1
1061	39	149.0	-1893.4	11594.8	-2136.1	243.6	-1.7
	40	148.0	-1867.0	11457.2	-2115.9	241.9	-1.6
1060	39	346.6	1380.4	34287.3	-5.9	582.9	2.2
	40	344.2	1348.3	33782.2	-5.2	578.7	2.2
1059	39	12.6	-920.8	33425.8	-3893.5	53.8	0.1
	40	12.5	-928.0	33188.3	-3874.4	53.0	0.1
1058	39	-5961.4	8040.8	37054.2	-1205.0	3683.0	-5.1
	40	-5885.4	7950.3	36613.9	-1198.4	3635.5	-5.0
1057	39	4929.2	1732.9	68641.4	-6644.2	-4280.0	-1.4
	40	4862.7	1687.1	67736.3	-6553.7	-4228.3	-1.3
1056	39	-2482.3	-216.3	48435.3	-3240.8	-963.6	-0.1
	40	-2471.7	-236.7	48223.8	-3262.0	-961.0	-0.1
1055	39	30.9	-3996.3	21462.0	-5867.0	60.8	3.0
	40	31.0	-3966.8	21290.6	-5816.8	60.8	3.0
1054	39	3368.4	-708.5	58453.3	437.2	1090.3	-4.7
	40	3334.2	-719.2	57766.3	423.2	1080.9	-4.7
1053	39	-4452.5	3230.6	33805.6	10640.0	-859.7	-1.3
	40	-4455.7	3212.5	33757.7	10614.7	-864.4	-1.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1052	39	-1239.7	3410.1	52647.2	-302.3	-1233.5	-2.8
	40	-1210.8	3385.7	52320.4	-297.6	-1224.2	-2.8
1051	39	9671.5	4001.3	28685.0	-126.7	3070.0	1.1
	40	9593.0	3955.9	28414.3	-121.8	3046.0	1.1
1022	39	-13211.6	6191.3	148633.2	103152.3	-4158.2	-0.1
	40	-12975.8	6052.0	145479.4	101050.1	-4106.4	0.0
1021	39	7190.7	-7.1	18066.7	5.2	787.2	2.9
	40	7063.5	-6.5	17711.6	4.5	778.9	2.7
1020	39	-7083.4	-2568.0	177403.3	-90156.7	-855.2	1.0
	40	-6989.9	-2510.7	174000.5	-88200.2	-873.5	0.8
1019	39	-17.1	-7560.1	41815.7	-13070.9	-36.3	-1.0
	40	-17.3	-7400.6	41142.5	-12881.3	-36.6	-1.1
1018	39	8.0	9995.4	10468.9	-4559.3	7.4	2.5
	40	7.2	9751.0	10269.9	-4437.5	6.2	2.5
1017	39	7647.2	-16.4	18090.9	22.7	1207.5	1.6
	40	7491.1	-15.7	17722.0	21.8	1180.6	1.6
1016	39	-7467.7	-3956.5	64754.5	12636.3	-1380.9	-3.1
	40	-7329.6	-3829.7	63488.1	12356.5	-1358.5	-3.0
1015	39	-2283.8	-2811.8	112930.5	57250.1	-3735.6	2.4
	40	-2186.7	-2779.9	110927.4	56319.6	-3577.5	2.2
1014	39	-7495.9	-6965.9	98232.3	-63883.2	2781.1	0.8
	40	-7323.4	-6875.9	96714.3	-62798.6	2810.5	0.7
1013	39	2389.2	28.6	47324.3	-106.2	-3970.9	8.7
	40	2360.0	28.3	46685.0	-104.1	-3939.4	8.3
1012	39	-384.9	35.8	35116.9	-110.5	3777.5	-0.5
	40	-347.7	34.8	34805.5	-107.6	3754.0	-1.0
1011	39	2849.7	-4411.1	65810.7	-47322.1	-3166.0	-1.8
	40	2826.7	-4357.7	65191.7	-46780.9	-3144.3	-2.2
1010	39	2406.7	1910.9	81192.0	38217.8	3834.3	-0.8
	40	2308.2	1883.5	80182.8	37837.3	3675.9	-1.0
1009	39	-4696.3	11.8	10334.5	-13.8	-926.0	3.0
	40	-4622.2	11.7	10190.9	-13.8	-907.8	2.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1008	39	5644.6	3554.3	38616.0	5004.7	1746.9	10.0
	40	5547.5	3518.8	38071.1	4920.8	1705.6	9.6
1007	39	-16.5	657.6	29655.2	-3555.4	-46.4	1.4
	40	-16.1	584.8	29309.3	-3513.4	-45.5	1.3
1006	39	-25.6	4175.0	46902.1	-5296.2	-75.3	0.3
	40	-25.2	4072.9	46357.0	-5259.9	-74.7	0.1
1005	39	-3950.3	4.3	9300.2	-8.9	-577.6	-0.7
	40	-3914.0	4.2	9221.3	-8.7	-572.2	-0.7
1004	39	5104.4	-5304.8	57323.5	8563.3	1496.5	2.5
	40	5054.0	-5277.6	56751.1	8501.5	1479.5	2.3
1003	39	-17.3	-356.7	30778.4	2801.7	-43.4	2.2
	40	-16.7	-345.6	30450.0	2767.6	-42.6	2.1
1002	39	-61.5	-6383.6	32856.6	-6669.1	-110.2	-1.4
	40	-60.4	-6306.2	32465.3	-6587.5	-108.8	-1.5
1001	39	7333.5	9823.2	51092.6	7149.7	2481.5	7.7
	40	7242.3	9705.2	50471.5	7063.3	2449.4	7.6
67	39	-744.2	-48.2	16830.7	3.0	-808.6	0.7
	40	-719.8	-50.2	16323.9	8.5	-782.7	0.6
58	39	33.7	-1205.0	83404.7	1293.1	76.3	0.1
	40	34.1	-1166.9	82191.9	1252.2	75.9	0.1
57	39	16.6	-1226.9	83341.9	1316.8	58.4	0.1
	40	16.3	-1188.1	82125.1	1275.2	57.1	0.1
56	39	17.9	-1228.0	83280.1	1318.2	59.7	0.1
	40	17.5	-1189.2	82064.7	1276.6	58.4	0.1
55	39	17.6	-1228.4	83275.1	1318.9	59.5	0.1
	40	17.3	-1189.6	82060.0	1277.3	58.2	0.1
54	39	17.1	-1230.0	83363.8	1320.9	58.9	0.1
	40	16.8	-1191.2	82147.0	1279.3	57.7	0.1
53	39	-35.5	-1273.3	86271.1	1367.5	3.8	0.1
	40	-35.8	-1233.0	85006.3	1324.2	2.5	0.1
52	39	109.0	-1239.4	83909.1	1331.5	155.3	0.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	108.5	-1200.3	82684.9	1289.5	153.9	0.1
51	39	51.2	-1140.4	77245.0	1225.8	94.6	0.1
	40	50.1	-1104.7	76132.7	1187.5	92.6	0.1
50	39	306.0	-646.5	46577.9	697.1	361.9	0.1
	40	305.1	-627.9	45987.4	677.1	360.1	0.1
49	39	-1.5	-837.5	145643.5	890.5	68.3	0.4
	40	-1.2	-810.7	142358.9	862.0	67.1	0.4
48	39	10.8	-821.7	144706.1	875.1	81.2	0.4
	40	10.6	-795.5	141447.1	847.2	79.5	0.4
47	39	10.7	-822.6	144693.2	877.3	81.1	0.4
	40	10.6	-796.4	141434.5	849.4	79.5	0.4
46	39	10.7	-823.7	144693.8	879.6	81.1	0.4
	40	10.6	-797.4	141435.0	851.7	79.5	0.4
45	39	10.0	-824.5	144731.7	881.7	80.4	0.4
	40	9.9	-798.2	141471.9	853.8	78.8	0.4
44	39	-1.5	-859.2	149667.2	919.3	68.3	0.4
	40	-1.6	-831.7	146272.8	890.1	66.7	0.4
43	39	33.7	-836.1	145952.6	896.4	105.3	0.4
	40	33.5	-809.5	142659.5	868.2	103.5	0.4
42	39	25.1	-781.1	136098.0	839.9	96.2	0.4
	40	24.6	-756.4	133072.0	813.7	94.2	0.4
41	39	82.4	-427.3	80755.0	469.9	156.3	0.4
	40	82.0	-415.0	79230.1	456.7	154.4	0.4
40	39	-0.0	821.1	145616.3	-849.2	71.9	0.4
	40	0.3	794.7	142332.0	-821.9	70.7	0.4
39	39	12.1	802.8	144725.2	-828.8	84.6	0.4
	40	11.9	777.0	141465.5	-802.1	82.9	0.4
38	39	12.0	801.5	144710.4	-826.2	84.6	0.4
	40	11.9	775.8	141451.1	-799.6	82.9	0.4
37	39	12.1	800.5	144710.2	-823.9	84.6	0.4
	40	11.9	774.7	141451.0	-797.3	83.0	0.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

36	39	11.9	801.9	144680.1	-824.1	84.4	0.4
	40	11.7	776.1	141421.1	-797.4	82.8	0.4
35	39	24.8	911.6	147756.0	-938.0	98.0	0.4
	40	24.4	882.9	144397.9	-908.3	96.1	0.4
34	39	27.8	818.4	145684.0	-838.9	101.1	0.4
	40	27.6	792.1	142395.3	-811.7	99.5	0.4
33	39	26.6	749.5	136101.8	-765.6	99.8	0.4
	40	26.0	725.5	133076.0	-740.7	97.8	0.4
32	39	83.6	393.5	80758.9	-391.0	159.7	0.4
	40	83.2	381.9	79234.2	-379.2	157.7	0.4
31	39	35.2	1199.7	83112.6	-1282.2	81.0	0.1
	40	35.7	1161.7	81910.3	-1241.6	80.7	0.1
30	39	19.4	1220.7	83283.2	-1304.4	64.5	0.1
	40	19.0	1182.1	82068.8	-1263.2	63.2	0.1
29	39	20.8	1221.1	83229.8	-1304.6	66.0	0.1
	40	20.4	1182.5	82016.4	-1263.3	64.7	0.1
28	39	21.3	1220.7	83240.8	-1303.9	66.5	0.1
	40	21.0	1182.1	82027.1	-1262.6	65.2	0.1
27	39	35.4	1218.3	82246.5	-1301.1	81.2	0.1
	40	34.7	1179.8	81046.8	-1259.9	79.7	0.1
26	39	400.4	1125.5	52667.7	-1201.5	464.2	0.1
	40	395.5	1090.3	51900.2	-1163.8	458.1	0.1
25	39	-63.1	335.3	46566.7	-355.1	-22.0	0.1
	40	-67.2	324.8	45986.6	-343.9	-27.2	0.1
24	39	-10.6	1202.7	79942.4	-1283.8	33.0	0.1
	40	-10.2	1164.7	78747.1	-1243.2	32.6	0.1
23	39	55.3	1129.2	77179.8	-1204.9	102.1	0.1
	40	54.1	1093.7	76067.0	-1166.9	100.0	0.1
22	39	308.4	635.6	46532.9	-676.0	367.6	0.1
	40	307.5	617.1	45942.8	-656.3	365.8	0.1
21	39	1714.0	-223.9	39709.1	162.4	1743.9	2.1
	40	1652.4	-218.3	38456.1	161.5	1678.4	1.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

20	39	-338.2	-664.1	48313.0	694.1	-402.4	0.7
	40	-337.4	-645.6	47699.9	675.5	-400.2	0.6
19	39	-42.7	-1189.3	81205.8	1258.0	-92.4	0.7
	40	-41.7	-1152.4	80035.2	1219.6	-90.1	0.6
18	39	-16.0	-1219.0	82916.7	1291.4	-64.4	0.7
	40	-15.6	-1180.7	81715.0	1251.1	-62.7	0.6
17	39	-13.8	-1219.7	83012.7	1293.5	-62.1	0.7
	40	-13.4	-1181.1	81807.8	1252.9	-60.4	0.6
16	39	-20.2	-1193.4	82574.7	1266.9	-68.8	0.7
	40	-20.6	-1155.5	81383.2	1226.8	-68.0	0.6
15	39	-116.2	-483.3	84652.3	427.6	-192.1	2.1
	40	-115.1	-472.0	83020.3	421.6	-190.0	1.9
14	39	5.3	-893.7	143756.0	864.9	-64.7	2.1
	40	4.5	-868.4	140521.7	843.4	-64.6	1.9
13	39	-6.5	-734.9	144708.5	705.3	-77.1	2.1
	40	-6.8	-721.1	141458.8	695.0	-76.4	1.9
12	39	-5.7	-730.3	144707.3	707.4	-76.2	2.1
	40	-6.0	-716.3	141458.0	696.1	-75.5	1.9
11	39	7.8	-742.6	145059.4	727.3	-62.1	2.1
	40	7.0	-727.7	141800.4	714.1	-61.9	1.9
10	39	-907.8	1457.9	85137.6	-1608.5	-1010.6	2.1
	40	-878.8	1418.6	83437.8	-1561.4	-980.5	1.9
9	39	588.0	2551.4	142739.6	-2748.5	558.3	2.1
	40	565.2	2491.9	139306.7	-2681.2	534.0	1.9
8	39	-23.3	-678.6	151908.6	646.2	-82.8	2.1
	40	-23.4	-490.0	147604.2	452.6	-83.4	1.9
7	39	-12.5	-715.0	152011.5	691.4	-71.5	2.1
	40	-13.2	-523.1	147700.2	493.4	-72.6	1.9
6	39	-0.1	-697.7	152484.1	680.2	-58.6	2.1
	40	-1.4	-506.3	148156.7	481.9	-60.3	1.9
5	39	-1047.4	-3.3	50227.1	-13.6	-1128.1	0.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	40	-1020.9	-8.6	49492.6	-6.7	-1101.2	0.6
4	39	504.4	92.8	82308.9	-115.0	499.5	0.7
	40	484.4	71.8	80877.5	-91.5	477.6	0.6
3	39	-57.3	2156.7	89819.2	-2323.8	-89.6	0.7
	40	-56.1	1979.8	87695.6	-2133.5	-89.3	0.6
2	39	-14.9	2230.3	89980.5	-2401.1	-45.2	0.7
	40	-15.8	2048.1	87845.9	-2205.3	-47.0	0.6
1	39	-38.4	2178.2	90129.9	-2343.8	-69.9	0.7
	40	-40.4	2000.5	87996.5	-2153.0	-72.8	0.6
Tot.	39	-0.0	0.0	8601776.0	-3560.7	3395.4	81.4
Tot.	40	-0.0	0.0	8442900.0	-3527.9	3270.1	75.1
Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
59	39	156.7	1079.3	92095.3	-1249.0	164.3	-0.0
	40	156.7	1059.9	91140.7	-1226.7	164.3	-0.0
60	39	-156.7	1079.3	92095.3	-1249.0	-164.3	-0.0
	40	-156.7	1059.9	91140.7	-1226.7	-164.3	-0.0
61	39	156.7	52.9	120993.3	-172.4	164.3	-0.0
	40	156.7	52.2	119645.3	-169.8	164.3	-0.0
62	39	-156.7	52.9	120993.3	-172.4	-164.3	-0.0
	40	-156.7	52.2	119645.3	-169.8	-164.3	-0.0
63	39	156.7	142.3	120310.7	-266.2	164.3	-0.0
	40	156.7	139.4	118971.0	-261.2	164.3	-0.0
64	39	-156.7	142.3	120310.7	-266.2	-164.3	-0.0
	40	-156.7	139.4	118971.0	-261.2	-164.3	-0.0
65	39	156.7	-1274.4	71421.2	1219.8	164.3	-0.0
	40	156.7	-1251.6	70749.4	1197.8	164.3	-0.0
66	39	-156.7	-1274.4	71421.2	1219.8	-164.3	-0.0
	40	-156.7	-1251.6	70749.4	1197.8	-164.3	-0.0
Tot.	39	0.0	0.0	809640.9	-935.7	0.0	-0.0
Tot.	40	0.0	0.0	801013.0	-919.8	0.0	-0.0

- Combinazioni QUASI PERMANENTI Stati Limite di Esercizio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Squilibri nodali

Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
1085	41	-1305.3	-25.4	31448.2	53.2	2640.8	5.8
1084	41	-2954.0	-12.5	41202.4	46.0	-3812.6	0.0
1083	41	-20.7	4686.9	-1566.9	-2701.2	-35.9	2.3
1082	41	-272.5	1441.8	25916.2	5427.0	-431.1	0.6
1081	41	281.1	151.6	33061.0	7659.4	472.4	1.3
1080	41	2494.5	-1.7	3600.5	4.1	1048.5	-0.5
1079	41	-3565.2	-9.6	5659.2	11.8	-1377.4	-0.8
1078	41	-4330.8	812.7	31626.3	4363.4	-1510.7	-6.4
1077	41	3870.5	1.8	7844.1	2.0	1030.7	-2.2
1076	41	-6049.4	-9.0	12985.5	15.1	-1409.7	0.2
1075	41	5977.1	-1915.0	54253.3	6500.6	1583.3	2.8
1074	41	14160.0	-40.3	23909.4	50.5	5341.3	6.4
1073	41	-7625.8	9.8	13650.0	-13.8	-2762.2	-1.0
1072	41	-4452.5	-6150.2	77209.4	-48571.2	3351.8	17.3
1071	41	-237.3	1.0	45554.6	3.7	-4616.5	8.4
1070	41	-2901.0	7.3	54723.2	-10.9	5208.5	-8.0
1069	41	7551.5	-8067.1	105323.0	-63052.8	-4006.8	-10.6
1068	41	-2201.2	134.3	75701.9	44033.8	-3508.5	3.7
1067	41	2083.1	-2477.4	101461.4	59313.2	3408.1	-1.6
1066	41	13.3	220.0	24256.2	-3034.5	42.3	0.4
1065	41	-7.0	6537.2	14520.1	-1121.0	-5.9	-2.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1064	41	12.2	1267.1	27534.8	3001.8	44.8	0.4
1063	41	11.2	-4509.8	18828.7	-2205.1	20.3	-0.7
1062	41	-30.0	-1159.8	19900.1	-1430.9	-28.1	0.1
1061	41	147.7	-1865.8	11444.5	-2112.5	241.4	-1.7
1060	41	343.5	1345.8	33724.4	-4.8	577.4	2.1
1059	41	12.5	-927.3	33182.1	-3874.7	52.8	0.1
1058	41	-5876.3	7938.1	36564.9	-1194.9	3630.1	-5.0
1057	41	4855.1	1685.3	67620.5	-6543.2	-4221.9	-1.3
1056	41	-2471.3	-235.7	48220.0	-3264.1	-961.2	-0.1
1055	41	30.8	-3961.5	21264.7	-5810.2	60.5	3.0
1054	41	3328.3	-717.7	57665.7	422.1	1079.5	-4.7
1053	41	-4455.0	3213.5	33757.5	10613.7	-864.7	-1.3
1052	41	-1205.8	3382.1	52260.8	-298.2	-1223.5	-2.7
1051	41	9576.5	3948.5	28365.3	-121.6	3040.6	1.1
1022	41	-12937.6	6028.1	145083.4	100758.9	-4091.1	0.0
1021	41	7038.1	-6.7	17653.6	4.9	775.6	2.7
1020	41	-6961.2	-2512.1	173451.1	-87959.2	-865.3	0.8
1019	41	-17.2	-7376.7	40991.5	-12832.6	-36.4	-1.0
1018	41	7.4	9731.9	10245.0	-4429.7	6.6	2.5
1017	41	7474.4	-15.9	17684.7	22.0	1178.1	1.6
1016	41	-7311.5	-3827.3	63343.3	12332.0	-1354.1	-3.0
1015	41	-2186.0	-2775.0	110637.9	56159.7	-3576.3	2.2
1014	41	-7306.0	-6856.8	96427.1	-62622.8	2797.2	0.7
1013	41	2351.6	27.7	46552.4	-102.9	-3924.3	8.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1012	41	-353.6	34.7	34718.5	-107.3	3743.2	-0.9
1011	41	2822.8	-4351.0	65082.9	-46706.9	-3135.7	-2.1
1010	41	2307.7	1880.4	80061.2	37775.4	3675.5	-1.0
1009	41	-4614.7	11.7	10173.6	-13.7	-906.6	2.9
1008	41	5538.2	3513.2	38015.8	4914.4	1702.6	9.6
1007	41	-16.2	588.3	29260.2	-3506.8	-45.6	1.3
1006	41	-25.4	4070.3	46278.8	-5247.6	-74.8	0.1
1005	41	-3904.5	4.2	9200.6	-8.7	-570.6	-0.7
1004	41	5040.8	-5264.2	56641.1	8482.9	1474.5	2.3
1003	41	-16.9	-345.0	30391.5	2762.6	-42.8	2.1
1002	41	-60.7	-6295.1	32408.0	-6575.8	-109.2	-1.5
1001	41	7227.2	9686.9	50381.0	7051.0	2443.4	7.6
67	41	-719.7	-50.4	16317.2	8.7	-782.5	0.6
58	41	34.2	-1166.8	81899.2	1252.1	75.8	0.1
57	41	16.2	-1188.1	81823.2	1275.1	56.8	0.1
56	41	17.4	-1189.2	81763.1	1276.5	58.2	0.1
55	41	17.2	-1189.6	81758.4	1277.2	57.9	0.1
54	41	16.7	-1191.1	81844.7	1279.2	57.4	0.1
53	41	-35.8	-1232.9	84692.6	1324.2	2.3	0.1
52	41	108.4	-1200.2	82381.6	1289.5	153.6	0.1
51	41	49.8	-1104.7	75860.4	1187.4	92.1	0.1
50	41	304.9	-627.9	45836.3	677.1	359.7	0.1
49	41	-1.1	-810.6	141782.0	861.9	66.9	0.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

48	41	10.6	-795.4	140875.6	847.2	79.2	0.4
47	41	10.5	-796.3	140863.1	849.3	79.1	0.4
46	41	10.5	-797.4	140863.6	851.7	79.1	0.4
45	41	9.9	-798.2	140900.2	853.8	78.4	0.4
44	41	-1.7	-831.7	145677.9	890.1	66.3	0.4
43	41	33.5	-809.5	142082.0	868.2	103.2	0.4
42	41	24.5	-756.4	132541.5	813.7	93.8	0.4
41	41	81.9	-415.1	78962.5	456.8	154.0	0.4
40	41	0.3	794.7	141755.6	-821.9	70.5	0.4
39	41	11.8	777.0	140894.0	-802.1	82.6	0.4
38	41	11.8	775.7	140879.7	-799.5	82.6	0.4
37	41	11.9	774.7	140879.5	-797.2	82.6	0.4
36	41	11.7	776.0	140849.8	-797.3	82.5	0.4
35	41	24.4	882.7	143810.7	-908.0	95.7	0.4
34	41	27.6	792.0	141818.6	-811.6	99.1	0.4
33	41	25.9	725.5	132545.4	-740.6	97.4	0.4
32	41	83.1	381.9	78966.7	-379.1	157.4	0.4
31	41	35.8	1161.6	81619.2	-1241.5	80.7	0.1
30	41	18.9	1182.0	81767.0	-1263.1	62.9	0.1
29	41	20.4	1182.4	81714.8	-1263.3	64.4	0.1
28	41	20.9	1182.0	81725.4	-1262.6	65.0	0.1
27	41	34.5	1179.7	80751.5	-1259.8	79.3	0.1
26	41	395.3	1090.1	51730.1	-1163.6	457.7	0.1
25	41	-67.2	324.7	45816.4	-343.9	-27.4	0.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

24	41	-10.1	1164.6	78455.6	-1243.1	32.5	0.1
23	41	53.9	1093.7	75794.8	-1166.9	99.6	0.1
22	41	307.3	617.1	45791.8	-656.3	365.4	0.1
21	41	1652.8	-219.0	38443.4	162.2	1679.2	1.9
20	41	-337.2	-645.5	47539.0	675.4	-399.9	0.6
19	41	-41.5	-1152.4	79744.5	1219.5	-89.7	0.6
18	41	-15.5	-1180.6	81413.2	1251.1	-62.5	0.6
17	41	-13.3	-1181.0	81505.8	1252.9	-60.2	0.6
16	41	-20.8	-1155.4	81092.1	1226.8	-68.0	0.6
15	41	-115.0	-471.9	82735.3	421.3	-189.5	1.9
14	41	4.6	-868.2	139955.9	843.1	-64.1	1.9
13	41	-6.7	-721.0	140887.4	694.9	-76.0	1.9
12	41	-6.0	-716.2	140886.5	696.0	-75.1	1.9
11	41	7.0	-727.6	141226.4	714.0	-61.6	1.9
10	41	-878.4	1417.5	83155.7	-1560.5	-979.7	1.9
9	41	565.6	2489.8	138749.0	-2679.0	534.8	1.9
8	41	-23.3	-490.0	147032.7	452.5	-82.9	1.9
7	41	-13.1	-523.1	147128.6	493.4	-72.1	1.9
6	41	-1.4	-506.3	147582.1	481.9	-59.9	1.9
5	41	-1020.6	-7.8	49335.0	-7.5	-1100.7	0.6
4	41	484.6	73.1	80592.9	-92.8	478.2	0.6
3	41	-56.0	1979.9	87394.5	-2133.5	-88.9	0.6
2	41	-15.6	2048.0	87544.3	-2205.2	-46.6	0.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

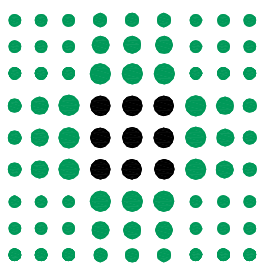
1	41	-40.4	2000.5	87704.1	-2153.0	-72.6	0.6
Tot.	41	-0.0	0.0	8415296.0	-3522.7	3266.0	75.4
Nodo	Comb.	Rx [kg]	Ry [kg]	Rz [kg]	Mx [kgm]	My [kgm]	Mz [kgm]
59	41	156.7	1059.8	90959.4	-1226.5	164.3	-0.0
60	41	-156.7	1059.8	90959.4	-1226.5	-164.3	-0.0
61	41	156.7	52.1	119387.7	-169.5	164.3	-0.0
62	41	-156.7	52.1	119387.7	-169.5	-164.3	-0.0
63	41	156.7	139.6	118715.8	-261.3	164.3	-0.0
64	41	-156.7	139.6	118715.8	-261.3	-164.3	-0.0
65	41	156.7	-1251.4	70621.9	1197.7	164.3	-0.0
66	41	-156.7	-1251.4	70621.9	1197.7	-164.3	-0.0
Tot.	41	0.0	0.0	799369.6	-919.2	0.0	-0.0

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Azienda Unità Sanitaria Locale di Parma

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geom. Lara Biavardi
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ing. Federica Ceresa
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ing. jr. Roberto Degiovanni
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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 2
PROGETTO E VERIFICA TRAVI PREFABBRICATE IN C.A.**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
Via Aristotele n. 5
Tel. 3356030441 - 0522 865441
42122 - Reggio Emilia

ELABORATO

RS. 03

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

- Verifiche travi

- Modalità di verifica

Le travi vengono progettate-verificate a flessione retta e taglio nel piano longitudinale della trave sulla base dell'inviluppo delle sollecitazioni, in conformità al *Decreto Legge del 26 Marzo 1980* e successivi aggiornamenti.

Viene comunque sempre predisposta l'armatura minima mentre gli sforzi di taglio vengono integralmente assorbiti dalle staffe.

Le operazioni di progetto-verifica vengono condotte, per ogni asta, in tre diverse sezioni e precisamente in corrispondenza dei fili esterni dei pilastri e della sezione in campata nella quale viene riscontrato il massimo momento positivo (negativo).

I momenti si intendono positivi se tendono le fibre di intradosso (inferiori).

Per quanto concerne il progetto e la verifica delle travi a taglio esse vengono condotte nel modo seguente:

- Si controlla se la trave necessita o meno di armatura aggiuntiva a taglio:
 1. Se non occorre armatura aggiuntiva a taglio si procede a disporre la staffatura minima di regolamento e la progettazione ha termine.
 2. Se occorre armatura aggiuntiva a taglio la staffatura viene progettata andando a suddividere la trave, a seconda del caso, in uno, tre o cinque conci:
 - due tronchi in prossimità degli appoggi di lunghezza pari all'altezza della sezione;
 - due altri (eventuali) tronchi dall'ascissa precedente a quella in cui il taglio può essere assorbito con la sola staffatura minima da regolamento
 - un restante (eventuale) concio di chiusura centrale.
- In ogni caso l'armatura a taglio si intende simmetrica rispetto alla mezzeria della trave e viene progettata considerando, rispetto alla mezzeria, la zona della trave più sollecitata.

Per quanto concerne le verifiche a taglio esse vengono condotte suddividendo la trave in cinque conci:

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

due tronchi in prossimità degli appoggi di lunghezza pari all'altezza della sezione; due altri (eventuali) tronchi dall'ascissa precedente a quella in cui il taglio può essere assorbito con la sola staffatura minima da regolamento; il restante (eventuale) concio di chiusura centrale.

L'armatura a taglio si intende simmetrica rispetto alla mezzeria della trave e viene progettata considerando, rispetto alla mezzeria, la zona della trave più sollecitata.

Simbologia utilizzata:

Af Es.

Area di ferro all'estradosso

Af In.

Area di ferro all'intradosso

Sigb.Es.

Tensione del calcestruzzo estradosso

Sigb. In.

Tensione del calcestruzzo intradosso

Sigf. Es.

Tensione dell'acciaio estradosso

Sigf. In.

Tensione dell'acciaio intradosso

- Sezioni Impiegate:

- Trave Sezioni Impiegate:

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Sezione Numero	Dimensioni	Cls Prefabbr.	f_{cd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{QP} [kg/cm ²]	Cls In Opera	f_{cd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Cf Gabbie Es [cm]	Cf Gabbie In [cm]	Cf Spez. Es [cm]	Cf Spez. In [cm]
1	B 70 [cm] H 34 [cm]	C35/45	211.6	224.1	168.1	C28/35	164.6	174.3	130.7	B 450 C	3739.0	3600.0	3600.0	2.50	2.50	2.50	10.00
2	B 30 [cm] H 34 [cm]	C35/45	211.6	224.1	168.1	C28/35	164.6	174.3	130.7	B 450 C	3739.0	3600.0	3600.0	2.50	2.50	2.50	10.00
5	B 50 [cm] H 49 [cm]	C35/45	211.6	224.1	168.1	C28/35	164.6	174.3	130.7	B 450 C	3739.0	3600.0	3600.0	2.50	2.50	2.50	10.00

- Verifiche Travate :

Fattore di sovreresistenza a taglio γ_{Rd} **1.10**

- Travata: 101 Travata 101 106 111 116

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- **102 107 112 117**
- **103 108 113 118**

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ_{bE} [kg/cm ²]	σ_{bI} [kg/cm ²]	σ_{fE} [kg/cm ²]	σ_{fI} [kg/cm ²]
Trave 101 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}7997.3 [kg/m] (VALORE CARATTERISTICO)																		
101	SLU	0.15	12.57	0.00	7.63		13474.3	14659.6	0.92	0.27	-394.3	6090.5	0.06	0.18				
SLE	Rare						9413.9				0.0				-0.0	102.6	2832.9	224.3
SLE	Freq						7670.4				0.0				-0.0	83.6	2308.3	182.7
SLE	Q.P.						7089.8				0.0				-0.0	77.3	2133.6	168.9
CAM	SLU	2.63	7.63	0.00	22.62	11459.2	-20499.4	0.0	8589.6	0.00	0.14	-20464.6	22044.7	0.93	0.24			

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Rare					7997.3	-14306.4	0.0				-14282.0			115.1	-0.0	1092.0	2500.6
SLE	Freq					6525.8	-11674.0	0.0				-11654.1			93.9	-0.0	891.1	2040.5
SLE	Q.P.					6035.3	-10796.5	0.0				-10778.2			86.9	-0.0	824.1	1887.1
106	SLU	5.10	27.14	0.00	15.21			24847.2	25305.5	0.98	0.39	0.0	10998.8	0.00	0.23			
SLE	Rare							17388.6				0.0			-0.0	145.4	2612.1	201.5
SLE	Freq							14349.9				0.0			-0.0	120.0	2155.6	166.3
SLE	Q.P.							13336.6				0.0			-0.0	111.5	2003.4	154.5

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.65		0.20		0.00													
Quasi Permanenti		2.65		0.18		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 101 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																			
106	SLU	0.25	27.14	0.00	15.21		20867.4	25305.5	0.82	0.39	0.0	10998.8	0.00	0.23					
SLE	Rare						15082.4				0.0				-0.0	126.1	2265.6	174.7	
SLE	Freq						13595.7				0.0				-0.0	113.7	2042.3	157.5	
SLE	Q.P.						13100.2				0.0				-0.0	109.5	1967.9	151.8	
CAM	SLU	3.45	7.63	0.00	19.67	5941.1	-17678.4	0.0	8599.3	0.00	0.14	-17678.4	19325.7	0.91	0.21				
SLE	Rare					4318.5	-12850.3	0.0				-12850.3			108.5	-0.0	995.8	2582.7	
SLE	Freq					3950.6	-11755.6	0.0				-11755.6			99.3	-0.0	910.9	2362.7	
SLE	Q.P.					3828.0	-11390.7	0.0				-11390.7			96.2	-0.0	882.7	2289.3	
111	SLU	6.65	18.10	0.00	12.57		18633.2	18896.3	0.99	0.33	0.0	9338.0	0.00	0.22					
SLE	Rare						13579.8				0.0				-0.0	131.2	2945.9	44.7	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							12508.3				0.0				-0.0	120.8	2713.5	41.2
SLE	Q.P.							12151.2				0.0				-0.0	117.4	2636.0	40.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		3.45		0.25		0.00													
Quasi Permanenti		3.45		0.24		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 101 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																			
111	SLU	0.25	18.10	0.00	12.57		13954.2	18954.6	0.74	0.32	0.0	9428.3	0.00	0.21					
SLE	Rare						10135.2				0.0				-0.0	96.5	2187.8	6.6	
SLE	Freq						9296.6				0.0				-0.0	88.5	2006.8	6.1	
SLE	Q.P.						9016.8				0.0				-0.0	85.8	1946.3	5.9	
CAM	SLU	2.72	7.63	0.00	12.57	5941.1	-10628.0	0.0	8494.9	0.00	0.13	-10610.0	12864.4	0.82	0.16				
SLE	Rare					4318.5	-7725.4	0.0				-7712.3			74.7	-0.0	603.0	2348.5	
SLE	Freq					3950.6	-7067.3	0.0				-7055.3			68.3	-0.0	551.6	2148.4	
SLE	Q.P.					3828.0	-6848.0	0.0				-6836.3			66.2	-0.0	534.5	2081.7	
116	SLU	5.20	7.63	0.00	7.63		8595.9	10392.5	0.83	0.21	-1401.4	6091.1	0.23	0.17					
SLE	Rare						4999.5				0.0				-0.0	65.5	2334.4	319.4	
SLE	Freq						4558.0				0.0				-0.0	59.8	2128.3	291.2	
SLE	Q.P.						4411.5				0.0				-0.0	57.8	2059.8	281.8	

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.70	0.21	0.00
Quasi Permanenti	2.70	0.20	0.00

- VERIFICHE A TAGLIO Trave 101 106 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.62	0.47	26367.6	10057.8	72039.0	31821.0	∅ 10 2br. 7.5'
0.62	1.61	0.99	20933.0	13832.3	92739.8	25247.8	Tr.∅ 12 2br. 25.0'
1.61	3.64	2.03	13599.5	14445.9	92739.8	17533.2	Tr.∅ 10 2br. 25.0'
3.64	4.63	0.99	24921.4	14445.9	92739.8	25247.8	Tr.∅ 12 2br. 25.0'
4.63	5.10	0.47	30356.0	12654.6	72039.0	31821.0	∅ 10 2br. 7.5'

- VERIFICHE A TAGLIO Trave 106 111 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	19342.8	12654.6	72039.0	31821.0	∅ 10 2br. 7.5'
0.63	1.55	0.92	17106.2	13844.9	92739.8	25247.8	Tr.∅ 12 2br. 25.0'
1.55	5.35	3.80	12694.6	13787.7	92739.8	17533.2	Tr.∅ 10 2br. 25.0'
5.35	6.27	0.92	16443.4	13793.1	92739.8	25247.8	Tr.∅ 12 2br. 25.0'
6.27	6.65	0.38	18680.0	11875.5	72039.0	31821.0	∅ 10 2br. 7.5'

- VERIFICHE A TAGLIO Trave 111 116 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	15976.9	11875.5	72039.0	20365.5	∅ 8 2br. 7.5'
0.59	4.86	4.27	13957.0	11875.5	92739.8	17533.2	Tr.∅ 10 2br. 25.0'
4.86	5.20	0.34	13700.2	10057.8	72039.0	20365.5	∅ 8 2br. 7.5'

- Travata: 102 Travata 121 167

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bt}	σ _{fE}	σ _{fi}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 102 /1 Sez. 1 70x34 70x34 [cm] L_{asse}4.00 L_{netta}3.60 q_{medio}4058.1 [kg/m] (VALORE CARATTERISTICO)																			
121	SLU	0.25	15.21	0.00	7.63			9423.2	16581.5	0.57	0.29	-4023.7	6113.0	0.66	0.19				
SLE	Rare							3457.6				0.0				-0.0	35.3	877.9	40.3
SLE	Freq							3130.7				0.0				-0.0	31.9	794.9	36.5
SLE	Q.P.							3021.5				0.0				-0.0	30.8	767.1	35.2
CAM	SLU	2.05	7.63	0.00	21.24	5806.6	-5806.6	0.0	8642.9	0.00	0.15	-6114.9	20310.7	0.30	0.23				
SLE	Rare					4058.1	-4058.1	0.0				-4273.5				36.4	-0.0	320.3	811.3
SLE	Freq					3676.9	-3676.9	0.0				-3873.7				33.0	-0.0	290.3	735.4
SLE	Q.P.					3549.9	-3549.9	0.0				-3740.5				31.9	-0.0	280.3	710.1
167	SLU	3.85	15.21	0.00	7.63			7705.9	16581.5	0.46	0.29	-4106.8	6113.0	0.67	0.19				
SLE	Rare							2364.0				0.0				-0.0	24.1	600.2	27.6
SLE	Freq							2139.7				0.0				-0.0	21.8	543.2	24.9
SLE	Q.P.							2065.3				0.0				-0.0	21.1	524.4	24.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.03	0.06	0.00
Quasi Permanenti	2.03	0.06	0.00

- VERIFICHE A TAGLIO Trave 121 167 Sez. 1 70x34 70x34 [cm] L_{asse} 4.00 L_{netta} 3.60 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	V _{Sd} [kg]	V _{Rd,c} [kg]	V _{Rd,max} [kg]	V _{Rd,s} [kg]	Staffe
0.25	0.62	0.37	12516.3	10057.8	72039.0	31821.0	∅ 10 2br. 7.5'
0.62	3.48	2.85	11540.8	12280.5	92739.8	34365.1	Tr.∅ 14 2br. 25.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.48	3.85	0.37	12871.3	10057.8	72039.0	31821.0	ø 10 2br. 7.5'
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- Travata: 102 Travata 1122 101 102 103 104 105

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 102 /1 Sez. 2 30x34 30x34 [cm] L_{asse}4.13 L_{netta}3.77 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
1122	SLU	0.10	9.42	0.00	7.63		4813.8	9417.2	0.51	0.35	-2681.5	5581.2	0.48	0.22				
SLE	Rare						1111.0				0.0				-0.0	22.6	466.8	21.5
SLE	Freq						1088.7				0.0				-0.0	22.1	457.4	21.1
SLE	Q.P.						1082.3				0.0				-0.0	22.0	454.7	21.0
CAM	SLU	1.99	4.02	0.00	7.63	1796.7	-1910.7	0.0	4379.2	0.00	0.13	-1902.3	7736.3	0.25	0.18			
SLE	Rare					1231.8	-1310.0	0.0				-1304.2			25.0	-0.0	232.9	654.7
SLE	Freq					1231.8	-1310.0	0.0				-1304.2			25.0	-0.0	232.9	654.7
SLE	Q.P.					1231.8	-1310.0	0.0				-1304.2			25.0	-0.0	232.9	654.7
101	SLU	3.88	7.63	0.00	7.63		5272.2	8156.5	0.65	0.33	-2758.2	5590.2	0.49	0.22				
SLE	Rare						1271.9				0.0				-0.0	27.9	643.9	1.2
SLE	Freq						1282.5				0.0				-0.0	28.1	649.3	1.2
SLE	Q.P.						1283.2				0.0				-0.0	28.1	649.6	1.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione		Intradosso		Estradosso	
	[m]		mm		mm	
Frequenti	2.04		0.04		0.00	
Quasi Permanenti	2.04		0.04		0.00	

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	Mre	[kgm]	[kgm]	Mri	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 102 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
101	SLU	0.25	7.63	0.00	7.63			5749.0	8156.5	0.70	0.33	-3359.3	5590.2	0.60	0.22			
SLE	Rare							1193.1				0.0			-0.0	26.2	604.0	1.1
SLE	Freq							1194.6				0.0			-0.0	26.2	604.8	1.1
SLE	Q.P.							1194.8				0.0			-0.0	26.2	604.9	1.1
CAM	SLU	2.03	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18			
SLE	Rare					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
102	SLU	3.80	7.63	0.00	7.63			5759.1	8156.5	0.71	0.33	-3289.9	5590.2	0.59	0.22			
SLE	Rare							1235.7				0.0			-0.0	27.1	625.6	1.2
SLE	Freq							1234.8				0.0			-0.0	27.1	625.1	1.2
SLE	Q.P.							1234.6				0.0			-0.0	27.1	625.0	1.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]				Intradosso mm				Estradosso mm								
Frequenti		2.03				0.04				0.00								
Quasi Permanenti		2.03				0.04				0.00								
Nodo	x [m]	A _{fe} [cm ²]	A _{feI} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} M _{re}	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} M _{ri}	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 102 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
102	SLU	0.25	7.63	0.00	7.63			5717.6	8156.5	0.70	0.33	-3334.7	5590.2	0.60	0.22			
SLE	Rare							1193.4				0.0			-0.0	26.2	604.2	1.1
SLE	Freq							1192.1				0.0			-0.0	26.1	603.5	1.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.							1191.5				0.0				-0.0	26.1	603.2	1.1
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
103	SLU	3.80	7.63	0.00	7.63			5747.7	8156.5	0.70	0.33	-3309.6	5590.2	0.59	0.22				
SLE	Rare							1219.0				0.0				-0.0	26.7	617.1	1.1
SLE	Freq							1219.3				0.0				-0.0	26.7	617.3	1.1
SLE	Q.P.							1219.1				0.0				-0.0	26.7	617.2	1.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.02		0.04		0.00													
Quasi Permanenti		2.02		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 102 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
103	SLU	0.25	7.63	0.00	7.63		5536.3	8156.5	0.68	0.33	-3462.0	5590.2	0.62	0.22					
SLE	Rare						1027.4				0.0				-0.0	22.5	520.1	1.0	
SLE	Freq						1036.8				0.0				-0.0	22.7	524.9	1.0	
SLE	Q.P.						1037.1				0.0				-0.0	22.7	525.1	1.0	
CAM	SLU	2.03	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

104	SLU	3.80	7.63	0.00	7.63			5979.9	8156.5	0.73	0.33	-2895.3	5590.2	0.52	0.22				
SLE	Rare							1600.8				0.0				-0.0	35.1	810.4	1.5
SLE	Freq							1556.6				0.0				-0.0	34.1	788.0	1.5
SLE	Q.P.							1542.3				0.0				-0.0	33.8	780.8	1.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.03		0.04		0.00													
Quasi Permanenti		2.03		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 102 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}3094.3 [kg/m] (VALORE CARATTERISTICO)																			
104	SLU	0.25	7.63	0.00	7.63			6859.3	8156.5	0.84	0.33	-2461.2	5590.2	0.44	0.22				
SLE	Rare							2641.6				0.0				-0.0	57.9	1337.3	2.5
SLE	Freq							2489.6				0.0				-0.0	54.6	1260.4	2.3
SLE	Q.P.							2438.1				0.0				-0.0	53.4	1234.3	2.3
CAM	SLU	2.00	4.02	0.00	7.63	4483.4	-4483.4	0.0	4379.2	0.00	0.13	-4483.4	7736.3	0.58	0.18				
SLE	Rare					3094.3	-3094.3	0.0				-3094.3				59.2	-0.0	552.6	1553.3
SLE	Freq					2903.7	-2903.7	0.0				-2903.7				55.6	-0.0	518.6	1457.6
SLE	Q.P.					2840.1	-2840.1	0.0				-2840.1				54.4	-0.0	507.2	1425.7
105	SLU	3.75	7.63	0.00	7.63			7128.8	8156.5	0.87	0.33	-2534.2	5590.2	0.45	0.22				
SLE	Rare							2772.0				0.0				-0.0	60.8	1403.4	2.6
SLE	Freq							2598.6				0.0				-0.0	57.0	1315.5	2.4
SLE	Q.P.							2542.5				0.0				-0.0	55.7	1287.1	2.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.00	0.11	0.00
Quasi Permanenti	2.00	0.11	0.00

- VERIFICHE A TAGLIO Trave 1122 101 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.47	0.37	6392.9	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.47	3.50	3.03	5931.5	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.50	3.88	0.37	5871.8	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 101 102 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.43	2.80	5598.4	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 102 103 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5590.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 103 104 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.63	3.42	2.79	5590.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 104 105 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	8897.9	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.37	2.75	7832.8	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.37	3.75	0.37	8897.9	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 105 Travata 104 121 109 114 119

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 105 /1 Sez. 1 70x34 70x34 [cm] Lasse 2.67 Lnetta 2.27 q_{medio} 6915.1 [kg/m] (VALORE CARATTERISTICO)																		
104	SLU	0.15	7.63	0.00	9.42		6274.6	10850.2	0.58	0.23	-5949.0	7291.8	0.82	0.18				
SLE	Rare						322.9				-115.9				2.0	4.3	149.4	63.0
SLE	Freq						256.2				-101.2				1.7	3.4	118.5	55.0
SLE	Q.P.						231.2				-97.6				1.7	3.1	106.9	53.0
CAM	SLU	1.29	7.63	0.00	8.27	9913.1	-4433.4	2.9	8628.7	0.00	0.12	-4418.3	8630.6	0.51	0.13			
SLE	Rare					6915.1	-3092.6	0.0				-3082.1			35.6	-0.0	238.4	1456.7
SLE	Freq					5901.1	-2639.1	0.0				-2630.1			30.4	-0.0	203.4	1243.1
SLE	Q.P.					5563.1	-2488.0	0.0				-2479.5			28.7	-0.0	191.8	1171.9
121	SLU	2.42	10.18	0.00	7.63		8541.3	12703.0	0.67	0.24	-1816.3	6097.9	0.30	0.17				
SLE	Rare						4366.1				0.0				-0.0	50.8	1577.3	156.6
SLE	Freq						3810.5				0.0				-0.0	44.3	1376.6	136.7
SLE	Q.P.						3638.5				0.0				-0.0	42.3	1314.4	130.5

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]						Intradosso mm				Estradosso mm			
Frequenti						1.19						0.13				0.00			
Quasi Permanenti						1.19						0.12				0.00			
Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 105 /2 Sez. 1 70x34 70x34 [cm] L_{asse}2.68 L_{netta}2.18 q_{medio}6915.1 [kg/m] (VALORE CARATTERISTICO)																			
121	SLU	0.25	10.18	0.00	7.63		9647.3	12703.0	0.76	0.24	-3064.3	6097.9	0.50	0.17					
SLE	Rare						3997.6				0.0				-0.0	46.5	1444.1	143.4	
SLE	Freq						3458.1				0.0				-0.0	40.2	1249.3	124.0	
SLE	Q.P.						3293.6				0.0				-0.0	38.3	1189.8	118.1	
CAM	SLU	1.34	7.84	0.00	7.83	9913.1	-4433.4	2008.4	8691.8	0.23	0.12	-4433.4	8334.7	0.53	0.13				
SLE	Rare					6915.1	-3092.6	0.0			-3092.6				35.8	-0.0	234.7	1498.9	
SLE	Freq					5901.1	-2639.1	0.0			-2639.1				30.6	-0.0	200.3	1279.1	
SLE	Q.P.					5563.1	-2488.0	0.0			-2488.0				28.8	-0.0	188.8	1205.8	
109	SLU	2.43	18.10	0.00	11.40		11336.0	18955.8	0.60	0.32	-6785.2	8609.0	0.79	0.20					
SLE	Rare						2708.2				0.0				-0.0	25.8	584.2	4.6	
SLE	Freq						2388.8				0.0				-0.0	22.8	515.3	4.1	
SLE	Q.P.						2275.4				0.0				-0.0	21.7	490.8	3.9	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]						Intradosso mm				Estradosso mm			
Frequenti						1.45						0.14				0.00			
Quasi Permanenti						1.45						0.13				0.00			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 105 /3 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4257.6 [kg/m] (VALORE CARATTERISTICO)																		
109	SLU	0.25	18.10	0.00	11.40		18114.9	18955.8	0.96	0.32	0.0	8609.0	0.00	0.20				
SLE	Rare						13153.2				0.0				-0.0	125.4	2837.1	22.5
SLE	Freq						12009.5				0.0				-0.0	114.5	2590.4	20.6
SLE	Q.P.						11627.5				0.0				-0.0	110.8	2508.0	19.9
CAM	SLU	3.45	7.63	0.00	19.01	5856.8	-17427.8	0.0	8549.0	0.00	0.14	-17427.8	18831.8	0.93	0.20			
SLE	Rare					4257.6	-12669.0	0.0				-12669.0			107.2	-0.0	977.6	2607.6
SLE	Freq					3895.3	-11591.0	0.0				-11591.0			98.1	-0.0	894.4	2385.8
SLE	Q.P.					3774.6	-11231.7	0.0				-11231.7			95.1	-0.0	866.7	2311.8
114	SLU	6.65	22.62	0.00	11.40		19437.4	22227.2	0.87	0.35	0.0	8608.8	0.00	0.20				
SLE	Rare						14136.3				0.0				-0.0	124.4	2488.3	109.4
SLE	Freq						12945.6				0.0				-0.0	113.9	2278.7	100.2
SLE	Q.P.						12549.4				0.0				-0.0	110.4	2209.0	97.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso												
		[m]		mm		mm												
Frequenti		3.45		0.24		0.00												
Quasi Permanenti		3.45		0.23		0.00												
Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 105 /4 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4257.6 [kg/m] (VALORE CARATTERISTICO)																		
114	SLU	0.25	22.62	0.00	11.40		15244.1	22227.2	0.69	0.35	0.0	8608.8	0.00	0.20				
SLE	Rare						10153.6				0.0				-0.0	89.3	1787.3	78.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							9300.3				0.0				-0.0	81.8	1637.1	72.0
SLE	Q.P.							9015.6				0.0				-0.0	79.3	1587.0	69.8
CAM	SLU	2.72	7.63	0.00	11.37	5856.8	-10477.4	0.0	8477.1	0.00	0.13	-10459.5	11751.3	0.89	0.15				
SLE	Rare					4257.6	-7616.4	0.0				-7603.5				76.1	-0.0	593.3	2550.8
SLE	Freq					3895.3	-6968.4	0.0				-6956.5				69.7	-0.0	542.8	2333.7
SLE	Q.P.					3774.6	-6752.4	0.0				-6740.9				67.5	-0.0	526.0	2261.4
119	SLU	5.20	9.42	0.00	7.63			9767.4	11991.6	0.81	0.23	-2470.8	6109.6	0.40	0.17				
SLE	Rare							4808.9				0.0				-0.0	58.0	1867.4	208.0
SLE	Freq							4390.4				0.0				-0.0	53.0	1704.9	189.9
SLE	Q.P.							4251.5				0.0				-0.0	51.3	1651.0	183.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.70	0.24	0.00
Quasi Permanenti	2.70	0.23	0.00

- VERIFICHE A TAGLIO Trave 104 121 Sez. 1 70x34 70x34 [cm] Lasse 2.67 Lnetta 2.27 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.50	0.35	14055.9	10789.6	72039.0	20365.5	ø 8 2br. 7.5'
0.50	2.07	1.57	12883.4	10057.8	92739.8	17533.2	Tr.ø 10 2br. 25.0'
2.07	2.42	0.35	14838.8	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 121 109 Sez. 1 70x34 70x34 [cm] Lasse 2.68 Lnetta 2.18 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	15848.5	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.62	2.05	1.43	15507.0	10057.8	92739.8	17533.2	Tr.ø 10 2br. 25.0'
2.05	2.43	0.37	17568.8	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 109 114 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	18538.7	11497.5	72039.0	20365.5	ø 8 2br. 7.5'
0.63	6.27	5.65	16741.0	13631.7	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	18945.9	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 114 119 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	15830.2	11497.5	72039.0	20365.5	ø 8 2br. 7.5'
0.59	4.86	4.27	13858.6	11486.9	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	13692.5	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- Travata: 113 Travata 105 167 110 115 120

Nodo	x [m]	Afe [cm ²]	Afe _r [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 113 /1 Sez. 1 70x34 70x34 [cm] Lasse 2.67 Lnetta 2.27 q_{medio} 3118.2 [kg/m] (VALORE CARATTERISTICO)																		
105	SLU	0.15	7.63	0.00	10.18		7436.4	10980.9	0.68	0.24	-6982.4	7846.3	0.89	0.19				
SLE	Rare						290.6				-19.6				0.3	3.8	134.3	17.7
SLE	Freq						244.3				-19.1				0.3	3.2	112.9	14.9
SLE	Q.P.						227.0				-18.7				0.3	3.0	104.9	13.8
CAM	SLU	1.29	7.63	0.00	10.18	4450.7	-1990.5	1496.2	8455.2	0.18	0.12	-3345.0	10635.6	0.31	0.14			
SLE	Rare					3118.2	-1394.5	0.0			-1389.8				14.5	-0.0	107.9	516.2
SLE	Freq					2833.2	-1267.1	0.0			-1262.8				13.1	-0.0	98.0	469.1
SLE	Q.P.					2738.2	-1224.6	0.0			-1220.4				12.7	-0.0	94.7	453.3
167	SLU	2.42	7.63	0.00	7.63		6295.6	10392.5	0.61	0.21	-2728.8	6091.1	0.45	0.17				
SLE	Rare						1980.9				0.0				-0.0	26.0	924.9	126.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							1827.5				0.0				-0.0	24.0	853.3	116.7
SLE	Q.P.							1783.4				0.0				-0.0	23.4	832.7	113.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		1.31		0.04		0.00													
Quasi Permanenti		1.31		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 113 /2 Sez. 1 70x34 70x34 [cm] L_{asse}2.68 L_{netta}2.18 q_{medio}3118.2 [kg/m] (VALORE CARATTERISTICO)																			
167	SLU	0.25	7.63	0.00	7.63		7590.9	10392.5	0.73	0.21	-4090.6	6091.1	0.67	0.17					
SLE	Rare						1969.5				0.0				-0.0	25.8	919.6	125.8	
SLE	Freq						1799.4				0.0				-0.0	23.6	840.2	114.9	
SLE	Q.P.						1750.2				0.0				-0.0	22.9	817.2	111.8	
CAM	SLU	1.34	7.63	0.00	10.18	4450.7	-1990.5	3418.8	8455.2	0.40	0.12	-4117.4	10635.6	0.39	0.14				
SLE	Rare					3118.2	-1394.5	0.0			-1394.5				14.5	-0.0	108.3	518.0	
SLE	Freq					2833.2	-1267.1	0.0			-1267.1				13.2	-0.0	98.4	470.7	
SLE	Q.P.					2738.2	-1224.6	0.0			-1224.6				12.7	-0.0	95.1	454.9	
110	SLU	2.43	10.18	0.00	12.57		11445.1	13306.0	0.86	0.28	-9255.9	9434.8	0.98	0.20					
SLE	Rare						1244.4				0.0				-0.0	14.7	444.1	43.1	
SLE	Freq						1134.6				0.0				-0.0	13.4	404.9	39.3	
SLE	Q.P.						1094.6				0.0				-0.0	12.9	390.6	37.9	

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		1.34		0.04		0.00												
Quasi Permanenti		1.34		0.04		0.00												
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 113 /3 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
110	SLU	0.25	10.18	0.00	12.57		12733.8	13306.0	0.96	0.28	-1030.3	9434.8	0.11	0.20				
SLE	Rare						7056.8				0.0				-0.0	83.1	2518.3	244.2
SLE	Freq						6491.1				0.0				-0.0	76.4	2316.4	224.6
SLE	Q.P.						6302.0				0.0				-0.0	74.2	2249.0	218.1
CAM	SLU	3.45	7.63	0.00	10.18	3128.2	-9308.2	0.0	8455.2	0.00	0.12	-9308.2	10635.6	0.88	0.14			
SLE	Rare					2283.2	-6793.9	0.0				-6793.9			70.7	-0.0	527.4	2523.6
SLE	Freq					2103.2	-6258.3	0.0				-6258.3			65.1	-0.0	485.9	2324.6
SLE	Q.P.					2043.2	-6079.8	0.0				-6079.8			63.2	-0.0	472.0	2258.3
115	SLU	6.65	12.57	0.00	7.63		13419.7	14664.8	0.92	0.27	-835.1	6116.6	0.14	0.18				
SLE	Rare						7551.8				0.0				-0.0	81.3	2261.8	152.2
SLE	Freq						6963.6				0.0				-0.0	74.9	2085.6	140.4
SLE	Q.P.						6767.9				0.0				-0.0	72.8	2027.0	136.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm	
Frequenti		3.45		0.23		0.00	
Quasi Permanenti		3.45		0.22		0.00	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 113 /4 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
115	SLU	0.25	12.57	0.00	7.63		12454.0	14664.8	0.85	0.27	-3078.2	6116.6	0.50	0.18				
SLE	Rare						5547.6				0.0				-0.0	59.7	1661.5	111.8
SLE	Freq						5109.6				0.0				-0.0	55.0	1530.4	103.0
SLE	Q.P.						4963.6				0.0				-0.0	53.4	1486.6	100.0
CAM	SLU	2.72	7.63	0.00	10.18	3128.2	-5596.0	0.0	8455.2	0.00	0.12	-5586.5	10635.6	0.53	0.14			
SLE	Rare					2283.2	-4084.4	0.0				-4077.5			42.4	-0.0	316.5	1514.6
SLE	Freq					2103.2	-3762.4	0.0				-3756.0			39.1	-0.0	291.6	1395.2
SLE	Q.P.					2043.2	-3655.1	0.0				-3648.9			38.0	-0.0	283.3	1355.4
120	SLU	5.20	7.63	0.00	7.63		8813.0	10392.5	0.85	0.21	-4754.1	6091.1	0.78	0.17				
SLE	Rare						2441.9				0.0				-0.0	32.0	1140.2	156.0
SLE	Freq						2250.4				0.0				-0.0	29.5	1050.8	143.8
SLE	Q.P.						2186.8				0.0				-0.0	28.7	1021.0	139.7

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.70	0.13	0.00
Quasi Permanenti	2.70	0.13	0.00

- VERIFICHE A TAGLIO Trave 105 167 Sez. 1 70x34 70x34 [cm] L_{asse} 2.67 L_{netta} 2.27 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.52	0.37	10755.8	11070.0	72039.0	20365.5	ø 8 2br. 7.5'
0.52	2.05	1.53	9978.9	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

2.05	2.42	0.37	10994.8	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
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- VERIFICHE A TAGLIO Trave 167 110 Sez. 1 70x34 70x34 [cm] Lasse 2.68 Lnetta 2.18 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	12093.8	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.62	2.05	1.43	11078.9	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
2.05	2.43	0.37	11896.0	11875.5	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 110 115 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	9909.4	11875.5	72039.0	20365.5	ø 8 2br. 7.5'
0.63	6.27	5.65	9534.6	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	10319.8	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 115 120 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	9147.9	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.59	4.86	4.27	8453.2	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	8494.2	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- Travata: 123 Travata 109 110

Nodo	x [m]	Afe [cm ²]	AfeI [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 123 /1 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 q_{medio} 2117.5 [kg/m] (VALORE CARATTERISTICO)																		
109	SLU	0.25	7.63	0.00	5.09		5348.4	8095.9	0.66	0.32	-2645.1	3859.6	0.69	0.19				
SLE	Rare						1635.7				0.0				-0.0	35.9	828.0	1.6
SLE	Freq						1491.5				0.0				-0.0	32.7	755.0	1.5
SLE	Q.P.						1442.3				0.0				-0.0	31.6	730.1	1.4
CAM	SLU	2.00	4.02	0.00	7.63	3018.2	-3018.2	0.0	4379.2	0.00	0.13	-3018.2	7736.3	0.39	0.18			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Rare					2117.5	-2117.5	0.0				-2117.5				40.5	-0.0	378.2	1063.0
SLE	Freq					1926.9	-1926.9	0.0				-1926.9				36.9	-0.0	344.1	967.3
SLE	Q.P.					1863.3	-1863.3	0.0				-1863.3				35.7	-0.0	332.8	935.4
110	SLU	3.75	7.63	0.00	5.09			5756.1	8095.9	0.71	0.32	-2264.8	3859.6	0.59	0.19				
SLE	Rare							2119.4				0.0				-0.0	46.5	1072.8	2.1
SLE	Freq							1924.0				0.0				-0.0	42.2	973.9	1.9
SLE	Q.P.							1861.0				0.0				-0.0	40.8	942.0	1.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.00	0.07	0.00
Quasi Permanenti	2.00	0.06	0.00

- VERIFICHE A TAGLIO Trave 109 110 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	6676.7	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.41	2.82	6043.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.41	3.75	0.34	6676.7	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 7 Travata 1114 116 117 118 119 120

Nodo	x [m]	Afe [cm ²]	Afe _l [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 7 /1 Sez. 2 30x34 30x34 [cm] L_{asse}4.13 L_{netta}3.77 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
1114	SLU	0.10	9.42	0.00	7.63		2425.2	9417.2	0.26	0.35	-501.6	5581.2	0.09	0.22				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Rare							1153.3				0.0				-0.0	23.5	484.5	22.4
SLE	Freq							1137.9				0.0				-0.0	23.1	478.1	22.1
SLE	Q.P.							1134.1				0.0				-0.0	23.1	476.5	22.0
CAM	SLU	1.99	4.02	0.00	7.63	1796.7	-1910.7	357.1	4379.2	0.08	0.13	-2436.7	7736.3	0.31	0.18				
SLE	Rare					1231.8	-1310.0	0.0				-1304.2				25.0	-0.0	232.9	654.7
SLE	Freq					1231.8	-1310.0	0.0				-1304.2				25.0	-0.0	232.9	654.7
SLE	Q.P.					1231.8	-1310.0	0.0				-1304.2				25.0	-0.0	232.9	654.7
116	SLU	3.88	7.63	0.00	7.63			3523.7	8156.5	0.43	0.33	-1448.0	5590.2	0.26	0.22				
SLE	Rare							1209.0				0.0				-0.0	26.5	612.0	1.1
SLE	Freq							1217.6				0.0				-0.0	26.7	616.4	1.1
SLE	Q.P.							1218.7				0.0				-0.0	26.7	617.0	1.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.04		0.04		0.00													
Quasi Permanenti		2.04		0.04		0.00													
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 7 / 2 Sez. 2 30x34 30x34 [cm] L_{asse} 4.05 L_{netta} 3.55 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																			
116	SLU	0.25	7.63	0.00	7.63		2878.0	8156.5	0.35	0.33	-788.5	5590.2	0.14	0.22					
SLE	Rare						1163.1				0.0				-0.0	25.5	588.8	1.1	
SLE	Freq						1166.1				0.0				-0.0	25.6	590.3	1.1	
SLE	Q.P.						1166.3				0.0				-0.0	25.6	590.5	1.1	
CAM	SLU	2.03	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
117	SLU	3.80	7.63	0.00	7.63			2961.0	8156.5	0.36	0.33	-698.7	5590.2	0.12	0.22				
SLE	Rare							1265.8				0.0				-0.0	27.7	640.8	1.2
SLE	Freq							1259.8				0.0				-0.0	27.6	637.8	1.2
SLE	Q.P.							1258.1				0.0				-0.0	27.6	636.9	1.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm				
Frequenti						2.03					0.04				0.00				
Quasi Permanenti						2.03					0.04				0.00				
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 7 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
117	SLU	0.25	7.63	0.00	7.63		2861.2	8156.5	0.35	0.33	-785.5	5590.2	0.14	0.22					
SLE	Rare						1156.7				0.0				-0.0	25.4	585.6	1.1	
SLE	Freq						1159.2				0.0				-0.0	25.4	586.9	1.1	
SLE	Q.P.						1159.4				0.0				-0.0	25.4	587.0	1.1	
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	
SLE	Freq					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	
118	SLU	3.80	7.63	0.00	7.63		2964.2	8156.5	0.36	0.33	-694.9	5590.2	0.12	0.22					
SLE	Rare						1269.8				0.0				-0.0	27.8	642.8	1.2	
SLE	Freq						1263.8				0.0				-0.0	27.7	639.8	1.2	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.						1262.2				0.0				-0.0	27.7	639.0	1.2
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- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		2.02		0.04		0.00												
Quasi Permanenti		2.02		0.04		0.00												
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 7 / 4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
118	SLU	0.25	7.63	0.00	7.63		2861.6	8156.5	0.35	0.33	-792.3	5590.2	0.14	0.22				
SLE	Rare						1153.0				0.0				-0.0	25.3	583.7	1.1
SLE	Freq						1155.7				0.0				-0.0	25.3	585.1	1.1
SLE	Q.P.						1156.0				0.0				-0.0	25.3	585.2	1.1
CAM	SLU	2.03	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18			
SLE	Rare					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
119	SLU	3.80	7.63	0.00	7.63		2965.3	8156.5	0.36	0.33	-702.5	5590.2	0.13	0.22				
SLE	Rare						1265.9				0.0				-0.0	27.7	640.9	1.2
SLE	Freq						1260.2				0.0				-0.0	27.6	638.0	1.2
SLE	Q.P.						1258.7				0.0				-0.0	27.6	637.2	1.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.03		0.04		0.00													
Quasi Permanenti		2.03		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 7 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
119	SLU	0.25	7.63	0.00	7.63			2680.8	8156.5	0.33	0.33	-919.4	5590.2	0.16	0.22				
SLE	Rare							979.7				0.0			-0.0	21.5	496.0	0.9	
SLE	Freq							989.7				0.0			-0.0	21.7	501.0	0.9	
SLE	Q.P.							990.7				0.0			-0.0	21.7	501.6	0.9	
CAM	SLU	2.00	4.02	0.00	7.63	1796.7	-1796.7	0.0	4379.2	0.00	0.13	-1796.7	7736.3	0.23	0.18				
SLE	Rare					1231.8	-1231.8	0.0				-1231.8			23.6	-0.0	220.0	618.4	
SLE	Freq					1231.8	-1231.8	0.0				-1231.8			23.6	-0.0	220.0	618.4	
SLE	Q.P.					1231.8	-1231.8	0.0				-1231.8			23.6	-0.0	220.0	618.4	
120	SLU	3.75	7.63	0.00	7.63			3036.0	8156.5	0.37	0.33	-740.6	5590.2	0.13	0.22				
SLE	Rare							1303.7				0.0			-0.0	28.6	660.0	1.2	
SLE	Freq							1280.5				0.0			-0.0	28.1	648.3	1.2	
SLE	Q.P.							1274.5				0.0			-0.0	27.9	645.2	1.2	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm	
Frequenti		2.00		0.04		0.00	
Quasi Permanenti		2.00		0.04		0.00	

- VERIFICHE A TAGLIO Trave 1114 116 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.50	0.40	6392.9	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.50	3.47	2.97	5895.1	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.47	3.88	0.40	5871.8	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 116 117 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.43	2.80	5598.4	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 117 118 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5590.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 118 119 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5590.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6058.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 119 120 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	6083.3	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.37	2.75	5621.3	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.37	3.75	0.37	6083.3	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 205 Travata 205 210 215 220

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 305 310 315 320
- 405 410 415 420

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 205 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
205	SLU	0.15	11.40	0.00	11.40		12158.5	14118.4	0.86	0.28	-6900.1	8605.7	0.80	0.20				
SLE	Rare						3028.6				0.0				-0.0	34.4	984.8	87.7
SLE	Freq						2767.9				0.0				-0.0	31.4	900.0	80.1
SLE	Q.P.						2681.8				0.0				-0.0	30.4	872.0	77.7
CAM	SLU	2.63	7.63	0.00	10.18	3128.2	-5596.0	0.0	8455.2	0.00	0.12	-5586.5	10635.6	0.53	0.14			
SLE	Rare					2283.2	-4084.4	0.0				-4077.5			42.4	-0.0	316.5	1514.6
SLE	Freq					2103.2	-3762.4	0.0				-3756.0			39.1	-0.0	291.6	1395.2
SLE	Q.P.					2043.2	-3655.1	0.0				-3648.9			38.0	-0.0	283.3	1355.4
210	SLU	5.10	15.21	0.00	9.42		15151.7	16767.3	0.90	0.29	-6392.4	7315.1	0.87	0.19				
SLE	Rare						5055.2				0.0				-0.0	51.0	1274.4	47.9
SLE	Freq						4674.2				0.0				-0.0	47.2	1178.4	44.3
SLE	Q.P.						4547.1				0.0				-0.0	45.9	1146.4	43.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.65	0.13	0.00
Quasi Permanenti	2.65	0.13	0.00

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 205 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
210	SLU	0.25	15.21	0.00	9.42		16721.6	16767.3	1.00	0.29	-3654.1	7315.1	0.50	0.19				
SLE	Rare						7791.4				0.0				-0.0	78.6	1964.3	73.8
SLE	Freq						7173.1				0.0				-0.0	72.4	1808.4	67.9
SLE	Q.P.						6966.6				0.0				-0.0	70.3	1756.3	66.0
CAM	SLU	3.45	7.63	0.00	10.18	3128.2	-9308.2	0.0	8455.2	0.00	0.12	-9308.2	10635.6	0.88	0.14			
SLE	Rare					2283.2	-6793.9	0.0				-6793.9			70.7	-0.0	527.4	2523.6
SLE	Freq					2103.2	-6258.3	0.0				-6258.3			65.1	-0.0	485.9	2324.6
SLE	Q.P.					2043.2	-6079.8	0.0				-6079.8			63.2	-0.0	472.0	2258.3
215	SLU	6.65	15.21	0.00	9.42		16260.5	16767.3	0.97	0.29	-4098.3	7315.1	0.56	0.19				
SLE	Rare						7179.6				0.0				-0.0	72.5	1810.0	68.0
SLE	Freq						6618.5				0.0				-0.0	66.8	1668.6	62.7
SLE	Q.P.						6431.5				0.0				-0.0	64.9	1621.4	60.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
		[m]		mm		mm	
Frequenti		3.45		0.23		0.00	
Quasi Permanenti		3.45		0.22		0.00	

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 205 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
215	SLU	0.25	15.21	0.00	9.42		15695.9	16767.3	0.94	0.29	-5912.9	7315.1	0.81	0.19				
SLE	Rare						5620.2				0.0				-0.0	56.7	1416.9	53.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							5191.7				0.0				-0.0	52.4	1308.9	49.2
SLE	Q.P.							5047.9				0.0				-0.0	50.9	1272.6	47.8
CAM	SLU	2.72	7.63	0.00	10.18	3128.2	-5596.0	0.0	8455.2	0.00	0.12	-5586.5	10635.6	0.53	0.14				
SLE	Rare					2283.2	-4084.4	0.0				-4077.5				42.4	-0.0	316.5	1514.6
SLE	Freq					2103.2	-3762.4	0.0				-3756.0				39.1	-0.0	291.6	1395.2
SLE	Q.P.					2043.2	-3655.1	0.0				-3648.9				38.0	-0.0	283.3	1355.4
220	SLU	5.20	11.40	0.00	11.40			11647.2	14118.4	0.82	0.28	-7372.7	8605.7	0.86	0.20				
SLE	Rare							2502.5				0.0				-0.0	28.4	813.7	72.5
SLE	Freq							2300.2				0.0				-0.0	26.1	747.9	66.6
SLE	Q.P.							2233.1				0.0				-0.0	25.3	726.1	64.7

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.70	0.13	0.00
Quasi Permanenti	2.70	0.13	0.00

- VERIFICHE A TAGLIO Trave 205 210 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	9489.1	11497.5	72039.0	20365.5	ø 8 2br. 7.5'
0.49	4.76	4.27	9385.9	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	10080.6	10789.6	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 210 215 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	10325.9	10789.6	72039.0	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.63	6.27	5.65	9531.9	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	10301.1	10789.6	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 215 220 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	10080.6	10789.6	72039.0	20365.5	ø 8 2br. 7.5'
0.59	4.86	4.27	9385.9	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	9489.1	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

- Travata: 222 Travata 1222 201 202 203 204 205

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1322 301 302 303 304 305
- 1422 401 402 403 404 405

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 222 /1 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 q_{medio} 1227.0 [kg/m] (VALORE CARATTERISTICO)																		
1222	SLU	0.10	11.40	0.00	11.40		8085.7	10815.6	0.75	0.39	-5372.7	8008.9	0.67	0.26				
SLE	Rare						1505.4				0.0				-0.0	28.6	535.8	41.0
SLE	Freq						1459.0				0.0				-0.0	27.7	519.3	39.7
SLE	Q.P.						1448.5				0.0				-0.0	27.5	515.5	39.5
CAM	SLU	1.99	5.09	0.00	7.63	1789.5	-1903.1	163.7	5395.7	0.03	0.14	-2264.2	7730.3	0.29	0.18			
SLE	Rare					1227.0	-1304.9	0.0			-1299.1				24.2	-0.0	219.5	651.9
SLE	Freq					1227.0	-1304.9	0.0			-1299.1				24.2	-0.0	219.5	651.9
SLE	Q.P.					1227.0	-1304.9	0.0			-1299.1				24.2	-0.0	219.5	651.9
201	SLU	3.88	11.40	0.00	11.40		8339.9	10815.6	0.77	0.39	-6449.3	8008.9	0.81	0.26				
SLE	Rare						1054.0				0.0				-0.0	20.0	375.1	28.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							1070.9				0.0				-0.0	20.3	381.1	29.2
SLE	Q.P.							1072.6				0.0				-0.0	20.4	381.7	29.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.04		0.04		0.00													
Quasi Permanenti		2.04		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 222 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
201	SLU	0.25	11.40	0.00	11.40		9419.1	10815.6	0.87	0.39	-7240.6	8008.9	0.90	0.26					
SLE	Rare						1133.2				0.0				-0.0	21.5	403.3	30.9	
SLE	Freq						1137.3				0.0				-0.0	21.6	404.8	31.0	
SLE	Q.P.						1137.9				0.0				-0.0	21.6	405.0	31.0	
CAM	SLU	2.03	4.02	0.00	7.63	1789.5	-1834.5	167.4	4379.2	0.04	0.13	-1834.5	7736.3	0.24	0.18				
SLE	Rare					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4	
SLE	Freq					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4	
SLE	Q.P.					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4	
202	SLU	3.80	11.40	0.00	11.40		9575.3	10815.6	0.89	0.39	-6963.9	8008.9	0.87	0.26					
SLE	Rare						1373.2				0.0				-0.0	26.1	488.7	37.4	
SLE	Freq						1356.2				0.0				-0.0	25.8	482.7	36.9	
SLE	Q.P.						1352.8				0.0				-0.0	25.7	481.5	36.9	

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		2.03		0.04		0.00												
Quasi Permanenti		2.03		0.04		0.00												
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 222 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
202	SLU	0.25	11.40	0.00	11.40		9406.2	10815.6	0.87	0.39	-7166.6	8008.9	0.89	0.26				
SLE	Rare						1150.0				0.0				-0.0	21.8	409.3	31.3
SLE	Freq						1153.0				0.0				-0.0	21.9	410.4	31.4
SLE	Q.P.						1153.5				0.0				-0.0	21.9	410.5	31.4
CAM	SLU	2.02	4.02	0.00	7.63	1789.5	-1834.5	163.7	4379.2	0.04	0.13	-1834.5	7736.3	0.24	0.18			
SLE	Rare					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4
SLE	Freq					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4
203	SLU	3.80	11.40	0.00	11.40		9572.8	10815.6	0.89	0.39	-6993.0	8008.9	0.87	0.26				
SLE	Rare						1362.4				0.0				-0.0	25.9	484.9	37.1
SLE	Freq						1345.7				0.0				-0.0	25.6	478.9	36.7
SLE	Q.P.						1342.5				0.0				-0.0	25.5	477.8	36.6

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm	
Frequenti		2.02		0.04		0.00	
Quasi Permanenti		2.02		0.04		0.00	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 222 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
203	SLU	0.25	11.40	0.00	11.40		9371.9	10815.6	0.87	0.39	-7218.9	8008.9	0.90	0.26				
SLE	Rare						1130.8				0.0				-0.0	21.5	402.5	30.8
SLE	Freq						1137.5				0.0				-0.0	21.6	404.8	31.0
SLE	Q.P.						1138.2				0.0				-0.0	21.6	405.1	31.0
CAM	SLU	2.03	4.02	0.00	7.63	1789.5	-1834.5	157.9	4379.2	0.04	0.13	-1834.5	7736.3	0.24	0.18			
SLE	Rare					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4
SLE	Freq					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0			-1257.9				24.1	-0.0	224.6	631.4
204	SLU	3.80	11.40	0.00	11.40		9603.8	10815.6	0.89	0.39	-6972.6	8008.9	0.87	0.26				
SLE	Rare						1385.6				0.0				-0.0	26.3	493.1	37.7
SLE	Freq						1359.0				0.0				-0.0	25.8	483.7	37.0
SLE	Q.P.						1352.5				0.0				-0.0	25.7	481.4	36.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
		[m]		mm		mm	
Frequenti		2.03		0.04		0.00	
Quasi Permanenti		2.03		0.04		0.00	

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 222 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
204	SLU	0.25	11.40	0.00	11.40		8923.0	10815.6	0.83	0.39	-7713.7	8008.9	0.96	0.26				
SLE	Rare						795.0				-1.5				0.0	15.1	282.9	21.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							813.2				0.0				-0.0	15.4	289.4	22.2
SLE	Q.P.							815.5				0.0				-0.0	15.5	290.2	22.2
CAM	SLU	2.00	4.02	0.00	7.63	1789.5	-1789.5	498.7	4379.2	0.11	0.13	-2012.2	7736.3	0.26	0.18				
SLE	Rare					1227.0	-1227.0	0.0				-1227.0				23.5	-0.0	219.1	615.9
SLE	Freq					1227.0	-1227.0	0.0				-1227.0				23.5	-0.0	219.1	615.9
SLE	Q.P.					1227.0	-1227.0	0.0				-1227.0				23.5	-0.0	219.1	615.9
205	SLU	3.75	11.40	0.00	11.40			10442.4	10815.6	0.97	0.39	-7133.0	8008.9	0.89	0.26				
SLE	Rare							1934.5				0.0				-0.0	36.7	688.5	52.7
SLE	Freq							1852.3				0.0				-0.0	35.2	659.2	50.5
SLE	Q.P.							1834.0				0.0				-0.0	34.8	652.7	50.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.00	0.04	0.00
Quasi Permanenti	2.00	0.04	0.00

- VERIFICHE A TAGLIO Trave 1222 201 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.47	0.37	7394.6	6535.6	30873.8	20365.5	ø 8 2br. 7.5'
0.47	3.50	3.03	6935.0	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.50	3.88	0.37	7210.6	6535.6	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 201 202 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	7480.6	6535.6	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.63	3.42	2.79	7013.9	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	7480.6	6535.6	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 202 203 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	7480.6	6535.6	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	7013.9	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	7480.6	6535.6	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 203 204 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	7480.6	6535.6	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.78	7010.0	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	7480.6	6535.6	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 204 205 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	7525.7	6535.6	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.41	2.82	7108.5	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.41	3.75	0.34	7525.7	6535.6	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 221 Travata 1373 1374

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1273 1274
- 1473 1474

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 221 /1 Sez. 2 30x34 30x34 [cm] L_{asse}2.95 L_{netta}2.95 q_{medio}255.0 [kg/m] (VALORE CARATTERISTICO)																			
1373	SLU	0.00	12.76	0.00	12.84			8467.0	11693.0	0.72	0.41	-7944.5	8809.5	0.90	0.21				
SLE	Rare							313.6				0.0				-0.0	5.8	101.7	8.4
SLE	Freq							292.8				0.0				-0.0	5.4	95.0	7.9
SLE	Q.P.							286.4				0.0				-0.0	5.3	92.9	7.7
CAM	SLU	1.47	5.09	0.00	5.09	331.5	-180.3	1067.7	5393.9	0.20	0.13	-1333.6	5287.9	0.25	0.15				
SLE	Rare					255.0	-138.7	0.0				-175.8				3.8	-0.0	30.2	130.3
SLE	Freq					255.0	-138.7	0.0				-175.9				3.8	-0.0	30.2	130.3
SLE	Q.P.					255.0	-138.7	0.0				-175.9				3.8	-0.0	30.2	130.3
1374	SLU	2.95	12.69	0.00	12.75			8148.9	11627.6	0.70	0.41	-8190.8	8726.5	0.94	0.21				
SLE	Rare							0.0				-85.1				1.9	-0.0	14.9	36.4
SLE	Freq							0.0				-65.0				1.5	-0.0	11.4	27.8
SLE	Q.P.							0.0				-58.7				1.3	-0.0	10.3	25.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	1.74	0.01	0.00
Quasi Permanenti	1.74	0.01	0.00

- VERIFICHE A TAGLIO Trave 1373 1374 Sez. 2 30x34 30x34 [cm] Lasse 2.95 Lnetta 2.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.00	0.34	0.34	7298.0	6798.5	30873.8	45822.3	∅ 12 2br. 7.5'
0.34	2.61	2.27	7217.3	4994.4	39745.6	11221.3	Tr.∅ 8 2br. 25.0'
2.61	2.95	0.34	7304.0	6782.6	30873.8	45822.3	∅ 12 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Travata: 323 Travata 1414 416 417 418 419 420

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1314 316 317 318 319 320

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 323 /1 Sez. 2 30x34 30x34 [cm] L_{asse}4.13 L_{netta}3.77 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
1414	SLU	0.10	9.42	0.00	9.42		7156.9	9447.3	0.76	0.36	-4016.2	6751.4	0.59	0.24				
SLE	Rare						1663.5				0.0				-0.0	33.8	699.4	27.8
SLE	Freq						1612.7				0.0				-0.0	32.8	678.0	26.9
SLE	Q.P.						1602.0				0.0				-0.0	32.6	673.5	26.7
CAM	SLU	1.99	5.09	0.00	7.63	1789.5	-1903.1	9.9	5395.7	0.00	0.14	-2150.3	7730.3	0.28	0.18			
SLE	Rare					1227.0	-1304.9	0.0				-1299.1			24.2	-0.0	219.5	651.9
SLE	Freq					1227.0	-1304.9	0.0				-1299.1			24.2	-0.0	219.5	651.9
SLE	Q.P.					1227.0	-1304.9	0.0				-1299.1			24.2	-0.0	219.5	651.9
416	SLU	3.88	9.42	0.00	9.42		6942.0	9447.3	0.73	0.36	-5516.2	6751.4	0.82	0.24				
SLE	Rare						750.4				0.0				-0.0	15.3	315.5	12.5
SLE	Freq						775.1				0.0				-0.0	15.8	325.9	12.9
SLE	Q.P.						778.4				0.0				-0.0	15.8	327.3	13.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.04	0.04	0.00

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Quasi Permanenti						2.04					0.04				0.00				
Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 323 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
416	SLU	0.25	9.42	0.00	9.42			7150.2	9447.3	0.76	0.36	-5245.2	6751.4	0.78	0.24				
SLE	Rare							989.6				0.0				-0.0	20.1	416.1	16.5
SLE	Freq							999.8				0.0				-0.0	20.3	420.4	16.7
SLE	Q.P.							1000.8				0.0				-0.0	20.3	420.8	16.7
CAM	SLU	2.03	4.02	0.00	7.63	1789.5	-1834.5	0.0	4379.2	0.00	0.13	-1834.5	7736.3	0.24	0.18				
SLE	Rare					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Freq					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
417	SLU	3.80	9.42	0.00	9.42			7638.9	9447.3	0.81	0.36	-4779.5	6751.4	0.71	0.24				
SLE	Rare							1462.7				0.0				-0.0	29.7	615.0	24.4
SLE	Freq							1436.5				0.0				-0.0	29.2	604.0	24.0
SLE	Q.P.							1429.7				0.0				-0.0	29.1	601.1	23.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione					Intradosso				Estradosso				
						[m]					mm				mm				
Frequenti						2.03					0.04				0.00				
Quasi Permanenti						2.03					0.04				0.00				
Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 323 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
417	SLU	0.25	9.42	0.00	9.42			7252.3	9447.3	0.77	0.36	-5267.6	6751.4	0.78	0.24				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Rare							1033.2				0.0				-0.0	21.0	434.4	17.2
SLE	Freq							1041.7				0.0				-0.0	21.2	438.0	17.4
SLE	Q.P.							1042.4				0.0				-0.0	21.2	438.3	17.4
CAM	SLU	2.02	4.02	0.00	7.63	1789.5	-1834.5	0.0	4379.2	0.00	0.13	-1834.5	7736.3	0.24	0.18				
SLE	Rare					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Freq					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
418	SLU	3.80	9.42	0.00	9.42			7693.7	9447.3	0.81	0.36	-4846.6	6751.4	0.72	0.24				
SLE	Rare							1456.9				0.0				-0.0	29.6	612.5	24.3
SLE	Freq							1430.3				0.0				-0.0	29.1	601.4	23.9
SLE	Q.P.							1423.5				0.0				-0.0	28.9	598.5	23.7

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.02		0.04		0.00													
Quasi Permanenti		2.02		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 323 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
418	SLU	0.25	9.42	0.00	9.42		7261.6	9447.3	0.77	0.36	-5315.0	6751.4	0.79	0.24					
SLE	Rare						1023.5				0.0				-0.0	20.8	430.3	17.1	
SLE	Freq						1032.6				0.0				-0.0	21.0	434.1	17.2	
SLE	Q.P.						1033.4				0.0				-0.0	21.0	434.5	17.2	
CAM	SLU	2.03	4.02	0.00	7.63	1789.5	-1834.5	0.0	4379.2	0.00	0.13	-1834.5	7736.3	0.24	0.18				
SLE	Rare					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
419	SLU	3.80	9.42	0.00	9.42			7695.5	9447.3	0.81	0.36	-4884.0	6751.4	0.72	0.24				
SLE	Rare							1437.1				0.0				-0.0	29.2	604.2	24.0
SLE	Freq							1412.1				0.0				-0.0	28.7	593.7	23.6
SLE	Q.P.							1405.7				0.0				-0.0	28.6	591.0	23.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm			Estradosso mm			
Frequenti		2.03										0.04			0.00			
Quasi Permanenti		2.03										0.04			0.00			
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 323 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
419	SLU	0.25	9.42	0.00	9.42		6703.2	9447.3	0.71	0.36	-5946.9	6751.4	0.88	0.24				
SLE	Rare						488.3				-9.7				0.2	9.9	205.3	8.1
SLE	Freq						519.7				-2.5				0.1	10.6	218.5	8.7
SLE	Q.P.						523.3				-0.9				0.0	10.6	220.0	8.7
CAM	SLU	2.00	4.02	0.00	7.63	1789.5	-1789.5	232.6	4379.2	0.05	0.13	-1789.5	7736.3	0.23	0.18			
SLE	Rare					1227.0	-1227.0	0.0				-1227.0			23.5	-0.0	219.1	615.9
SLE	Freq					1227.0	-1227.0	0.0				-1227.0			23.5	-0.0	219.1	615.9
SLE	Q.P.					1227.0	-1227.0	0.0				-1227.0			23.5	-0.0	219.1	615.9
420	SLU	3.75	9.42	0.00	9.42		8610.4	9447.3	0.91	0.36	-4781.7	6751.4	0.71	0.24				
SLE	Rare						2033.9				0.0				-0.0	41.3	855.1	33.9
SLE	Freq						1944.1				0.0				-0.0	39.5	817.4	32.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.						1923.0				0.0				-0.0	39.1	808.5	32.1
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- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.00	0.04	0.00
Quasi Permanenti	2.00	0.04	0.00

- VERIFICHE A TAGLIO Trave 1414 416 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.48	0.38	6699.0	6133.2	30873.8	20365.5	ø 8 2br. 7.5'
0.48	3.49	3.01	6227.4	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.49	3.88	0.38	6515.0	6133.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 416 417 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6740.9	6133.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.78	6269.4	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6740.9	6133.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 417 418 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6740.9	6133.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	6274.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6740.9	6133.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 418 419 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6740.9	6133.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	6274.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6740.9	6133.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 419 420 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	6775.5	6133.2	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.37	2.75	6315.3	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.37	3.75	0.37	6775.5	6133.2	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 122 Travata 1573 1574

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1173 1174

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{Mre} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 122 /1 Sez. 2 30x34 30x34 [cm] L_{asse}2.95 L_{netta}2.95 q_{medio}255.0 [kg/m] (VALORE CARATTERISTICO)																			
1573	SLU	0.00	9.61	0.00	9.42			6803.5	9495.2	0.72	0.37	-6260.3	6556.9	0.95	0.26				
SLE	Rare							296.9				0.0			-0.0	6.2	123.8	2.6	
SLE	Freq							278.1				0.0			-0.0	5.8	115.9	2.5	
SLE	Q.P.							271.6				0.0			-0.0	5.7	113.2	2.4	
CAM	SLU	1.47	5.09	0.00	5.09	331.5	-180.3	848.7	5393.9	0.16	0.13	-1099.8	5287.9	0.21	0.15				
SLE	Rare					255.0	-138.7	0.0				-174.0			3.7	-0.0	29.9	128.9	
SLE	Freq					255.0	-138.7	0.0				-174.1			3.7	-0.0	29.9	129.0	
SLE	Q.P.					255.0	-138.7	0.0				-174.1			3.7	-0.0	29.9	129.0	
1574	SLU	2.95	9.55	0.00	9.42			6432.5	9452.0	0.68	0.37	-6478.5	6556.8	0.99	0.26				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 304 309 314 319
- 401 406 411 416
- 402 407 412 417
- 403 408 413 418
- 404 409 414 419
- 502 507 512 517
- 503 508 513 518
- 504 509 514 519

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 201 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																			
501	SLU	0.15	12.57	0.00	7.63			12592.6	14664.8	0.86	0.27	-4032.7	6116.6	0.66	0.18				
SLE	Rare							5856.5				0.0			-0.0	63.0	1754.1	118.0	
SLE	Freq							5242.8				0.0			-0.0	56.4	1570.3	105.7	
SLE	Q.P.							5039.5				0.0			-0.0	54.2	1509.4	101.6	
CAM	SLU	2.63	7.63	0.00	11.37	5941.1	-10628.0	0.0	8477.1	0.00	0.13	-10610.0	11751.3	0.90	0.15				
SLE	Rare					4318.5	-7725.4	0.0				-7712.3			77.2	-0.0	601.8	2587.3	
SLE	Freq					3950.6	-7067.3	0.0				-7055.3			70.7	-0.0	550.5	2366.9	
SLE	Q.P.					3828.0	-6848.0	0.0				-6836.3			68.5	-0.0	533.4	2293.4	
506	SLU	5.10	22.62	0.00	11.40			17213.0	22227.2	0.77	0.35	-1547.3	8608.8	0.18	0.20				
SLE	Rare							9991.6				0.0			-0.0	87.9	1758.8	77.3	
SLE	Freq							9190.6				0.0			-0.0	80.9	1617.8	71.1	
SLE	Q.P.							8923.4				0.0			-0.0	78.5	1570.7	69.1	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione	Intradosso	Estradosso
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]				mm				mm								
Frequenti		2.65				0.24				0.00								
Quasi Permanenti		2.65				0.23				0.00								
Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 201 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																		
506	SLU	0.25	22.62	0.00	11.40		20631.3	22227.2	0.93	0.35	0.0	8608.8	0.00	0.20				
SLE	Rare						14276.4				0.0				-0.0	125.6	2513.0	110.5
SLE	Freq						13067.2				0.0				-0.0	115.0	2300.1	101.2
SLE	Q.P.						12664.6				0.0				-0.0	111.4	2229.3	98.0
CAM	SLU	3.45	7.63	0.00	19.67	5941.1	-17678.4	0.0	8599.3	0.00	0.14	-17678.4	19325.7	0.91	0.21			
SLE	Rare					4318.5	-12850.3	0.0				-12850.3			108.5	-0.0	995.8	2582.7
SLE	Freq					3950.6	-11755.6	0.0				-11755.6			99.3	-0.0	910.9	2362.7
SLE	Q.P.					3828.0	-11390.7	0.0				-11390.7			96.2	-0.0	882.7	2289.3
511	SLU	6.65	22.62	0.00	11.40		20228.2	22227.2	0.91	0.35	0.0	8608.8	0.00	0.20				
SLE	Rare						14029.7				0.0				-0.0	123.5	2469.6	108.6
SLE	Freq						12811.9				0.0				-0.0	112.7	2255.2	99.2
SLE	Q.P.						12405.9				0.0				-0.0	109.2	2183.7	96.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione				Intradosso				Estradosso								
		[m]				mm				mm								
Frequenti		3.45				0.25				0.00								
Quasi Permanenti		3.45				0.24				0.00								
Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 201 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																			
511	SLU	0.25	22.62	0.00	11.40			17718.1	22227.2	0.80	0.35	-1185.0	8608.8	0.14	0.20				
SLE	Rare							10291.4				0.0				-0.0	90.6	1811.5	79.7
SLE	Freq							9460.5				0.0				-0.0	83.2	1665.3	73.2
SLE	Q.P.							9184.6				0.0				-0.0	80.8	1616.7	71.1
CAM	SLU	2.72	7.63	0.00	11.37	5941.1	-10628.0	0.0	8477.1	0.00	0.13	-10610.0	11751.3	0.90	0.15				
SLE	Rare					4318.5	-7725.4	0.0				-7712.3				77.2	-0.0	601.8	2587.3
SLE	Freq					3950.6	-7067.3	0.0				-7055.3				70.7	-0.0	550.5	2366.9
SLE	Q.P.					3828.0	-6848.0	0.0				-6836.3				68.5	-0.0	533.4	2293.4
516	SLU	5.20	12.57	0.00	7.63			12151.5	14664.8	0.83	0.27	-4440.5	6116.6	0.73	0.18				
SLE	Rare							5206.7				0.0				-0.0	56.0	1559.4	105.0
SLE	Freq							4738.8				0.0				-0.0	51.0	1419.3	95.5
SLE	Q.P.							4584.1				0.0				-0.0	49.3	1373.0	92.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm	
Frequenti	2.70	0.24	0.00	
Quasi Permanenti	2.70	0.23	0.00	

- VERIFICHE A TAGLIO Trave 501 506 Sez. 1 70x34 70x34 [cm] L_{asse} 5.35 L_{netta} 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	14367.5	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.49	4.76	4.27	13854.4	11486.9	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	15874.3	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 506 511 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	19080.2	11497.5	72039.0	20365.5	ø 8 2br. 7.5'
0.63	6.27	5.65	16843.6	13787.7	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	19039.3	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 511 516 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	16015.3	11497.5	72039.0	20365.5	ø 8 2br. 7.5'
0.62	4.83	4.21	13813.5	11486.9	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.83	5.20	0.37	14367.5	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- Travata: 223 Travata 1514 516 517 518 519 520

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1214 216 217 218 219 220

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 223 /1 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 q_{medio} 1367.0 [kg/m] (VALORE CARATTERISTICO)																		
1514	SLU	0.10	7.63	0.00	7.63		6694.6	8156.5	0.82	0.33	-3206.0	5590.2	0.57	0.22				
SLE	Rare						1824.7				0.0				-0.0	40.0	923.8	1.7
SLE	Freq						1766.6				0.0				-0.0	38.7	894.4	1.6
SLE	Q.P.						1755.0				0.0				-0.0	38.5	888.5	1.6
CAM	SLU	1.99	4.02	0.00	7.63	1999.5	-2126.4	0.0	4379.2	0.00	0.13	-2220.1	7736.3	0.29	0.18			
SLE	Rare					1367.0	-1453.8	0.0				-1447.4			27.7	-0.0	258.5	726.6
SLE	Freq					1367.0	-1453.8	0.0				-1447.4			27.7	-0.0	258.5	726.6
SLE	Q.P.					1367.0	-1453.8	0.0				-1447.4			27.7	-0.0	258.5	726.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

516	SLU	3.88	7.63	0.00	7.63			6239.8	8156.5	0.77	0.33	-4750.6	5590.2	0.85	0.22				
SLE	Rare							941.3				0.0				-0.0	20.6	476.5	0.9
SLE	Freq							958.6				0.0				-0.0	21.0	485.3	0.9
SLE	Q.P.							960.8				0.0				-0.0	21.1	486.4	0.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.04		0.05		0.00													
Quasi Permanenti		2.04		0.05		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 223 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
516	SLU	0.25	7.63	0.00	7.63			6485.1	8156.5	0.80	0.33	-4267.8	5590.2	0.76	0.22				
SLE	Rare							1092.4				0.0				-0.0	23.9	553.0	1.0
SLE	Freq							1106.9				0.0				-0.0	24.3	560.4	1.0
SLE	Q.P.							1108.6				0.0				-0.0	24.3	561.3	1.0
CAM	SLU	2.03	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
517	SLU	3.80	7.63	0.00	7.63			6764.0	8156.5	0.83	0.33	-3697.1	5590.2	0.66	0.22				
SLE	Rare							1565.1				0.0				-0.0	34.3	792.4	1.5
SLE	Freq							1539.7				0.0				-0.0	33.7	779.5	1.4
SLE	Q.P.							1533.5				0.0				-0.0	33.6	776.3	1.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		2.03		0.05		0.00												
Quasi Permanenti		2.03		0.05		0.00												
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 223 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
517	SLU	0.25	7.63	0.00	7.63		6253.7	8156.5	0.77	0.33	-3892.3	5590.2	0.70	0.22				
SLE	Rare						1168.4				0.0				-0.0	25.6	591.5	1.1
SLE	Freq						1179.4				0.0				-0.0	25.9	597.1	1.1
SLE	Q.P.						1180.7				0.0				-0.0	25.9	597.7	1.1
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18			
SLE	Rare					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5
518	SLU	3.80	7.63	0.00	7.63		6487.6	8156.5	0.80	0.33	-3505.9	5590.2	0.63	0.22				
SLE	Rare						1519.0				0.0				-0.0	33.3	769.0	1.4
SLE	Freq						1496.4				0.0				-0.0	32.8	757.6	1.4
SLE	Q.P.						1490.8				0.0				-0.0	32.7	754.7	1.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]				mm				mm									
Frequenti		2.02				0.05				0.00									
Quasi Permanenti		2.02				0.05				0.00									
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	Mre		[kgm]	[kgm]	Mri		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 223 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
518	SLU	0.25	7.63	0.00	7.63			6121.8	8156.5	0.75	0.33	-3717.8	5590.2	0.67	0.22				
SLE	Rare							1190.2				0.0			-0.0	26.1	602.5	1.1	
SLE	Freq							1200.8				0.0			-0.0	26.3	607.9	1.1	
SLE	Q.P.							1202.0				0.0			-0.0	26.3	608.5	1.1	
CAM	SLU	2.03	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
SLE	Freq					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
519	SLU	3.80	7.63	0.00	7.63			6335.2	8156.5	0.78	0.33	-3452.5	5590.2	0.62	0.22				
SLE	Rare							1465.3				0.0			-0.0	32.1	741.8	1.4	
SLE	Freq							1446.2				0.0			-0.0	31.7	732.1	1.3	
SLE	Q.P.							1441.4				0.0			-0.0	31.6	729.7	1.3	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione				Intradosso				Estradosso								
		[m]				mm				mm								
Frequenti		2.03				0.05				0.00								
Quasi Permanenti		2.03				0.05				0.00								
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	Mre		[kgm]	[kgm]	Mri		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 223 /5 Sez. 2 30x34 30x34 [cm] L _{asse} 4.00 L _{netta} 3.50 q _{medio} 1367.0 [kg/m] (VALORE CARATTERISTICO)																			
519	SLU	0.25	7.63	0.00	7.63			5378.9	8156.5	0.66	0.33	-4123.4	5590.2	0.74	0.22				
SLE	Rare							697.7				0.0				-0.0	15.3	353.2	0.7
SLE	Freq							719.1				0.0				-0.0	15.8	364.0	0.7
SLE	Q.P.							721.4				0.0				-0.0	15.8	365.2	0.7
CAM	SLU	2.00	4.02	0.00	7.63	1999.5	-1999.5	0.0	4379.2	0.00	0.13	-1999.5	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1367.0	0.0				-1367.0				26.2	-0.0	244.1	686.2
SLE	Freq					1367.0	-1367.0	0.0				-1367.0				26.2	-0.0	244.1	686.2
SLE	Q.P.					1367.0	-1367.0	0.0				-1367.0				26.2	-0.0	244.1	686.2
520	SLU	3.75	7.63	0.00	7.63			6838.1	8156.5	0.84	0.33	-3384.7	5590.2	0.61	0.22				
SLE	Rare							2076.4				0.0				-0.0	45.5	1051.2	1.9
SLE	Freq							1986.9				0.0				-0.0	43.6	1005.9	1.9
SLE	Q.P.							1967.1				0.0				-0.0	43.1	995.8	1.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.00	0.05	0.00
Quasi Permanenti	2.00	0.05	0.00

- VERIFICHE A TAGLIO Trave 1514 516 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.48	0.38	6324.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.48	3.49	3.01	5798.8	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.49	3.88	0.38	6119.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 516 517 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.43	2.80	5787.9	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 517 518 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5778.8	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 518 519 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5778.8	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 519 520 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	6319.9	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.37	2.75	5807.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.37	3.75	0.37	6319.9	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 505 Travata 505 510 515 520

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 505 /1 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 q_{medio} 2283.2 [kg/m] (VALORE CARATTERISTICO)																		
505	SLU	0.15	7.63	0.00	7.63		8746.6	10392.5	0.84	0.21	-4159.6	6091.1	0.68	0.17				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Rare							2826.7				0.0				-0.0	37.1	1319.9	180.6
SLE	Freq							2584.3				0.0				-0.0	33.9	1206.7	165.1
SLE	Q.P.							2500.2				0.0				-0.0	32.8	1167.4	159.7
CAM	SLU	2.63	7.63	0.00	10.18	3128.2	-5596.0	0.0	8455.2	0.00	0.12	-5586.5	10635.6	0.53	0.14				
SLE	Rare					2283.2	-4084.4	0.0				-4077.5				42.4	-0.0	316.5	1514.6
SLE	Freq					2103.2	-3762.4	0.0				-3756.0				39.1	-0.0	291.6	1395.2
SLE	Q.P.					2043.2	-3655.1	0.0				-3648.9				38.0	-0.0	283.3	1355.4
510	SLU	5.10	11.40	0.00	7.63			10822.9	13701.5	0.79	0.26	-2045.9	6129.1	0.33	0.18				
SLE	Rare							5207.0				0.0				-0.0	58.5	1708.6	144.4
SLE	Freq							4816.2				0.0				-0.0	54.1	1580.4	133.5
SLE	Q.P.							4688.5				0.0				-0.0	52.7	1538.5	130.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.65		0.13		0.00													
Quasi Permanenti		2.65		0.13		0.00													
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 505 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																			
510	SLU	0.25	11.40	0.00	7.63		12220.9	13701.5	0.89	0.26	-96.9	6129.1	0.02	0.18					
SLE	Rare						7601.7				0.0				-0.0	85.5	2494.4	210.8	
SLE	Freq						7001.0				0.0				-0.0	78.7	2297.3	194.1	
SLE	Q.P.						6800.5				0.0				-0.0	76.5	2231.5	188.5	
CAM	SLU	3.45	7.63	0.00	10.18	3128.2	-9308.2	0.0	8455.2	0.00	0.12	-9308.2	10635.6	0.88	0.14				
SLE	Rare					2283.2	-6793.9	0.0				-6793.9				70.7	-0.0	527.4	2523.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq					2103.2	-6258.3	0.0				-6258.3				65.1	-0.0	485.9	2324.6
SLE	Q.P.					2043.2	-6079.8	0.0				-6079.8				63.2	-0.0	472.0	2258.3
515	SLU	6.65	11.40	0.00	7.63			11878.1	13701.5	0.87	0.26	-294.0	6129.1	0.05	0.18				
SLE	Rare							7209.9				0.0				-0.0	81.1	2365.9	199.9
SLE	Freq							6645.0				0.0				-0.0	74.7	2180.5	184.2
SLE	Q.P.							6457.3				0.0				-0.0	72.6	2118.9	179.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm			
Frequenti						3.45					0.23				0.00			
Quasi Permanenti						3.45					0.22				0.00			
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 505 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
515	SLU	0.25	11.40	0.00	7.63		11208.5	13701.5	0.82	0.26	-1691.7	6129.1	0.28	0.18				
SLE	Rare						5647.7				0.0				-0.0	63.5	1853.2	156.6
SLE	Freq						5217.2				0.0				-0.0	58.7	1712.0	144.6
SLE	Q.P.						5074.9				0.0				-0.0	57.1	1665.3	140.7
CAM	SLU	2.72	7.63	0.00	10.18	3128.2	-5596.0	0.0	8455.2	0.00	0.12	-5586.5	10635.6	0.53	0.14			
SLE	Rare					2283.2	-4084.4	0.0				-4077.5			42.4	-0.0	316.5	1514.6
SLE	Freq					2103.2	-3762.4	0.0				-3756.0			39.1	-0.0	291.6	1395.2
SLE	Q.P.					2043.2	-3655.1	0.0				-3648.9			38.0	-0.0	283.3	1355.4
520	SLU	5.20	7.63	0.00	7.63		8358.0	10392.5	0.80	0.21	-4511.8	6091.1	0.74	0.17				
SLE	Rare						2383.6				0.0				-0.0	31.2	1112.9	152.3
SLE	Freq						2183.0				0.0				-0.0	28.6	1019.3	139.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.						2113.5				0.0				-0.0	27.7	986.8	135.0
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- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.70	0.13	0.00
Quasi Permanenti	2.70	0.13	0.00

- VERIFICHE A TAGLIO Trave 505 510 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	8496.8	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.49	4.76	4.27	8258.6	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	8953.3	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 510 515 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	10093.6	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.63	6.27	5.65	8916.0	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	9927.0	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 515 520 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	8953.3	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.59	4.86	4.27	8258.6	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	8496.8	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- Travata: 522 Travata 1522 501 502 503 504 505

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 522 /1 Sez. 2 30x34 30x34 [cm] L_{asse}4.13 L_{netta}3.77 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
1522	SLU	0.10	9.42	0.00	7.63		6970.4	9417.2	0.74	0.35	-3857.4	5581.2	0.69	0.22				
SLE	Rare						1615.9				0.0				-0.0	32.9	678.9	31.3
SLE	Freq						1567.0				0.0				-0.0	31.9	658.4	30.4
SLE	Q.P.						1556.5				0.0				-0.0	31.7	654.0	30.2
CAM	SLU	1.99	4.02	0.00	7.63	1999.5	-2126.4	0.0	4379.2	0.00	0.13	-2243.9	7736.3	0.29	0.18			
SLE	Rare					1367.0	-1453.8	0.0				-1447.4			27.7	-0.0	258.5	726.6
SLE	Freq					1367.0	-1453.8	0.0				-1447.4			27.7	-0.0	258.5	726.6
SLE	Q.P.					1367.0	-1453.8	0.0				-1447.4			27.7	-0.0	258.5	726.6
501	SLU	3.88	7.63	0.00	7.63		6985.9	8156.5	0.86	0.33	-5016.9	5590.2	0.90	0.22				
SLE	Rare						950.2				0.0				-0.0	20.8	481.0	0.9
SLE	Freq						980.3				0.0				-0.0	21.5	496.3	0.9
SLE	Q.P.						984.5				0.0				-0.0	21.6	498.4	0.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione				Intradosso				Estradosso								
		[m]				mm				mm								
Frequenti		2.04				0.05				0.00								
Quasi Permanenti		2.04				0.05				0.00								
Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 522 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
501	SLU	0.25	7.63	0.00	7.63		7762.9	8156.5	0.95	0.33	-5391.7	5590.2	0.96	0.22				
SLE	Rare						1170.2				0.0				-0.0	25.6	592.4	1.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							1183.3				0.0				-0.0	25.9	599.0	1.1
SLE	Q.P.							1185.6				0.0				-0.0	26.0	600.2	1.1
CAM	SLU	2.03	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
502	SLU	3.80	7.63	0.00	7.63			7851.2	8156.5	0.96	0.33	-4910.3	5590.2	0.88	0.22				
SLE	Rare							1491.5				0.0				-0.0	32.7	755.1	1.4
SLE	Freq							1473.4				0.0				-0.0	32.3	745.9	1.4
SLE	Q.P.							1470.5				0.0				-0.0	32.2	744.4	1.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.03		0.05		0.00													
Quasi Permanenti		2.03		0.05		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 522 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
502	SLU	0.25	7.63	0.00	7.63			7476.9	8156.5	0.92	0.33	-4981.2	5590.2	0.89	0.22				
SLE	Rare							1236.5				0.0				-0.0	27.1	626.0	1.2
SLE	Freq							1246.1				0.0				-0.0	27.3	630.8	1.2
SLE	Q.P.							1247.9				0.0				-0.0	27.4	631.7	1.2
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
503	SLU	3.80	7.63	0.00	7.63			7562.6	8156.5	0.93	0.33	-4715.1	5590.2	0.84	0.22				
SLE	Rare							1440.7				0.0				-0.0	31.6	729.3	1.3
SLE	Freq							1425.9				0.0				-0.0	31.3	721.9	1.3
SLE	Q.P.							1423.8				0.0				-0.0	31.2	720.8	1.3

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.02		0.05		0.00													
Quasi Permanenti		2.02		0.05		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 522 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
503	SLU	0.25	7.63	0.00	7.63			7296.5	8156.5	0.89	0.33	-4822.0	5590.2	0.86	0.22				
SLE	Rare							1222.7				0.0				-0.0	26.8	619.0	1.1
SLE	Freq							1235.6				0.0				-0.0	27.1	625.5	1.2
SLE	Q.P.							1237.3				0.0				-0.0	27.1	626.4	1.2
CAM	SLU	2.03	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
504	SLU	3.80	7.63	0.00	7.63			7439.2	8156.5	0.91	0.33	-4624.9	5590.2	0.83	0.22				
SLE	Rare							1435.4				0.0				-0.0	31.5	726.7	1.3
SLE	Freq							1412.5				0.0				-0.0	31.0	715.1	1.3
SLE	Q.P.							1407.1				0.0				-0.0	30.8	712.4	1.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		2.03		0.05		0.00												
Quasi Permanenti		2.03		0.05		0.00												
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 522 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
504	SLU	0.25	7.63	0.00	7.63		6360.0	8156.5	0.78	0.33	-5102.3	5590.2	0.91	0.22				
SLE	Rare						579.9				0.0				-0.0	12.7	293.6	0.5
SLE	Freq						622.5				0.0				-0.0	13.6	315.2	0.6
SLE	Q.P.						628.9				0.0				-0.0	13.8	318.4	0.6
CAM	SLU	2.00	4.02	0.00	7.63	1999.5	-1999.5	0.0	4379.2	0.00	0.13	-1999.5	7736.3	0.26	0.18			
SLE	Rare					1367.0	-1367.0	0.0				-1367.0			26.2	-0.0	244.1	686.2
SLE	Freq					1367.0	-1367.0	0.0				-1367.0			26.2	-0.0	244.1	686.2
SLE	Q.P.					1367.0	-1367.0	0.0				-1367.0			26.2	-0.0	244.1	686.2
505	SLU	3.75	7.63	0.00	7.63		7856.2	8156.5	0.96	0.33	-4063.4	5590.2	0.73	0.22				
SLE	Rare						1997.6				0.0				-0.0	43.8	1011.3	1.9
SLE	Freq						1913.8				0.0				-0.0	41.9	968.9	1.8
SLE	Q.P.						1896.4				0.0				-0.0	41.6	960.1	1.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	[m]	mm	mm
Frequenti	2.00	0.05	0.00
Quasi Permanenti	2.00	0.05	0.00

- VERIFICHE A TAGLIO Trave 1522 501 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.47	0.37	6658.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.47	3.50	3.03	6146.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.50	3.88	0.37	6116.8	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 501 502 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.43	2.80	5787.9	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 502 503 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5778.8	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 503 504 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5778.8	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6298.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 504 505 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.25	0.59	0.34	6319.9	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.41	2.82	5855.1	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.41	3.75	0.34	6319.9	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 622 Travata 1673 1674

Nodo	x	Afe	Afe _r	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 622 /1 Sez. 2 30x34 30x34 [cm] L_{asse}2.95 L_{netta}2.95 q_{medio}255.0 [kg/m] (VALORE CARATTERISTICO)																			
1673	SLU	0.00	7.82	0.00	7.63			5965.8	7762.1	0.77	0.18	-5453.3	7586.3	0.72	0.18				
SLE	Rare							280.5				0.0				-0.0	5.0	139.9	41.7
SLE	Freq							262.6				0.0				-0.0	4.7	131.0	39.0
SLE	Q.P.							256.3				0.0				-0.0	4.6	127.8	38.1
CAM	SLU	1.47	5.09	0.00	5.09	331.5	-180.3	757.9	5393.9	0.14	0.13	-1165.0	5287.9	0.22	0.15				
SLE	Rare					255.0	-138.7	0.0				-196.6				4.2	-0.0	33.8	145.7
SLE	Freq					255.0	-138.7	0.0				-195.4				4.2	-0.0	33.5	144.8
SLE	Q.P.					255.0	-138.7	0.0				-195.2				4.2	-0.0	33.5	144.6
1674	SLU	2.95	7.76	0.00	7.63			5877.9	7703.5	0.76	0.18	-6025.1	7586.3	0.79	0.18				
SLE	Rare							0.0				-99.9				1.8	-0.0	14.8	51.0
SLE	Freq							0.0				-80.2				1.4	-0.0	11.9	41.0
SLE	Q.P.							0.0				-73.6				1.3	-0.0	10.9	37.6

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	1.88	0.01	0.00

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Quasi Permanenti	1.88	0.01	0.00
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- VERIFICHE A TAGLIO Trave 1673 1674 Sez. 2 30x34 30x34 [cm] Lasse 2.95 Lnetta 2.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.00	0.34	0.34	5579.0	5717.2	30873.8	45822.3	ø 12 2br. 7.5'
0.34	2.61	2.27	5492.3	4994.4	39745.6	11221.3	Tr.ø 8 2br. 25.0'
2.61	2.95	0.34	5559.1	5717.2	30873.8	45822.3	ø 12 2br. 7.5'

- Travata: 701 Travata 122 123 124 125 126 127 128 129 130 131 1151

Nodo	x [m]	Afe [cm ²]	Afe _l [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 701 /1 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																		
122	SLU	0.25	5.09	0.00	5.09		3455.5	6202.6	0.56	0.28	-1353.8	3860.7	0.35	0.20				
SLE	Rare						1147.8				0.0				-0.0	29.5	836.8	59.7
SLE	Freq						1125.7				0.0				-0.0	28.9	820.6	58.6
SLE	Q.P.						1120.1				0.0				-0.0	28.8	816.5	58.3
CAM	SLU	1.88	4.02	0.00	7.63	1796.7	-1579.1	0.0	4379.2	0.00	0.13	-1579.1	7736.3	0.20	0.18			
SLE	Rare					1231.8	-1082.6	0.0				-1082.6			20.7	-0.0	193.4	543.5
SLE	Freq					1231.8	-1082.6	0.0				-1082.6			20.7	-0.0	193.4	543.5
SLE	Q.P.					1231.8	-1082.6	0.0				-1082.6			20.7	-0.0	193.4	543.5
123	SLU	3.50	4.02	0.00	5.09		3023.9	5420.7	0.56	0.27	-1488.2	3861.5	0.39	0.19				
SLE	Rare						807.3				0.0				-0.0	22.8	721.9	74.5
SLE	Freq						816.9				0.0				-0.0	23.1	730.5	75.4
SLE	Q.P.						817.9				0.0				-0.0	23.1	731.4	75.5

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		1.88		0.04		0.00													
Quasi Permanenti		1.88		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /2 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
123	SLU	0.25	4.02	0.00	5.09			3257.2	5420.7	0.60	0.27	-1219.0	3861.5	0.32	0.19				
SLE	Rare							1102.8				0.0				-0.0	31.1	986.2	101.8
SLE	Freq							1096.7				0.0				-0.0	30.9	980.7	101.2
SLE	Q.P.							1095.0				0.0				-0.0	30.9	979.3	101.1
CAM	SLU	1.90	4.02	0.00	7.63	1796.7	-1621.5	0.0	4379.2	0.00	0.13	-1621.5	7736.3	0.21	0.18				
SLE	Rare					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1
SLE	Freq					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1
SLE	Q.P.					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1
124	SLU	3.55	4.02	0.00	5.09			3127.3	5420.7	0.58	0.27	-1327.9	3861.5	0.34	0.19				
SLE	Rare							963.7				0.0				-0.0	27.2	861.8	88.9
SLE	Freq							967.3				0.0				-0.0	27.3	865.0	89.3
SLE	Q.P.							967.6				0.0				-0.0	27.3	865.3	89.3

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		1.90		0.04		0.00												
Quasi Permanenti		1.90		0.04		0.00												
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[cm ²]	[kg/m]	[kgm]															[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 701 /3 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																						
124	SLU	0.25	4.02	0.00	5.09			3158.7	5420.7	0.58	0.27	-1522.6	3861.5	0.39	0.19							
SLE	Rare							863.5				0.0				-0.0	24.4	772.2	79.7			
SLE	Freq							871.2				0.0				-0.0	24.6	779.1	80.4			
SLE	Q.P.							871.9				0.0				-0.0	24.6	779.7	80.5			
CAM	SLU	1.90	4.02	0.00	7.63	1796.7	-1621.5	0.0	4379.2	0.00	0.13	-1621.5	7736.3	0.21	0.18							
SLE	Rare					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1			
SLE	Freq					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1			
SLE	Q.P.					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1			
125	SLU	3.55	5.09	0.00	5.09			3486.1	6202.6	0.56	0.28	-1248.0	3860.7	0.32	0.20							
SLE	Rare							1222.1				0.0				-0.0	31.4	890.9	63.6			
SLE	Freq							1199.4				0.0				-0.0	30.8	874.3	62.4			
SLE	Q.P.							1192.9				0.0				-0.0	30.7	869.6	62.1			

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm			Estradosso mm				
Frequenti		1.90										0.04			0.00				
Quasi Permanenti		1.90										0.04			0.00				
Nodo	x [m]	A _{fe} [cm ²]	A _{feI} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} M _{re}	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} M _{ri}	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /4 Sez. 2 30x34 30x34 [cm] L_{asse}0.59 L_{netta}0.09 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
125	SLU	0.25	5.09	0.00	5.09			1388.9	6219.8	0.22	0.29	-532.3	3787.7	0.14	0.21				
SLE	Rare							769.0				-21.1			0.8	20.3	564.3	52.9	
SLE	Freq							737.5				-21.1			0.8	19.5	541.1	50.8	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.						727.6					-21.1				0.8	19.2	533.9	50.1
CAM	SLU	0.30	5.09	0.00	5.09	1796.7	-39.1	1388.9	6724.9	0.21	0.25	-532.3	3787.7	0.14	0.21				
SLE	Rare					1231.8	-26.8	448.8				-26.8				1.0	11.9	329.3	30.9
SLE	Freq					1231.8	-26.8	444.7				-26.8				1.0	11.7	326.3	30.6
SLE	Q.P.					1231.8	-26.8	443.6				-26.8				1.0	11.7	325.5	30.5
126	SLU	0.34	5.09	0.00	5.09			1388.9	6219.8	0.22	0.29	-565.8	3787.7	0.15	0.21				
SLE	Rare							163.4				-21.1				0.8	4.3	119.9	21.9
SLE	Freq							171.0				-21.1				0.8	4.5	125.5	21.9
SLE	Q.P.							171.0				-21.1				0.8	4.5	125.5	21.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm				
Frequenti						0.25					0.00				0.01				
Quasi Permanenti						0.25					0.00				0.01				
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
126	SLU	0.25	5.09	0.00	5.09		3418.1	6202.6	0.55	0.28	-1122.7	3860.7	0.29	0.20					
SLE	Rare						1264.3				0.0				-0.0	32.5	921.7	65.8	
SLE	Freq						1252.8				0.0				-0.0	32.2	913.3	65.2	
SLE	Q.P.						1250.5				0.0				-0.0	32.1	911.6	65.1	
CAM	SLU	2.03	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	
SLE	Freq					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

127	SLU	3.80	4.02	0.00	5.09			3235.6	5420.7	0.60	0.27	-1286.0	3861.5	0.33	0.19				
SLE	Rare							1058.7				0.0				-0.0	29.9	946.7	97.7
SLE	Freq							1065.9				0.0				-0.0	30.1	953.2	98.4
SLE	Q.P.							1066.9				0.0				-0.0	30.1	954.1	98.5

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.03		0.04		0.00													
Quasi Permanenti		2.03		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
127	SLU	0.25	4.02	0.00	5.09			3332.1	5420.7	0.61	0.27	-1037.6	3861.5	0.27	0.19				
SLE	Rare							1256.9				0.0				-0.0	35.5	1124.0	116.0
SLE	Freq							1253.2				0.0				-0.0	35.4	1120.7	115.7
SLE	Q.P.							1252.2				0.0				-0.0	35.3	1119.8	115.6
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
128	SLU	3.80	4.02	0.00	5.09			3249.8	5420.7	0.60	0.27	-1117.5	3861.5	0.29	0.19				
SLE	Rare							1164.1				0.0				-0.0	32.8	1041.0	107.4
SLE	Freq							1165.9				0.0				-0.0	32.9	1042.7	107.6
SLE	Q.P.							1166.1				0.0				-0.0	32.9	1042.8	107.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		2.02		0.04		0.00												
Quasi Permanenti		2.02		0.04		0.00												
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 701 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
128	SLU	0.25	4.02	0.00	5.09		3334.8	5420.7	0.62	0.27	-1039.0	3861.5	0.27	0.19				
SLE	Rare						1257.8				0.0				-0.0	35.5	1124.8	116.1
SLE	Freq						1253.8				0.0				-0.0	35.4	1121.2	115.7
SLE	Q.P.						1252.8				0.0				-0.0	35.4	1120.3	115.6
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18			
SLE	Rare					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
129	SLU	3.80	4.02	0.00	5.09		3251.5	5420.7	0.60	0.27	-1112.8	3861.5	0.29	0.19				
SLE	Rare						1167.4				0.0				-0.0	32.9	1044.0	107.7
SLE	Freq						1169.2				0.0				-0.0	33.0	1045.6	107.9
SLE	Q.P.						1169.3				0.0				-0.0	33.0	1045.7	107.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]				mm				mm								
Frequenti		2.02				0.04				0.00								
Quasi Permanenti		2.02				0.04				0.00								
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 701 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
129	SLU	0.25	4.02	0.00	5.09		3336.1	5420.7	0.62	0.27	-1038.3	3861.5	0.27	0.19				
SLE	Rare						1258.9				0.0				-0.0	35.5	1125.8	116.2
SLE	Freq						1254.9				0.0				-0.0	35.4	1122.2	115.8
SLE	Q.P.						1253.8				0.0				-0.0	35.4	1121.2	115.7
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18			
SLE	Rare					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9
130	SLU	3.80	4.02	0.00	5.09		3250.8	5420.7	0.60	0.27	-1114.5	3861.5	0.29	0.19				
SLE	Rare						1166.1				0.0				-0.0	32.9	1042.8	107.6
SLE	Freq						1167.8				0.0				-0.0	33.0	1044.4	107.8
SLE	Q.P.						1168.0				0.0				-0.0	33.0	1044.5	107.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione				Intradosso				Estradosso								
		[m]				mm				mm								
Frequenti		2.02				0.04				0.00								
Quasi Permanenti		2.02				0.04				0.00								
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 701 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
130	SLU	0.25	4.02	0.00	5.09			3324.0	5420.7	0.61	0.27	-1036.9	3861.5	0.27	0.19				
SLE	Rare							1254.5				0.0				-0.0	35.4	1121.9	115.8
SLE	Freq							1250.3				0.0				-0.0	35.3	1118.1	115.4
SLE	Q.P.							1249.1				0.0				-0.0	35.2	1117.1	115.3
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
131	SLU	3.80	4.02	0.00	7.63			3229.9	5541.6	0.58	0.29	-1076.7	5595.5	0.19	0.24				
SLE	Rare							1175.5				0.0				-0.0	33.6	1037.6	99.1
SLE	Freq							1177.8				0.0				-0.0	33.7	1039.7	99.3
SLE	Q.P.							1178.0				0.0				-0.0	33.7	1039.9	99.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.02		0.04		0.00													
Quasi Permanenti		2.02		0.04		0.00													
Nodo	x [m]	A _{fe} [cm ²]	A _{fe_t} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} / M _{re}	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} / M _{ri}	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /10 Sez. 2 30x34 30x34 [cm] L_{asse}4.17 L_{netta}3.82 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
131	SLU	0.25	4.02	0.00	7.63			3804.0	5541.6	0.69	0.29	-1518.6	5595.5	0.27	0.24				
SLE	Rare							1240.1				0.0				-0.0	35.5	1094.7	104.6
SLE	Freq							1250.3				0.0				-0.0	35.8	1103.7	105.5
SLE	Q.P.							1251.5				0.0				-0.0	35.8	1104.7	105.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

CAM	SLU	2.16	4.02	0.00	7.63	1796.7	-1948.0	0.0	4379.2	0.00	0.13	-1939.5	7736.3	0.25	0.18				
SLE	Rare					1231.8	-1335.5	0.0				-1329.7				25.5	-0.0	237.5	667.5
SLE	Freq					1231.8	-1335.5	0.0				-1329.7				25.5	-0.0	237.5	667.5
SLE	Q.P.					1231.8	-1335.5	0.0				-1329.7				25.5	-0.0	237.5	667.5
1151	SLU	4.07	9.42	0.00	5.09			3401.0	9383.4	0.36	0.34	-1296.0	3859.5	0.34	0.20				
SLE	Rare							1178.7				0.0				-0.0	24.1	494.0	24.3
SLE	Freq							1160.2				0.0				-0.0	23.7	486.2	24.0
SLE	Q.P.							1155.7				0.0				-0.0	23.6	484.3	23.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.11	0.05	0.00
Quasi Permanenti	2.11	0.05	0.00

- VERIFICHE A TAGLIO Trave 122 123 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	5098.4	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.16	2.57	4679.5	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	4857.5	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 123 124 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4845.3	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.21	2.62	4426.5	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	4845.3	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 124 125 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4845.0	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.21	2.62	4663.4	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	5082.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 126 127 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	5021.4	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.43	2.80	4561.1	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	4800.9	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 127 128 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4801.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4332.7	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4801.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 128 129 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4801.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4332.7	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4801.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 129 130 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4801.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4332.7	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4801.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 130 131 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5289.6	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4821.1	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4835.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 131 1151 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.66	0.41	4721.5	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.66	3.66	3.00	5864.9	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.66	4.07	0.41	6368.4	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 706 Travata 150 151 152 153 154 155 156 157 158 1169

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 706 /1 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																			
150	SLU	0.25	7.63	0.00	7.63			3016.9	8156.5	0.37	0.33	-971.8	5590.2	0.17	0.22				
SLE	Rare							1146.1				0.0			-0.0	25.1	580.2	1.1	
SLE	Freq							1123.8				0.0			-0.0	24.6	568.9	1.0	
SLE	Q.P.							1118.1				0.0			-0.0	24.5	566.0	1.0	
CAM	SLU	1.88	4.02	0.00	7.63	1796.7	-1579.1	0.0	4379.2	0.00	0.13	-1579.1	7736.3	0.20	0.18				
SLE	Rare					1231.8	-1082.6	0.0				-1082.6			20.7	-0.0	193.4	543.5	
SLE	Freq					1231.8	-1082.6	0.0				-1082.6			20.7	-0.0	193.4	543.5	
SLE	Q.P.					1231.8	-1082.6	0.0				-1082.6			20.7	-0.0	193.4	543.5	
151	SLU	3.50	5.09	0.00	5.09			2629.8	6202.6	0.42	0.28	-1144.1	3860.7	0.30	0.20				
SLE	Rare							808.7				0.0			-0.0	20.8	589.5	42.1	
SLE	Freq							818.4				0.0			-0.0	21.0	596.6	42.6	
SLE	Q.P.							819.4				0.0			-0.0	21.1	597.4	42.6	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		1.88		0.04		0.00													
Quasi Permanenti		1.88		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 706 /2 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
151	SLU	0.25	5.09	0.00	5.09			2892.5	6202.6	0.47	0.28	-900.7	3860.7	0.23	0.20				
SLE	Rare							1101.4				0.0				-0.0	28.3	802.9	57.3
SLE	Freq							1094.5				0.0				-0.0	28.1	797.9	56.9
SLE	Q.P.							1092.8				0.0				-0.0	28.1	796.6	56.9
CAM	SLU	1.90	4.02	0.00	7.63	1796.7	-1621.5	0.0	4379.2	0.00	0.13	-1621.5	7736.3	0.21	0.18				
SLE	Rare					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1
SLE	Freq					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1
SLE	Q.P.					1231.8	-1111.7	0.0				-1111.7				21.3	-0.0	198.5	558.1
152	SLU	3.55	5.09	0.00	5.09			2816.6	6202.6	0.45	0.28	-984.0	3860.7	0.25	0.20				
SLE	Rare							1004.1				0.0				-0.0	25.8	732.0	52.2
SLE	Freq							1007.5				0.0				-0.0	25.9	734.5	52.4
SLE	Q.P.							1007.9				0.0				-0.0	25.9	734.7	52.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]				mm				mm									
Frequenti		1.90				0.04				0.00									
Quasi Permanenti		1.90				0.04				0.00									
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 706 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.39 L_{netta}3.89 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
152	SLU	0.25	5.09	0.00	5.09			3122.2	6202.6	0.50	0.28	-483.6	3860.7	0.13	0.20				
SLE	Rare							1486.5				0.0			-0.0	38.2	1083.6	77.3	
SLE	Freq							1481.5				0.0			-0.0	38.1	1080.0	77.1	
SLE	Q.P.							1480.3				0.0			-0.0	38.0	1079.1	77.0	
CAM	SLU	2.19	4.02	0.00	7.63	1796.7	-2164.1	0.0	4379.2	0.00	0.13	-2164.1	7736.3	0.28	0.18				
SLE	Rare					1231.8	-1483.7	0.0				-1483.7			28.4	-0.0	265.0	744.8	
SLE	Freq					1231.8	-1483.7	0.0				-1483.7			28.4	-0.0	265.0	744.8	
SLE	Q.P.					1231.8	-1483.7	0.0				-1483.7			28.4	-0.0	265.0	744.8	
153	SLU	4.14	5.09	0.00	5.09			3051.2	6202.6	0.49	0.28	-554.3	3860.7	0.14	0.20				
SLE	Rare							1403.0				0.0			-0.0	36.1	1022.8	73.0	
SLE	Freq							1405.3				0.0			-0.0	36.1	1024.4	73.1	
SLE	Q.P.							1405.5				0.0			-0.0	36.1	1024.6	73.1	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione				Intradosso				Estradosso								
		[m]				mm				mm								
Frequenti		2.19				0.05				0.00								
Quasi Permanenti		2.19				0.05				0.00								
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 706 /4 Sez. 2 30x34 30x34 [cm] L _{asse} 4.05 L _{netta} 3.55 q _{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																			
153	SLU	0.25	5.09	0.00	5.09			2993.8	6202.6	0.48	0.28	-724.5	3860.7	0.19	0.20				
SLE	Rare							1263.5				0.0				-0.0	32.5	921.1	65.7
SLE	Freq							1260.7				0.0				-0.0	32.4	919.0	65.6
SLE	Q.P.							1259.9				0.0				-0.0	32.4	918.5	65.5
CAM	SLU	2.03	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
154	SLU	3.80	5.09	0.00	5.09			2906.9	6202.6	0.47	0.28	-792.6	3860.7	0.21	0.20				
SLE	Rare							1176.3				0.0				-0.0	30.2	857.5	61.2
SLE	Freq							1177.5				0.0				-0.0	30.3	858.4	61.3
SLE	Q.P.							1177.6				0.0				-0.0	30.3	858.5	61.3

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.03		0.04		0.00													
Quasi Permanenti		2.03		0.04		0.00													
Nodo	x [m]	A _{fe} [cm ²]	A _{feI} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} M _{re}	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} M _{ri}	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 706 /5 Sez. 2 30x34 30x34 [cm] L _{asse} 4.05 L _{netta} 3.55 q _{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																			
154	SLU	0.25	5.09	0.00	5.09			2984.1	6202.6	0.48	0.28	-732.4	3860.7	0.19	0.20				
SLE	Rare							1256.4				0.0				-0.0	32.3	915.9	65.4
SLE	Freq							1252.0				0.0				-0.0	32.2	912.7	65.1
SLE	Q.P.							1250.9				0.0				-0.0	32.2	911.9	65.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
155	SLU	3.80	5.09	0.00	5.09			2904.5	6202.6	0.47	0.28	-802.4	3860.7	0.21	0.20				
SLE	Rare							1169.5				0.0				-0.0	30.1	852.5	60.8
SLE	Freq							1171.3				0.0				-0.0	30.1	853.9	60.9
SLE	Q.P.							1171.5				0.0				-0.0	30.1	854.0	60.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm				
Frequenti						2.02					0.04				0.00				
Quasi Permanenti						2.02					0.04				0.00				
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 706 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
155	SLU	0.25	5.09	0.00	5.09			2984.3	6202.6	0.48	0.28	-732.1	3860.7	0.19	0.20				
SLE	Rare							1256.7				0.0				-0.0	32.3	916.1	65.4
SLE	Freq							1252.3				0.0				-0.0	32.2	912.9	65.2
SLE	Q.P.							1251.2				0.0				-0.0	32.2	912.1	65.1
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
156	SLU	3.80	5.09	0.00	5.09			2904.3	6202.6	0.47	0.28	-802.9	3860.7	0.21	0.20				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Rare							1169.1				0.0				-0.0	30.1	852.2	60.8
SLE	Freq							1170.9				0.0				-0.0	30.1	853.6	60.9
SLE	Q.P.							1171.1				0.0				-0.0	30.1	853.7	60.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm		Estradosso mm					
Frequenti		2.02										0.04		0.00					
Quasi Permanenti		2.02										0.04		0.00					
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 706 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
156	SLU	0.25	5.09	0.00	5.09			2984.6	6202.6	0.48	0.28	-731.4	3860.7	0.19	0.20				
SLE	Rare							1257.3				0.0				-0.0	32.3	916.5	65.4
SLE	Freq							1252.9				0.0				-0.0	32.2	913.4	65.2
SLE	Q.P.							1251.8				0.0				-0.0	32.2	912.5	65.1
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Freq					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8				24.2	-0.0	225.5	633.9
157	SLU	3.80	5.09	0.00	5.09			2902.5	6202.6	0.47	0.28	-803.1	3860.7	0.21	0.20				
SLE	Rare							1168.1				0.0				-0.0	30.0	851.5	60.8
SLE	Freq							1169.9				0.0				-0.0	30.1	852.9	60.9
SLE	Q.P.							1170.1				0.0				-0.0	30.1	853.0	60.9

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.02		0.04		0.00													
Quasi Permanenti		2.02		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 706 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
157	SLU	0.25	5.09	0.00	5.09			2982.4	6202.6	0.48	0.28	-734.5	3860.7	0.19	0.20				
SLE	Rare							1254.1				0.0			-0.0	32.2	914.2	65.2	
SLE	Freq							1249.5				0.0			-0.0	32.1	910.8	65.0	
SLE	Q.P.							1248.2				0.0			-0.0	32.1	909.9	64.9	
CAM	SLU	2.02	4.02	0.00	7.63	1796.7	-1841.9	0.0	4379.2	0.00	0.13	-1841.9	7736.3	0.24	0.18				
SLE	Rare					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	
SLE	Freq					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	
SLE	Q.P.					1231.8	-1262.8	0.0				-1262.8			24.2	-0.0	225.5	633.9	
158	SLU	3.80	5.09	0.00	5.09			2928.2	6202.6	0.47	0.28	-810.1	3860.7	0.21	0.20				
SLE	Rare							1176.6				0.0			-0.0	30.2	857.8	61.2	
SLE	Freq							1179.1				0.0			-0.0	30.3	859.5	61.3	
SLE	Q.P.							1179.3				0.0			-0.0	30.3	859.7	61.4	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm	
Frequenti		2.02		0.04		0.00	
Quasi Permanenti		2.02		0.04		0.00	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 706 /9 Sez. 2 30x34 30x34 [cm] L_{asse} 4.17 L_{netta} 3.82 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																			
158	SLU	0.25	5.09	0.00	5.09			2837.7	6202.6	0.46	0.28	-644.9	3860.7	0.17	0.20				
SLE	Rare							1251.9				0.0				-0.0	32.2	912.7	65.1
SLE	Freq							1260.5				0.0				-0.0	32.4	918.9	65.6
SLE	Q.P.							1261.5				0.0				-0.0	32.4	919.6	65.6
CAM	SLU	2.16	4.02	0.00	7.63	1796.7	-1948.0	0.0	4379.2	0.00	0.13	-1939.5	7736.3	0.25	0.18				
SLE	Rare					1231.8	-1335.5	0.0				-1329.7				25.5	-0.0	237.5	667.5
SLE	Freq					1231.8	-1335.5	0.0				-1329.7				25.5	-0.0	237.5	667.5
SLE	Q.P.					1231.8	-1335.5	0.0				-1329.7				25.5	-0.0	237.5	667.5
1169	SLU	4.07	7.63	0.00	5.09			2337.5	8095.9	0.29	0.32	-369.1	3859.6	0.10	0.19				
SLE	Rare							1160.6				0.0				-0.0	25.4	587.5	1.2
SLE	Freq							1146.0				0.0				-0.0	25.1	580.1	1.1
SLE	Q.P.							1142.5				0.0				-0.0	25.0	578.3	1.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.11	0.05	0.00
Quasi Permanenti	2.11	0.05	0.00

- VERIFICHE A TAGLIO Trave 150 151 Sez. 2 30x34 30x34 [cm] L_{asse} 3.75 L_{netta} 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	V _{Sd} [kg]	V _{Rd,c} [kg]	V _{Rd,max} [kg]	V _{Rd,s} [kg]	Staffe
0.25	0.59	0.34	5699.3	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.16	2.57	5280.4	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.16	3.50	0.34	5630.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
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- VERIFICHE A TAGLIO Trave 151 152 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5082.0	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.17	2.54	4612.9	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.17	3.55	0.38	5082.0	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 152 153 Sez. 2 30x34 30x34 [cm] Lasse 4.39 Lnetta 3.89 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.64	0.39	4982.8	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.64	3.75	3.12	4508.5	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.75	4.14	0.39	4982.8	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 153 154 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.66	0.41	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.66	3.39	2.73	4516.6	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.39	3.80	0.41	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 154 155 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4552.7	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 155 156 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4552.7	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'

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3.42	3.80	0.38	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
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- VERIFICHE A TAGLIO Trave 156 157 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4552.7	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 157 158 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4552.7	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5021.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 158 1169 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.66	0.41	4894.8	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.66	3.66	3.00	5072.6	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.66	4.07	0.41	5576.1	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 325 Travata 350 351 352 353 354 355 356 357 358 1369

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 450 451 452 453 454 455 456 457 458 1469

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 325 /1 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 q_{medio} 1227.0 [kg/m] (VALORE CARATTERISTICO)																			
350	SLU	0.25	7.63	0.00	7.63			7129.0	8156.5	0.87	0.33	-3847.7	5590.2	0.69	0.22				

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SLE	Rare							1813.1				0.0				-0.0	39.7	917.9	1.7
SLE	Freq							1731.5				0.0				-0.0	38.0	876.6	1.6
SLE	Q.P.							1712.8				0.0				-0.0	37.5	867.1	1.6
CAM	SLU	1.88	4.02	0.00	7.63	1789.5	-1572.8	211.4	4379.2	0.05	0.13	-1572.8	7736.3	0.20	0.18				
SLE	Rare					1227.0	-1078.4	0.0				-1078.4				20.6	-0.0	192.6	541.4
SLE	Freq					1227.0	-1078.4	0.0				-1078.4				20.6	-0.0	192.6	541.4
SLE	Q.P.					1227.0	-1078.4	0.0				-1078.4				20.6	-0.0	192.6	541.4
351	SLU	3.50	7.63	0.00	7.63			5486.5	8156.5	0.67	0.33	-4839.9	5590.2	0.87	0.22				
SLE	Rare							362.5				-22.9				0.6	7.9	183.5	15.8
SLE	Freq							391.5				-11.5				0.3	8.6	198.2	7.9
SLE	Q.P.							394.9				-8.9				0.3	8.7	199.9	6.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		1.88		0.04		0.00													
Quasi Permanenti		1.88		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 325 /2 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
351	SLU	0.25	7.63	0.00	7.63			6316.2	8156.5	0.77	0.33	-3863.5	5590.2	0.69	0.22				
SLE	Rare							1285.6				0.0				-0.0	28.2	650.9	1.2
SLE	Freq							1260.4				0.0				-0.0	27.6	638.1	1.2
SLE	Q.P.							1254.4				0.0				-0.0	27.5	635.1	1.2
CAM	SLU	1.90	4.02	0.00	7.63	1789.5	-1615.0	0.0	4379.2	0.00	0.13	-1615.0	7736.3	0.21	0.18				
SLE	Rare					1227.0	-1107.4	0.0				-1107.4				21.2	-0.0	197.8	555.9

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SLE	Freq					1227.0	-1107.4	0.0				-1107.4				21.2	-0.0	197.8	555.9
SLE	Q.P.					1227.0	-1107.4	0.0				-1107.4				21.2	-0.0	197.8	555.9
352	SLU	3.55	7.63	0.00	7.63			5963.5	8156.5	0.73	0.33	-4289.2	5590.2	0.77	0.22				
SLE	Rare							861.3				0.0				-0.0	18.9	436.0	0.8
SLE	Freq							871.2				0.0				-0.0	19.1	441.0	0.8
SLE	Q.P.							872.3				0.0				-0.0	19.1	441.6	0.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm		Estradosso mm				
Frequenti		1.90										0.04		0.00				
Quasi Permanenti		1.90										0.04		0.00				
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 325 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.39 L_{netta}3.89 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
352	SLU	0.25	7.63	0.00	7.63		6269.4	8156.5	0.77	0.33	-3103.9	5590.2	0.56	0.22				
SLE	Rare						1619.6				0.0				-0.0	35.5	819.9	1.5
SLE	Freq						1601.0				0.0				-0.0	35.1	810.5	1.5
SLE	Q.P.						1596.5				0.0				-0.0	35.0	808.3	1.5
CAM	SLU	2.19	4.02	0.00	7.63	1789.5	-2155.5	0.0	4379.2	0.00	0.13	-2155.5	7736.3	0.28	0.18			
SLE	Rare					1227.0	-1477.9	0.0				-1477.9			28.3	-0.0	263.9	741.9
SLE	Freq					1227.0	-1477.9	0.0				-1477.9			28.3	-0.0	263.9	741.9
SLE	Q.P.					1227.0	-1477.9	0.0				-1477.9			28.3	-0.0	263.9	741.9
353	SLU	4.14	7.63	0.00	5.09		5978.0	8095.9	0.74	0.32	-3408.2	3859.6	0.88	0.19				
SLE	Rare						1312.3				0.0				-0.0	28.8	664.3	1.3
SLE	Freq						1318.7				0.0				-0.0	28.9	667.5	1.3

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SLE	Q.P.						1319.4				0.0				-0.0	28.9	667.9	1.3
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- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		2.19		0.05		0.00												
Quasi Permanenti		2.19		0.05		0.00												
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 325 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
353	SLU	0.25	7.63	0.00	5.09		6208.8	8095.9	0.77	0.32	-3609.4	3859.6	0.94	0.19				
SLE	Rare						1324.7				0.0				-0.0	29.0	670.5	1.3
SLE	Freq						1313.8				0.0				-0.0	28.8	665.0	1.3
SLE	Q.P.						1311.1				0.0				-0.0	28.7	663.7	1.3
CAM	SLU	2.03	4.02	0.00	7.63	1789.5	-1834.5	0.0	4379.2	0.00	0.13	-1834.5	7736.3	0.24	0.18			
SLE	Rare					1227.0	-1257.9	0.0				-1257.9			24.1	-0.0	224.6	631.4
SLE	Freq					1227.0	-1257.9	0.0				-1257.9			24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0				-1257.9			24.1	-0.0	224.6	631.4
354	SLU	3.80	7.63	0.00	5.09		6020.0	8095.9	0.74	0.32	-3762.9	3859.6	0.97	0.19				
SLE	Rare						1137.5				0.0				-0.0	24.9	575.8	1.1
SLE	Freq						1140.8				0.0				-0.0	25.0	577.5	1.1
SLE	Q.P.						1141.1				0.0				-0.0	25.0	577.6	1.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni		Sezione [m]										Intradosso mm				Estradosso mm			
Frequenti		2.03										0.04				0.00			
Quasi Permanenti		2.03										0.04				0.00			
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 325 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
354	SLU	0.25	7.63	0.00	5.09			6232.6	8095.9	0.77	0.32	-3580.7	3859.6	0.93	0.19				
SLE	Rare							1364.3				0.0				-0.0	29.9	690.6	1.4
SLE	Freq							1348.1				0.0				-0.0	29.6	682.4	1.3
SLE	Q.P.							1344.2				0.0				-0.0	29.5	680.4	1.3
CAM	SLU	2.02	4.02	0.00	7.63	1789.5	-1834.5	0.0	4379.2	0.00	0.13	-1834.5	7736.3	0.24	0.18				
SLE	Rare					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Freq					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
355	SLU	3.80	7.63	0.00	5.09			5995.6	8095.9	0.74	0.32	-3809.5	3859.6	0.99	0.19				
SLE	Rare							1097.0				0.0				-0.0	24.0	555.3	1.1
SLE	Freq							1102.2				0.0				-0.0	24.2	557.9	1.1
SLE	Q.P.							1102.8				0.0				-0.0	24.2	558.2	1.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm				Estradosso mm			
Frequenti		2.02										0.04				0.00			
Quasi Permanenti		2.02										0.04				0.00			
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	

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		[cm ²]	[kg/m]	[kgm]															[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 325 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																						
355	SLU	0.25	7.63	0.00	5.09			6209.5	8095.9	0.77	0.32	-3584.3	3859.6	0.93	0.19							
SLE	Rare							1358.8				0.0				-0.0	29.8	687.8	1.4			
SLE	Freq							1343.1				0.0				-0.0	29.4	679.8	1.3			
SLE	Q.P.							1339.2				0.0				-0.0	29.4	677.9	1.3			
CAM	SLU	2.02	4.02	0.00	7.63	1789.5	-1834.5	0.0	4379.2	0.00	0.13	-1834.5	7736.3	0.24	0.18							
SLE	Rare					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4			
SLE	Freq					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4			
SLE	Q.P.					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4			
356	SLU	3.80	7.63	0.00	5.09			5998.4	8095.9	0.74	0.32	-3794.4	3859.6	0.98	0.19							
SLE	Rare							1096.2				0.0				-0.0	24.0	554.9	1.1			
SLE	Freq							1101.5				0.0				-0.0	24.1	557.6	1.1			
SLE	Q.P.							1102.0				0.0				-0.0	24.2	557.8	1.1			

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm		Estradosso mm						
Frequenti		2.02										0.04		0.00						
Quasi Permanenti		2.02										0.04		0.00						
Nodo	x [m]	A _{fe} [cm ²]	A _{feI} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 325 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																				
356	SLU	0.25	7.63	0.00	5.09			6210.5	8095.9	0.77	0.32	-3587.1	3859.6	0.93	0.19					
SLE	Rare							1356.3				0.0					-0.0	29.7	686.5	1.4
SLE	Freq							1340.7				0.0					-0.0	29.4	678.7	1.3

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SLE	Q.P.							1336.9				0.0				-0.0	29.3	676.7	1.3
CAM	SLU	2.02	4.02	0.00	7.63	1789.5	-1834.5	0.0	4379.2	0.00	0.13	-1834.5	7736.3	0.24	0.18				
SLE	Rare					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Freq					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
357	SLU	3.80	7.63	0.00	7.63			6002.5	8156.5	0.74	0.33	-3799.0	5590.2	0.68	0.22				
SLE	Rare							1095.8				0.0				-0.0	24.0	554.8	1.0
SLE	Freq							1101.2				0.0				-0.0	24.1	557.5	1.0
SLE	Q.P.							1101.7				0.0				-0.0	24.1	557.8	1.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm				
Frequenti						2.02					0.04				0.00				
Quasi Permanenti						2.02					0.04				0.00				
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 325 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
357	SLU	0.25	7.63	0.00	7.63			6221.5	8156.5	0.76	0.33	-3569.3	5590.2	0.64	0.22				
SLE	Rare							1372.6				0.0				-0.0	30.1	694.9	1.3
SLE	Freq							1356.5				0.0				-0.0	29.7	686.8	1.3
SLE	Q.P.							1352.5				0.0				-0.0	29.6	684.7	1.3
CAM	SLU	2.02	4.02	0.00	7.63	1789.5	-1834.5	0.0	4379.2	0.00	0.13	-1834.5	7736.3	0.24	0.18				
SLE	Rare					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Freq					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4
SLE	Q.P.					1227.0	-1257.9	0.0				-1257.9				24.1	-0.0	224.6	631.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

358	SLU	3.80	7.63	0.00	7.63			5985.3	8156.5	0.73	0.33	-3863.2	5590.2	0.69	0.22				
SLE	Rare							1053.1				0.0				-0.0	23.1	533.1	1.0
SLE	Freq							1060.3				0.0				-0.0	23.2	536.8	1.0
SLE	Q.P.							1061.0				0.0				-0.0	23.3	537.2	1.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.02		0.04		0.00													
Quasi Permanenti		2.02		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 325 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.17 L_{netta}3.82 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
358	SLU	0.25	7.63	0.00	7.63			5430.4	8156.5	0.67	0.33	-3970.2	5590.2	0.71	0.22				
SLE	Rare							789.1				0.0				-0.0	17.3	399.5	0.7
SLE	Freq							814.6				0.0				-0.0	17.9	412.4	0.8
SLE	Q.P.							818.1				0.0				-0.0	17.9	414.2	0.8
CAM	SLU	2.16	4.02	0.00	7.63	1789.5	-1940.2	0.0	4379.2	0.00	0.13	-1963.5	7736.3	0.25	0.18				
SLE	Rare					1227.0	-1330.3	0.0				-1324.5				25.4	-0.0	236.5	664.9
SLE	Freq					1227.0	-1330.3	0.0				-1324.5				25.4	-0.0	236.5	664.9
SLE	Q.P.					1227.0	-1330.3	0.0				-1324.5				25.4	-0.0	236.5	664.9
1369	SLU	4.07	9.42	0.00	7.63			5835.1	9417.2	0.62	0.35	-2657.4	5581.2	0.48	0.22				
SLE	Rare							1691.7				0.0				-0.0	34.4	710.8	32.8
SLE	Freq							1637.9				0.0				-0.0	33.3	688.2	31.8
SLE	Q.P.							1626.7				0.0				-0.0	33.1	683.5	31.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.11	0.04	0.00
Quasi Permanenti	2.11	0.04	0.00

- VERIFICHE A TAGLIO Trave 350 351 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	6223.6	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.16	2.57	5806.4	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	6223.6	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 351 352 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	6190.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.21	2.62	5773.0	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	6190.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 352 353 Sez. 2 30x34 30x34 [cm] Lasse 4.39 Lnetta 3.89 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.65	0.40	5475.5	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.65	3.74	3.08	5408.1	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.74	4.14	0.40	5904.8	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 353 354 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.65	0.40	5545.7	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.65	3.40	2.74	5051.0	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.40	3.80	0.40	5545.7	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 354 355 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5545.7	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5079.0	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5545.7	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 355 356 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5545.7	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5079.0	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5545.7	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 356 357 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6033.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5566.5	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5562.7	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 357 358 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6050.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5583.5	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6050.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 358 1369 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5849.4	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.63	3.68	3.05	5898.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.68	4.07	0.38	6366.3	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 1008 Travata 422 432 441 450

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 222 232 241 250
- 322 332 341 350

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 1008 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																		
422	SLU	0.15	15.21	0.00	15.21		14847.0	17051.7	0.87	0.32	-10297.8	11142.2	0.92	0.22				
SLE	Rare						2583.4				0.0				-0.0	26.2	648.5	25.6
SLE	Freq						2363.4				0.0				-0.0	24.0	593.3	23.4
SLE	Q.P.						2291.6				0.0				-0.0	23.3	575.3	22.7
CAM	SLU	2.63	9.42	0.00	10.18	2959.7	-5294.7	0.0	10136.2	0.00	0.13	-5285.7	10644.0	0.50	0.15			
SLE	Rare					2161.3	-3866.4	0.0				-3859.8			39.5	-0.0	283.7	1435.1
SLE	Freq					1992.6	-3564.5	0.0				-3558.5			36.4	-0.0	261.5	1323.1
SLE	Q.P.					1936.3	-3463.9	0.0				-3458.0			35.3	-0.0	254.1	1285.7
432	SLU	5.10	19.01	0.00	15.21		18673.8	19784.6	0.94	0.34	-9631.5	11139.5	0.86	0.22				
SLE	Rare						5026.1				0.0				-0.0	46.8	1033.5	3.9
SLE	Freq						4648.4				0.0				-0.0	43.2	955.8	3.6
SLE	Q.P.						4523.0				0.0				-0.0	42.1	930.0	3.5

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.65		0.12		0.00													
Quasi Permanenti		2.65		0.12		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 1008 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																			
432	SLU	0.25	19.01	0.00	15.21		19454.0	19784.6	0.98	0.34	-7245.0	11139.5	0.65	0.22					
SLE	Rare						7055.4				0.0				-0.0	65.6	1450.7	5.5	
SLE	Freq						6504.0				0.0				-0.0	60.5	1337.4	5.1	
SLE	Q.P.						6320.3				0.0				-0.0	58.8	1299.6	4.9	
CAM	SLU	3.45	9.42	0.00	10.18	2959.7	-8807.0	0.0	10136.2	0.00	0.13	-8807.0	10644.0	0.83	0.15				
SLE	Rare					2161.3	-6431.3	0.0				-6431.3			65.7	-0.0	472.6	2391.2	
SLE	Freq					1992.6	-5929.2	0.0				-5929.2			60.6	-0.0	435.7	2204.5	
SLE	Q.P.					1936.3	-5761.8	0.0				-5761.8			58.9	-0.0	423.4	2142.3	
441	SLU	6.65	19.01	0.00	15.21		19454.7	19784.6	0.98	0.34	-7228.2	11139.5	0.65	0.22					
SLE	Rare						7061.3				0.0				-0.0	65.7	1452.0	5.5	
SLE	Freq						6511.9				0.0				-0.0	60.6	1339.0	5.1	
SLE	Q.P.						6328.7				0.0				-0.0	58.9	1301.3	4.9	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		3.45		0.21		0.00												
Quasi Permanenti		3.45		0.20		0.00												
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[cm ²]	[kg/m]	[kgm]											[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 1008 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																			
441	SLU	0.25	19.01	0.00	15.21			18835.5	19784.6	0.95	0.34	-9809.3	11139.5	0.88	0.22				
SLE	Rare							5017.3				0.0				-0.0	46.7	1031.7	3.9
SLE	Freq							4639.8				0.0				-0.0	43.2	954.0	3.6
SLE	Q.P.							4513.7				0.0				-0.0	42.0	928.1	3.5
CAM	SLU	2.72	9.42	0.00	10.18	2959.7	-5294.7	0.0	10136.2	0.00	0.13	-5285.7	10644.0	0.50	0.15				
SLE	Rare					2161.3	-3866.4	0.0				-3859.8				39.5	-0.0	283.7	1435.1
SLE	Freq					1992.6	-3564.5	0.0				-3558.5				36.4	-0.0	261.5	1323.1
SLE	Q.P.					1936.3	-3463.9	0.0				-3458.0				35.3	-0.0	254.1	1285.7
450	SLU	5.20	15.21	0.00	15.21			15001.9	17051.7	0.88	0.32	-10435.8	11142.2	0.94	0.22				
SLE	Rare							2587.8				0.0				-0.0	26.3	649.6	25.6
SLE	Freq							2370.0				0.0				-0.0	24.0	594.9	23.5
SLE	Q.P.							2299.0				0.0				-0.0	23.3	577.1	22.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.70	0.12	0.00
Quasi Permanenti	2.70	0.12	0.00

- VERIFICHE A TAGLIO Trave 422 432 Sez. 1 70x34 70x34 [cm] L_{asse} 5.35 L_{netta} 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	10584.4	12654.6	72039.0	20365.5	ø 8 2br. 7.5'
0.49	4.76	4.27	10285.1	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	10943.4	12654.6	72039.0	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 432 441 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	11028.1	12654.6	72039.0	20365.5	ø 8 2br. 7.5'
0.63	6.27	5.65	10299.2	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	11028.1	12654.6	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 441 450 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	10943.4	12654.6	72039.0	20365.5	ø 8 2br. 7.5'
0.59	4.86	4.27	10285.1	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	10584.4	12654.6	72039.0	20365.5	ø 8 2br. 7.5'

- Travata: 107 Travata 423 433 442 451

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 123 133 142 151
- 124 134 143 152
- 126 135 144 153
- 127 136 145 154
- 128 137 146 155
- 129 138 147 156
- 130 139 148 157
- 131 140 149 158
- 223 233 242 251
- 224 234 243 252
- 226 235 244 253
- 227 236 245 254
- 228 237 246 255
- 229 238 247 256

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 230 239 248 257
- 231 240 249 258
- 323 333 342 351
- 324 334 343 352
- 326 335 344 353
- 327 336 345 354
- 328 337 346 355
- 329 338 347 356
- 330 339 348 357
- 331 340 349 358
- 424 434 443 452
- 426 435 444 453
- 427 436 445 454
- 428 437 446 455
- 429 438 447 456
- 430 439 448 457
- 431 440 449 458

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 107 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																		
423	SLU	0.15	18.10	0.00	11.40		15689.5	18955.8	0.83	0.32	-7672.2	8609.0	0.89	0.20				
SLE	Rare						6682.0				0.0				-0.0	63.7	1441.3	11.5
SLE	Freq						6066.8				0.0				-0.0	57.8	1308.6	10.4
SLE	Q.P.						5872.5				0.0				-0.0	56.0	1266.7	10.1
CAM	SLU	2.63	9.42	0.00	12.57	5520.0	-9874.7	0.0	10166.0	0.00	0.13	-9859.1	12862.7	0.77	0.16			
SLE	Rare					4013.8	-7180.4	0.0				-7168.7			68.1	-0.0	533.0	2184.4
SLE	Freq					3674.1	-6572.6	0.0				-6561.4			62.4	-0.0	487.8	1999.3
SLE	Q.P.					3560.8	-6370.0	0.0				-6359.2			60.4	-0.0	472.8	1937.7
433	SLU	5.10	26.55	0.00	15.21		21032.6	24956.6	0.84	0.38	-5485.8	11119.3	0.49	0.22				
SLE	Rare						10186.9				0.0				-0.0	85.0	1557.8	128.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							9333.6				0.0				-0.0	77.9	1427.3	118.0
SLE	Q.P.							9048.8				0.0				-0.0	75.5	1383.8	114.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm		Estradosso mm						
Frequenti		2.65										0.19		0.00						
Quasi Permanenti		2.65										0.18		0.00						
Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	Mri	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 107 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																				
433	SLU	0.25	26.55	0.00	15.21			23479.7	24956.6	0.94	0.38	-1873.1	11119.3	0.17	0.22					
SLE	Rare							14461.7				0.0					-0.0	120.7	2211.5	182.8
SLE	Freq							13228.0				0.0					-0.0	110.4	2022.8	167.2
SLE	Q.P.							12816.5				0.0					-0.0	107.0	1959.9	162.0
CAM	SLU	3.45	9.42	0.00	18.10	5520.0	-16425.4	0.0	10228.9	0.00	0.14	-16425.4	17911.7	0.92	0.19					
SLE	Rare					4013.8	-11943.6	0.0				-11943.6					101.2	-0.0	888.3	2585.6
SLE	Freq					3674.1	-10932.7	0.0				-10932.7					92.7	-0.0	813.1	2366.7
SLE	Q.P.					3560.8	-10595.7	0.0				-10595.7					89.8	-0.0	788.0	2293.8
442	SLU	6.65	26.55	0.00	15.21			23492.3	24956.6	0.94	0.38	-1821.2	11119.3	0.16	0.22					
SLE	Rare							14538.0				0.0					-0.0	121.4	2223.2	183.8
SLE	Freq							13298.9				0.0					-0.0	111.0	2033.7	168.1
SLE	Q.P.							12885.7				0.0					-0.0	107.6	1970.5	162.9

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		3.45		0.25		0.00													
Quasi Permanenti		3.45		0.24		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 107 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																			
442	SLU	0.25	26.55	0.00	15.21			21013.5	24956.6	0.84	0.38	-5489.5	11119.3	0.49	0.22				
SLE	Rare							10465.0				0.0			-0.0	87.4	1600.3	132.3	
SLE	Freq							9585.9				0.0			-0.0	80.0	1465.9	121.2	
SLE	Q.P.							9292.6				0.0			-0.0	77.6	1421.0	117.5	
CAM	SLU	2.72	9.42	0.00	12.57	5520.0	-9874.7	0.0	10166.0	0.00	0.13	-9881.4	12862.7	0.77	0.16				
SLE	Rare					4013.8	-7180.4	0.0				-7184.8			68.3	-0.0	534.2	2189.3	
SLE	Freq					3674.1	-6572.6	0.0				-6576.1			62.5	-0.0	488.9	2003.8	
SLE	Q.P.					3560.8	-6370.0	0.0				-6373.2			60.6	-0.0	473.8	1942.0	
451	SLU	5.20	18.10	0.00	11.40			15689.3	18955.8	0.83	0.32	-7651.8	8609.0	0.89	0.20				
SLE	Rare							5437.3				0.0			-0.0	51.8	1172.8	9.3	
SLE	Freq							4927.3				0.0			-0.0	47.0	1062.8	8.4	
SLE	Q.P.							4762.9				0.0			-0.0	45.4	1027.3	8.2	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm	
Frequenti		2.94		0.19		0.00	
Quasi Permanenti		2.94		0.18		0.00	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 423 433 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	15066.9	11497.5	72039.0	20365.5	ø 8 2br. 7.5'
0.49	4.76	4.27	14217.0	11875.5	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	16168.5	12654.6	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 433 442 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	19568.3	12654.6	72039.0	20365.5	ø 8 2br. 7.5'
0.63	6.27	5.65	17300.8	13410.4	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	19604.6	12654.6	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 442 451 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	16480.2	12654.6	72039.0	20365.5	ø 8 2br. 7.5'
0.62	4.83	4.21	14298.6	11875.5	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.83	5.20	0.37	15066.9	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

- Travata: 1108 Travata 522 532 541 550

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 122 132 141 150

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 1108 /1 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 q_{medio} 2161.3 [kg/m] (VALORE CARATTERISTICO)																		
522	SLU	0.15	7.63	0.00	7.63		9462.3	10392.5	0.91	0.21	-5352.6	6091.1	0.88	0.17				
SLE	Rare						2466.3				0.0				-0.0	32.3	1151.6	157.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							2258.0				0.0				-0.0	29.6	1054.3	144.2
SLE	Q.P.							2185.9				0.0				-0.0	28.7	1020.6	139.6
CAM	SLU	2.63	7.63	0.00	10.18	2959.7	-5294.7	0.0	8455.2	0.00	0.12	-5285.7	10635.6	0.50	0.14				
SLE	Rare					2161.3	-3866.4	0.0				-3859.8				40.2	-0.0	299.7	1433.7
SLE	Freq					1992.6	-3564.5	0.0				-3558.5				37.0	-0.0	276.3	1321.8
SLE	Q.P.					1936.3	-3463.9	0.0				-3458.0				36.0	-0.0	268.5	1284.5
532	SLU	5.10	11.40	0.00	7.63			12519.0	13701.5	0.91	0.26	-3755.1	6129.1	0.61	0.18				
SLE	Rare							5134.8				0.0				-0.0	57.7	1684.9	142.4
SLE	Freq							4750.9				0.0				-0.0	53.4	1559.0	131.7
SLE	Q.P.							4624.6				0.0				-0.0	52.0	1517.5	128.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm					
Frequenti						2.65					0.12				0.00					
Quasi Permanenti						2.65					0.12				0.00					
Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	Mri	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 1108 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																				
532	SLU	0.25	11.40	0.00	7.63		13443.1	13701.5	0.98	0.26	-1652.3	6129.1	0.27	0.18						
SLE	Rare						7030.7				0.0						-0.0	79.0	2307.1	194.9
SLE	Freq						6481.2				0.0						-0.0	72.9	2126.7	179.7
SLE	Q.P.						6298.0				0.0						-0.0	70.8	2066.6	174.6
CAM	SLU	3.45	7.63	0.00	10.18	2959.7	-8807.0	0.0	8455.2	0.00	0.12	-8807.0	10635.6	0.83	0.14					
SLE	Rare					2161.3	-6431.3	0.0				-6431.3					66.9	-0.0	499.3	2388.9
SLE	Freq					1992.6	-5929.2	0.0				-5929.2					61.7	-0.0	460.3	2202.4

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.					1936.3	-5761.8	0.0				-5761.8				59.9	-0.0	447.3	2140.2
541	SLU	6.65	11.40	0.00	7.63			13469.9	13701.5	0.98	0.26	-1625.5	6129.1	0.27	0.18				
SLE	Rare							7059.2				0.0				-0.0	79.4	2316.4	195.7
SLE	Freq							6509.1				0.0				-0.0	73.2	2135.9	180.5
SLE	Q.P.							6325.7				0.0				-0.0	71.1	2075.7	175.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm														
Frequenti		3.45		0.21		0.00														
Quasi Permanenti		3.45		0.20		0.00														
Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	Mri	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 1108 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																				
541	SLU	0.25	11.40	0.00	7.63			12510.5	13701.5	0.91	0.26	-3803.3	6129.1	0.62	0.18					
SLE	Rare							5136.6				0.0					-0.0	57.7	1685.5	142.4
SLE	Freq							4750.4				0.0					-0.0	53.4	1558.8	131.7
SLE	Q.P.							4623.8				0.0					-0.0	52.0	1517.3	128.2
CAM	SLU	2.72	7.63	0.00	10.18	2959.7	-5294.7	0.0	8455.2	0.00	0.12	-5285.7	10635.6	0.50	0.14					
SLE	Rare					2161.3	-3866.4	0.0				-3859.8					40.2	-0.0	299.7	1433.7
SLE	Freq					1992.6	-3564.5	0.0				-3558.5					37.0	-0.0	276.3	1321.8
SLE	Q.P.					1936.3	-3463.9	0.0				-3458.0					36.0	-0.0	268.5	1284.5
550	SLU	5.20	7.63	0.00	7.63			9733.0	10392.5	0.94	0.21	-5598.7	6091.1	0.92	0.17					
SLE	Rare							2465.5				0.0					-0.0	32.3	1151.2	157.5
SLE	Freq							2258.9				0.0					-0.0	29.6	1054.7	144.3
SLE	Q.P.							2187.0				0.0					-0.0	28.7	1021.2	139.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.70	0.12	0.00
Quasi Permanenti	2.70	0.12	0.00

- VERIFICHE A TAGLIO Trave 522 532 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	8226.9	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.49	4.76	4.27	8035.7	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	8694.1	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 532 541 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	9470.9	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.63	6.27	5.65	8566.1	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	9477.0	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 541 550 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	8694.1	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.59	4.86	4.27	8035.7	11070.0	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	8226.9	10057.8	72039.0	20365.5	ø 8 2br. 7.5'

- Travata: 224 Travata 522 523 524 525 526 527 528 529 530 531 1551

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 222 223 224 225 226 227 228 229 230 231 1251
- 322 323 324 325 326 327 328 329 330 331 1351
- 422 423 424 425 426 427 428 429 430 431 1451

Nodo	x	Afe	Afe _l	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 224 /1 Sez. 2 30x34 30x34 [cm] L_{asse}3.75 L_{netta}3.25 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
522	SLU	0.25	5.09	0.00	5.09			5930.6	6202.6	0.96	0.28	-2516.2	3860.7	0.65	0.20				
SLE	Rare							1805.5				0.0				-0.0	46.4	1316.2	93.9
SLE	Freq							1725.5				0.0				-0.0	44.4	1257.9	89.8
SLE	Q.P.							1707.2				0.0				-0.0	43.9	1244.5	88.8
CAM	SLU	1.88	4.02	0.00	7.63	1999.5	-1757.4	26.5	4379.2	0.01	0.13	-1757.4	7736.3	0.23	0.18				
SLE	Rare					1367.0	-1201.5	0.0				-1201.5				23.0	-0.0	214.6	603.1
SLE	Freq					1367.0	-1201.5	0.0				-1201.5				23.0	-0.0	214.6	603.1
SLE	Q.P.					1367.0	-1201.5	0.0				-1201.5				23.0	-0.0	214.6	603.1
523	SLU	3.50	4.02	0.00	5.09			4201.4	5420.7	0.78	0.27	-3716.8	3861.5	0.96	0.19				
SLE	Rare							549.5				-22.4				0.8	15.5	491.4	50.7
SLE	Freq							569.2				-11.2				0.4	16.1	509.1	52.5
SLE	Q.P.							571.5				-8.6				0.3	16.1	511.1	52.7

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	1.88	0.04	0.00
Quasi Permanenti	1.88	0.04	0.00

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 224 /2 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
523	SLU	0.25	4.02	0.00	5.09			5195.7	5420.7	0.96	0.27	-2796.3	3861.5	0.72	0.19				
SLE	Rare							1227.0				0.0				-0.0	34.6	1097.2	113.2
SLE	Freq							1204.8				0.0				-0.0	34.0	1077.4	111.2
SLE	Q.P.							1199.7				0.0				-0.0	33.9	1072.8	110.7
CAM	SLU	1.90	4.02	0.00	7.63	1999.5	-1804.5	0.0	4379.2	0.00	0.13	-1804.5	7736.3	0.23	0.18				
SLE	Rare					1367.0	-1233.7	0.0				-1233.7				23.6	-0.0	220.3	619.3
SLE	Freq					1367.0	-1233.7	0.0				-1233.7				23.6	-0.0	220.3	619.3
SLE	Q.P.					1367.0	-1233.7	0.0				-1233.7				23.6	-0.0	220.3	619.3
524	SLU	3.55	4.02	0.00	5.09			4775.3	5420.7	0.88	0.27	-3183.9	3861.5	0.82	0.19				
SLE	Rare							1037.5				0.0				-0.0	29.3	927.8	95.7
SLE	Freq							1047.1				0.0				-0.0	29.5	936.4	96.6
SLE	Q.P.							1048.4				0.0				-0.0	29.6	937.5	96.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
		[m]		mm		mm	
Frequenti		1.90		0.04		0.00	
Quasi Permanenti		1.90		0.04		0.00	

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 224 /3 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1055.0 [kg/m] (VALORE CARATTERISTICO)																			
524	SLU	0.25	4.02	0.00	5.09			4764.6	5420.7	0.88	0.27	-3828.8	3861.5	0.99	0.19				
SLE	Rare							662.3				-31.7				1.1	18.7	592.2	61.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							677.6				-19.8				0.7	19.1	605.9	62.5
SLE	Q.P.							679.1				-17.5				0.6	19.2	607.3	62.7
CAM	SLU	1.90	4.02	0.00	7.63	1531.5	-1382.2	57.7	4379.2	0.01	0.13	-1382.2	7736.3	0.18	0.18				
SLE	Rare					1055.0	-952.1	0.0				-952.1				18.2	-0.0	170.0	478.0
SLE	Freq					1055.0	-952.1	0.0				-952.1				18.2	-0.0	170.0	478.0
SLE	Q.P.					1055.0	-952.1	0.0				-952.1				18.2	-0.0	170.0	478.0
525	SLU	3.55	5.09	0.00	5.09			6038.7	6202.6	0.97	0.28	-2760.7	3860.7	0.72	0.20				
SLE	Rare							1806.3				0.0				-0.0	46.4	1316.7	94.0
SLE	Freq							1694.1				0.0				-0.0	43.5	1235.0	88.1
SLE	Q.P.							1673.5				0.0				-0.0	43.0	1220.0	87.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]						Intradosso mm				Estradosso mm			
Frequenti						3.55						0.00				0.03			
Quasi Permanenti						1.90						0.03				0.00			
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /4 Sez. 2 30x34 30x34 [cm] L_{asse}0.59 L_{netta}0.09 q_{medio}1055.0 [kg/m] (VALORE CARATTERISTICO)																			
525	SLU	0.25	5.09	0.00	5.09		1797.3	6219.8	0.29	0.29	-785.6	3787.7	0.21	0.21					
SLE	Rare						1271.9				-18.1				0.7	33.6	933.4	87.6	
SLE	Freq						1184.8				-18.1				0.7	31.3	869.4	81.6	
SLE	Q.P.						1168.2				-18.1				0.7	30.9	857.3	80.4	
CAM	SLU	0.30	5.09	0.00	5.09	1531.5	-33.3	1797.3	6724.9	0.27	0.25	-785.6	3787.7	0.21	0.21				
SLE	Rare					1055.0	-23.0	599.8				-23.0			0.8	15.8	440.2	41.3	
SLE	Freq					1055.0	-23.0	598.6				-23.0			0.8	15.8	439.2	41.2	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.					1055.0	-23.0	597.1				-23.0				0.8	15.8	438.2	41.1
526	SLU	0.34	5.09	0.00	5.09			1797.3	6219.8	0.29	0.29	-790.2	3787.7	0.21	0.21				
SLE	Rare							55.4				-92.5				3.4	1.5	40.7	96.0
SLE	Freq							66.1				-53.0				1.9	1.7	48.5	55.0
SLE	Q.P.							66.1				-45.3				1.7	1.7	48.5	47.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		0.25		0.00		0.02													
Quasi Permanenti		0.25		0.00		0.02													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{re} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{ri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
526	SLU	0.25	5.09	0.00	5.09			5937.0	6202.6	0.96	0.28	-2532.5	3860.7	0.66	0.20				
SLE	Rare							1839.8				0.0			-0.0	47.3	1341.2	95.7	
SLE	Freq							1798.6				0.0			-0.0	46.2	1311.1	93.6	
SLE	Q.P.							1787.8				0.0			-0.0	46.0	1303.3	93.0	
CAM	SLU	2.03	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
SLE	Freq					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
527	SLU	3.80	4.02	0.00	5.09			4680.5	5420.7	0.86	0.27	-3548.9	3861.5	0.92	0.19				
SLE	Rare							837.1				0.0			-0.0	23.6	748.6	77.3	
SLE	Freq							852.9				0.0			-0.0	24.1	762.7	78.7	
SLE	Q.P.							854.9				0.0			-0.0	24.1	764.5	78.9	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm												
Frequenti		2.03		0.05		0.00												
Quasi Permanenti		2.03		0.05		0.00												
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 224 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
527	SLU	0.25	4.02	0.00	5.09		5134.7	5420.7	0.95	0.27	-2521.7	3861.5	0.65	0.19				
SLE	Rare						1365.1				0.0				-0.0	38.5	1220.8	126.0
SLE	Freq						1360.3				0.0				-0.0	38.4	1216.5	125.5
SLE	Q.P.						1359.0				0.0				-0.0	38.3	1215.3	125.4
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18			
SLE	Rare					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5
528	SLU	3.80	4.02	0.00	5.09		4900.8	5420.7	0.90	0.27	-2762.0	3861.5	0.72	0.19				
SLE	Rare						1290.9				0.0				-0.0	36.4	1154.4	119.1
SLE	Freq						1294.4				0.0				-0.0	36.5	1157.5	119.5
SLE	Q.P.						1294.8				0.0				-0.0	36.5	1157.9	119.5

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]				mm				mm									
Frequenti		2.02				0.05				0.00									
Quasi Permanenti		2.02				0.05				0.00									
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 224 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
528	SLU	0.25	4.02	0.00	5.09			5154.5	5420.7	0.95	0.27	-2502.9	3861.5	0.65	0.19				
SLE	Rare							1409.8				0.0				-0.0	39.8	1260.7	130.1
SLE	Freq							1401.5				0.0				-0.0	39.5	1253.4	129.3
SLE	Q.P.							1399.5				0.0				-0.0	39.5	1251.5	129.2
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
529	SLU	3.80	4.02	0.00	5.09			4891.2	5420.7	0.90	0.27	-2735.0	3861.5	0.71	0.19				
SLE	Rare							1272.8				0.0				-0.0	35.9	1138.2	117.5
SLE	Freq							1277.1				0.0				-0.0	36.0	1142.1	117.9
SLE	Q.P.							1277.6				0.0				-0.0	36.1	1142.5	117.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione				Intradosso				Estradosso								
		[m]				mm				mm								
Frequenti		2.02				0.05				0.00								
Quasi Permanenti		2.02				0.05				0.00								
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 224 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
529	SLU	0.25	4.02	0.00	5.09			5134.4	5420.7	0.95	0.27	-2491.4	3861.5	0.65	0.19				
SLE	Rare							1443.3				0.0				-0.0	40.7	1290.7	133.2
SLE	Freq							1432.1				0.0				-0.0	40.4	1280.7	132.2
SLE	Q.P.							1429.5				0.0				-0.0	40.3	1278.4	131.9
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
530	SLU	3.80	4.02	0.00	5.09			4877.2	5420.7	0.90	0.27	-2711.0	3861.5	0.70	0.19				
SLE	Rare							1242.4				0.0				-0.0	35.1	1111.1	114.7
SLE	Freq							1248.2				0.0				-0.0	35.2	1116.2	115.2
SLE	Q.P.							1248.9				0.0				-0.0	35.2	1116.9	115.3

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.02		0.05		0.00													
Quasi Permanenti		2.02		0.05		0.00													
Nodo	x [m]	A _{fe} [cm ²]	A _{fe_t} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} M _{re}	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} M _{ri}	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
530	SLU	0.25	4.02	0.00	5.09			5116.6	5420.7	0.94	0.27	-2455.4	3861.5	0.64	0.19				
SLE	Rare							1477.8				0.0				-0.0	41.7	1321.5	136.4
SLE	Freq							1464.3				0.0				-0.0	41.3	1309.5	135.1
SLE	Q.P.							1461.2				0.0				-0.0	41.2	1306.7	134.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
531	SLU	3.80	4.02	0.00	7.63			4720.0	5541.6	0.85	0.29	-2672.7	5595.5	0.48	0.24				
SLE	Rare							1176.8				0.0				-0.0	33.6	1038.8	99.3
SLE	Freq							1186.1				0.0				-0.0	33.9	1047.0	100.0
SLE	Q.P.							1187.3				0.0				-0.0	33.9	1048.0	100.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm				
Frequenti						2.02					0.05				0.00				
Quasi Permanenti						2.02					0.05				0.00				
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /10 Sez. 2 30x34 30x34 [cm] L_{asse}4.17 L_{netta}3.82 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
531	SLU	0.25	4.02	0.00	7.63			5396.1	5541.6	0.97	0.29	-4251.6	5595.5	0.76	0.24				
SLE	Rare							925.7				0.0				-0.0	26.5	817.1	78.1
SLE	Freq							947.4				0.0				-0.0	27.1	836.3	79.9
SLE	Q.P.							950.0				0.0				-0.0	27.2	838.6	80.1
CAM	SLU	2.16	4.02	0.00	7.63	1999.5	-2167.9	0.0	4379.2	0.00	0.13	-2158.4	7736.3	0.28	0.18				
SLE	Rare					1367.0	-1482.1	0.0				-1475.6				28.3	-0.0	263.5	740.8
SLE	Freq					1367.0	-1482.1	0.0				-1475.6				28.3	-0.0	263.5	740.8
SLE	Q.P.					1367.0	-1482.1	0.0				-1475.6				28.3	-0.0	263.5	740.8
1551	SLU	4.07	9.42	0.00	5.09			5958.0	9383.4	0.63	0.34	-2549.5	3859.5	0.66	0.20				

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SLE	Rare						1999.7				0.0				-0.0	40.9	838.0	41.3
SLE	Freq						1919.5				0.0				-0.0	39.2	804.4	39.6
SLE	Q.P.						1902.7				0.0				-0.0	38.9	797.4	39.3

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	1.92	0.05	0.00
Quasi Permanenti	1.92	0.05	0.00

- VERIFICHE A TAGLIO Trave 522 523 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	5318.1	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.16	2.57	4853.3	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	5077.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 523 524 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	5068.4	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.21	2.62	4603.6	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	5068.4	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 524 525 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4553.3	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.21	2.62	4509.6	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	4926.8	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

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- VERIFICHE A TAGLIO Trave 526 527 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5261.4	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4741.5	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5040.9	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 527 528 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5041.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4521.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5041.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 528 529 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	5041.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.43	2.80	4528.9	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	5041.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 529 530 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5041.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4521.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5041.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 530 531 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5529.6	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5009.6	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5075.2	5717.2	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 531 1551 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.66	0.41	4969.3	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.66	3.66	3.00	6077.6	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.66	4.07	0.41	6636.4	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 225 Travata 550 551 552 553 554 555 556 557 558 1569

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 250 251 252 253 254 255 256 257 258 1269

Nodo	x [m]	Afe [cm ²]	Afe _l [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 225 /1 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 q_{medio} 1367.0 [kg/m] (VALORE CARATTERISTICO)																		
550	SLU	0.25	7.63	0.00	7.63		5834.4	8156.5	0.72	0.33	-3088.6	5590.2	0.55	0.22				
SLE	Rare						1802.4				0.0				-0.0	39.5	912.5	1.7
SLE	Freq						1724.0				0.0				-0.0	37.8	872.8	1.6
SLE	Q.P.						1707.0				0.0				-0.0	37.4	864.2	1.6
CAM	SLU	1.88	4.02	0.00	7.63	1999.5	-1757.4	13.9	4379.2	0.00	0.13	-1757.4	7736.3	0.23	0.18			
SLE	Rare					1367.0	-1201.5	0.0			-1201.5				23.0	-0.0	214.6	603.1
SLE	Freq					1367.0	-1201.5	0.0			-1201.5				23.0	-0.0	214.6	603.1
SLE	Q.P.					1367.0	-1201.5	0.0			-1201.5				23.0	-0.0	214.6	603.1
551	SLU	3.50	5.09	0.00	5.09		4764.5	6202.6	0.77	0.28	-3621.5	3860.7	0.94	0.20				
SLE	Rare						549.3				0.0				-0.0	14.1	400.4	28.6
SLE	Freq						569.3				0.0				-0.0	14.6	415.0	29.6
SLE	Q.P.						571.5				0.0				-0.0	14.7	416.6	29.7

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		1.88		0.04		0.00													
Quasi Permanenti		1.88		0.04		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 225 /2 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
551	SLU	0.25	5.09	0.00	5.09			5273.4	6202.6	0.85	0.28	-2974.2	3860.7	0.77	0.20				
SLE	Rare							1265.3				0.0			-0.0	32.5	922.4	65.8	
SLE	Freq							1248.1				0.0			-0.0	32.1	909.9	64.9	
SLE	Q.P.							1244.2				0.0			-0.0	32.0	907.0	64.7	
CAM	SLU	1.90	4.02	0.00	7.63	1999.5	-1804.5	0.0	4379.2	0.00	0.13	-1804.5	7736.3	0.23	0.18				
SLE	Rare					1367.0	-1233.7	0.0				-1233.7			23.6	-0.0	220.3	619.3	
SLE	Freq					1367.0	-1233.7	0.0				-1233.7			23.6	-0.0	220.3	619.3	
SLE	Q.P.					1367.0	-1233.7	0.0				-1233.7			23.6	-0.0	220.3	619.3	
552	SLU	3.55	5.09	0.00	5.09			5082.2	6202.6	0.82	0.28	-3230.5	3860.7	0.84	0.20				
SLE	Rare							1035.6				0.0			-0.0	26.6	755.0	53.9	
SLE	Freq							1045.8				0.0			-0.0	26.9	762.4	54.4	
SLE	Q.P.							1047.2				0.0			-0.0	26.9	763.4	54.5	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm	
Frequenti		1.90		0.04		0.00	
Quasi Permanenti		1.90		0.04		0.00	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 225 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.39 L_{netta}3.89 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
552	SLU	0.25	5.09	0.00	5.09		5305.0	6202.6	0.86	0.28	-2356.4	3860.7	0.61	0.20				
SLE	Rare						1673.0				0.0				-0.0	43.0	1219.6	87.0
SLE	Freq						1661.9				0.0				-0.0	42.7	1211.5	86.5
SLE	Q.P.						1659.2				0.0				-0.0	42.7	1209.6	86.3
CAM	SLU	2.19	4.02	0.00	7.63	1999.5	-2408.4	0.0	4379.2	0.00	0.13	-2408.4	7736.3	0.31	0.18			
SLE	Rare					1367.0	-1646.6	0.0				-1646.6			31.5	-0.0	294.1	826.6
SLE	Freq					1367.0	-1646.6	0.0				-1646.6			31.5	-0.0	294.1	826.6
SLE	Q.P.					1367.0	-1646.6	0.0				-1646.6			31.5	-0.0	294.1	826.6
553	SLU	4.14	5.09	0.00	5.09		5145.3	6202.6	0.83	0.28	-2518.7	3860.7	0.65	0.20				
SLE	Rare						1528.5				0.0				-0.0	39.3	1114.3	79.5
SLE	Freq						1534.5				0.0				-0.0	39.4	1118.7	79.8
SLE	Q.P.						1535.3				0.0				-0.0	39.5	1119.2	79.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso	
		[m]		mm		mm	
Frequenti		2.19		0.06		0.00	
Quasi Permanenti		2.19		0.06		0.00	

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 225 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
553	SLU	0.25	5.09	0.00	5.09		5267.9	6202.6	0.85	0.28	-2723.5	3860.7	0.71	0.20				
SLE	Rare						1360.5				0.0				-0.0	35.0	991.8	70.8

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SLE	Freq							1357.2				0.0				-0.0	34.9	989.4	70.6
SLE	Q.P.							1356.2				0.0				-0.0	34.9	988.7	70.6
CAM	SLU	2.03	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
554	SLU	3.80	5.09	0.00	5.09			5135.4	6202.6	0.83	0.28	-2828.3	3860.7	0.73	0.20				
SLE	Rare							1332.8				0.0				-0.0	34.3	971.6	69.3
SLE	Freq							1334.5				0.0				-0.0	34.3	972.8	69.4
SLE	Q.P.							1334.7				0.0				-0.0	34.3	973.0	69.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.03		0.05		0.00													
Quasi Permanenti		2.03		0.05		0.00													
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 225 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
554	SLU	0.25	5.09	0.00	5.09		5273.2	6202.6	0.85	0.28	-2703.3	3860.7	0.70	0.20					
SLE	Rare						1436.7				0.0				-0.0	36.9	1047.3	74.7	
SLE	Freq						1425.2				0.0				-0.0	36.6	1039.0	74.1	
SLE	Q.P.						1422.5				0.0				-0.0	36.6	1037.0	74.0	
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5

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SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
555	SLU	3.80	5.09	0.00	5.09			5116.5	6202.6	0.82	0.28	-2858.6	3860.7	0.74	0.20				
SLE	Rare							1255.0				0.0				-0.0	32.3	914.8	65.3
SLE	Freq							1260.5				0.0				-0.0	32.4	918.9	65.6
SLE	Q.P.							1261.2				0.0				-0.0	32.4	919.4	65.6

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.02		0.05		0.00													
Quasi Permanenti		2.02		0.05		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{re} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{ri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 225 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
555	SLU	0.25	5.09	0.00	5.09			5271.6	6202.6	0.85	0.28	-2704.2	3860.7	0.70	0.20				
SLE	Rare							1454.5				0.0				-0.0	37.4	1060.3	75.7
SLE	Freq							1441.6				0.0				-0.0	37.1	1050.9	75.0
SLE	Q.P.							1438.6				0.0				-0.0	37.0	1048.7	74.8
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Freq					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4				26.8	-0.0	250.3	703.5
556	SLU	3.80	5.09	0.00	5.09			5116.1	6202.6	0.82	0.28	-2858.4	3860.7	0.74	0.20				
SLE	Rare							1236.1				0.0				-0.0	31.8	901.1	64.3
SLE	Freq							1242.5				0.0				-0.0	31.9	905.8	64.6
SLE	Q.P.							1243.3				0.0				-0.0	32.0	906.4	64.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm				
Frequenti						2.02					0.05				0.00				
Quasi Permanenti						2.02					0.05				0.00				
Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 225 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
556	SLU	0.25	5.09	0.00	5.09			5443.0	6202.6	0.88	0.28	-2704.2	3860.7	0.70	0.20				
SLE	Rare							1475.0				0.0			-0.0	37.9	1075.3	76.7	
SLE	Freq							1460.4				0.0			-0.0	37.5	1064.6	76.0	
SLE	Q.P.							1457.0				0.0			-0.0	37.5	1062.2	75.8	
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
SLE	Freq					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
557	SLU	3.80	5.09	0.00	5.09			5297.5	6202.6	0.85	0.28	-2868.7	3860.7	0.74	0.20				
SLE	Rare							1216.0				0.0			-0.0	31.3	886.5	63.3	
SLE	Freq							1223.5				0.0			-0.0	31.4	891.9	63.6	
SLE	Q.P.							1224.4				0.0			-0.0	31.5	892.6	63.7	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione					Intradosso				Estradosso			
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]				mm				mm									
Frequenti		2.02				0.05				0.00									
Quasi Permanenti		2.02				0.05				0.00									
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	Mre		[kgm]	[kgm]	Mri		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 225 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
557	SLU	0.25	5.09	0.00	5.09			5724.0	6202.6	0.92	0.28	-2774.6	3860.7	0.72	0.20				
SLE	Rare							1504.7				0.0			-0.0	38.7	1096.9	78.3	
SLE	Freq							1488.0				0.0			-0.0	38.2	1084.7	77.4	
SLE	Q.P.							1484.2				0.0			-0.0	38.2	1082.0	77.2	
CAM	SLU	2.02	4.02	0.00	7.63	1999.5	-2049.8	0.0	4379.2	0.00	0.13	-2049.8	7736.3	0.26	0.18				
SLE	Rare					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
SLE	Freq					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
SLE	Q.P.					1367.0	-1401.4	0.0				-1401.4			26.8	-0.0	250.3	703.5	
558	SLU	3.80	5.09	0.00	5.09			5558.9	6202.6	0.90	0.28	-3216.0	3860.7	0.83	0.20				
SLE	Rare							1159.6				0.0			-0.0	29.8	845.3	60.3	
SLE	Freq							1170.0				0.0			-0.0	30.1	852.9	60.9	
SLE	Q.P.							1171.5				0.0			-0.0	30.1	854.0	60.9	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione				Intradosso				Estradosso								
		[m]				mm				mm								
Frequenti		2.02				0.05				0.00								
Quasi Permanenti		2.02				0.05				0.00								
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	Mre		[kgm]	[kgm]	Mri		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 225 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.17 L_{netta}3.82 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
558	SLU	0.25	5.09	0.00	5.09			5216.1	6202.6	0.84	0.28	-3646.1	3860.7	0.94	0.20				
SLE	Rare							981.7				0.0				-0.0	25.2	715.7	51.1
SLE	Freq							999.4				0.0				-0.0	25.7	728.6	52.0
SLE	Q.P.							1001.7				0.0				-0.0	25.7	730.2	52.1
CAM	SLU	2.16	4.02	0.00	7.63	1999.5	-2167.9	0.0	4379.2	0.00	0.13	-2158.4	7736.3	0.28	0.18				
SLE	Rare					1367.0	-1482.1	0.0				-1475.6				28.3	-0.0	263.5	740.8
SLE	Freq					1367.0	-1482.1	0.0				-1475.6				28.3	-0.0	263.5	740.8
SLE	Q.P.					1367.0	-1482.1	0.0				-1475.6				28.3	-0.0	263.5	740.8
1569	SLU	4.07	7.63	0.00	5.09			5766.8	8095.9	0.71	0.32	-2556.3	3859.6	0.66	0.19				
SLE	Rare							1849.7				0.0				-0.0	40.6	936.3	1.8
SLE	Freq							1788.6				0.0				-0.0	39.2	905.4	1.8
SLE	Q.P.							1776.6				0.0				-0.0	38.9	899.3	1.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.11	0.05	0.00
Quasi Permanenti	2.11	0.05	0.00

- VERIFICHE A TAGLIO Trave 550 551 Sez. 2 30x34 30x34 [cm] L_{asse} 3.75 L_{netta} 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	5919.0	5717.2	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.16	2.57	5454.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	5849.9	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 551 552 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	5305.0	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.59	3.21	2.62	4840.3	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	5305.0	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 552 553 Sez. 2 30x34 30x34 [cm] Lasse 4.39 Lnetta 3.89 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5245.8	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.76	3.14	4732.9	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.76	4.14	0.38	5245.8	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 553 554 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.62	3.43	2.80	4750.3	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 554 555 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4741.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 555 556 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4741.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 556 557 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4741.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 557 558 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4741.2	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5261.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 558 1569 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.67	0.42	5142.6	4994.4	30873.8	20365.5	ø 8 2br. 7.5'
0.67	3.64	2.97	5264.7	5717.2	39745.6	11221.3	Tr.ø 8 2br. 25.0'
3.64	4.07	0.42	5844.2	4994.4	30873.8	20365.5	ø 8 2br. 7.5'

- Travata: 507 Travata 523 533 542 551

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 524 534 543 552
- 526 535 544 553
- 527 536 545 554
- 528 537 546 555
- 529 538 547 556
- 530 539 548 557
- 531 540 549 558

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo		x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 507 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																			
523	SLU	0.15	9.42	0.00	7.63			11426.1	11991.6	0.95	0.23	-3690.9	6109.6	0.60	0.17				
	SLE	Rare						6456.5				0.0				-0.0	77.9	2507.2	279.2
	SLE	Freq						5871.8				0.0				-0.0	70.9	2280.2	253.9
	SLE	Q.P.						5677.7				0.0				-0.0	68.5	2204.8	245.5
CAM	SLU	2.63	7.63	0.00	11.37	5520.0	-9874.7	0.0	8477.1	0.00	0.13	-9857.9	11751.3	0.84	0.15				
	SLE	Rare				4013.8	-7180.4	0.0				-7168.2				71.8	-0.0	559.3	2404.7
	SLE	Freq				3674.1	-6572.6	0.0				-6561.4				65.7	-0.0	512.0	2201.2
	SLE	Q.P.				3560.8	-6370.0	0.0				-6359.2				63.7	-0.0	496.2	2133.3
533	SLU	5.10	22.62	0.00	11.40			15042.5	22227.2	0.68	0.35	0.0	8608.8	0.00	0.20				
	SLE	Rare						10175.8				0.0				-0.0	89.5	1791.2	78.8
	SLE	Freq						9360.5				0.0				-0.0	82.4	1647.7	72.5
	SLE	Q.P.						9088.4				0.0				-0.0	80.0	1599.8	70.4

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm	
Frequenti		2.65		0.22		0.00	
Quasi Permanenti		2.65		0.21		0.00	

Nodo		x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 507 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																			
533	SLU	0.25	22.62	0.00	11.40			19587.7	22227.2	0.88	0.35	0.0	8608.8	0.00	0.20				
	SLE	Rare						14237.5				0.0				-0.0	125.3	2506.1	110.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							13021.4				0.0				-0.0	114.6	2292.1	100.8
SLE	Q.P.							12615.3				0.0				-0.0	111.0	2220.6	97.7
CAM	SLU	3.45	7.63	0.00	18.10	5520.0	-16425.4	0.0	8576.2	0.00	0.14	-16425.4	17922.4	0.92	0.20				
SLE	Rare					4013.8	-11943.6	0.0				-11943.6				103.3	-0.0	928.6	2585.5
SLE	Freq					3674.1	-10932.7	0.0				-10932.7				94.6	-0.0	850.0	2366.7
SLE	Q.P.					3560.8	-10595.7	0.0				-10595.7				91.6	-0.0	823.8	2293.7
542	SLU	6.65	22.62	0.00	11.40			20016.4	22227.2	0.90	0.35	0.0	8608.8	0.00	0.20				
SLE	Rare							14541.3				0.0				-0.0	128.0	2559.6	112.6
SLE	Freq							13303.8				0.0				-0.0	117.1	2341.8	103.0
SLE	Q.P.							12892.7				0.0				-0.0	113.4	2269.4	99.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm					
Frequenti						3.45					0.25				0.00					
Quasi Permanenti						3.45					0.24				0.00					
Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	Mri	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 507 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																				
542	SLU	0.25	22.62	0.00	11.40		15032.4	22227.2	0.68	0.35	0.0	8608.8	0.00	0.20						
SLE	Rare						10380.8					0.0					-0.0	91.3	1827.3	80.4
SLE	Freq						9542.8					0.0					-0.0	84.0	1679.8	73.9
SLE	Q.P.						9263.9					0.0					-0.0	81.5	1630.7	71.7
CAM	SLU	2.72	7.63	0.00	11.37	5520.0	-9874.7	0.0	8477.1	0.00	0.13	-9869.9	11751.3	0.84	0.15					
SLE	Rare					4013.8	-7180.4	0.0				-7176.0					71.9	-0.0	559.9	2407.4
SLE	Freq					3674.1	-6572.6	0.0				-6567.6					65.8	-0.0	512.5	2203.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.					3560.8	-6370.0	0.0				-6365.2				63.7	-0.0	496.7	2135.3
551	SLU	5.20	9.42	0.00	7.63			10997.8	11991.6	0.92	0.23	-3677.7	6109.6	0.60	0.17				
SLE	Rare							5353.1				0.0				-0.0	64.6	2078.8	231.5
SLE	Freq							4853.7				0.0				-0.0	58.6	1884.8	209.9
SLE	Q.P.							4683.3				0.0				-0.0	56.5	1818.6	202.5

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.70	0.22	0.00
Quasi Permanenti	2.70	0.21	0.00

- VERIFICHE A TAGLIO Trave 523 533 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	14456.9	10057.8	72039.0	20365.5	ø 8 2br. 7.5'
0.49	4.76	4.27	13988.8	11486.9	92739.8	17533.2	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	16018.0	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 533 542 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	19517.3	11497.5	72039.0	20365.5	ø 8 2br. 7.5'
0.63	6.27	5.65	17345.4	13410.4	92739.8	17533.2	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	19649.2	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 542 551 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	16406.4	11497.5	72039.0	20365.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.59	4.86	4.27	14325.7	11486.9	92739.8	17533.2	Tr.Ø 10 2br. 25.0'
4.86	5.20	0.34	13889.4	10057.8	72039.0	20365.5	Ø 8 2br. 7.5'

- Travata: 216 Travata 259 260

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 261 262
- 263 264
- 265 266

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 216 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																		
259	SLU	0.25	26.55	0.00	26.55		29374.0	37853.5	0.78	0.29	-28336.3	32883.4	0.86	0.18				
SLE	Rare						518.8				0.0				-0.0	2.4	52.8	11.9
SLE	Freq						518.8				0.0				-0.0	2.4	52.8	11.9
SLE	Q.P.						518.8				0.0				-0.0	2.4	52.8	11.9
CAM	SLU	2.07	9.42	0.00	9.42	796.3	-857.1	4304.5	15099.4	0.29	0.10	-5356.2	14894.5	0.36	0.11			
SLE	Rare					612.5	-659.3	0.0			-659.3				4.2	-0.0	39.5	173.1
SLE	Freq					612.5	-659.3	0.0			-659.3				4.2	-0.0	39.5	173.1
SLE	Q.P.					612.5	-659.3	0.0			-659.3				4.2	-0.0	39.5	173.1
260	SLU	3.90	26.55	0.00	26.55		29374.0	37853.5	0.78	0.29	-28336.3	32883.4	0.86	0.18				
SLE	Rare						518.8				0.0				-0.0	2.4	52.8	11.9
SLE	Freq						518.8				0.0				-0.0	2.4	52.8	11.9
SLE	Q.P.						518.8				0.0				-0.0	2.4	52.8	11.9

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.07	0.02	0.00
Quasi Permanenti	2.07	0.02	0.00

- VERIFICHE A TAGLIO Trave 259 260 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.75	0.50	20497.8	14632.5	77099.1	22885.8	ø 8 2br. 10.0'
0.75	3.40	2.64	20189.6	10361.1	91701.3	27518.3	Tr.ø 10 2br. 25.0'
3.40	3.90	0.50	20497.8	14632.5	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 220 Travata 269 259 261 263 265

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 268 260 262 264 266

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 220 /1 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 q_{medio} 3607.6 [kg/m] (VALORE CARATTERISTICO)																		
269	SLU	0.05	18.49	0.00	18.66		335.8	27825.0	0.01	0.26	-6.5	23039.3	0.00	0.14				
SLE	Rare						4.8				-4.5				0.0	0.0	0.7	0.7
SLE	Freq						4.5				-4.2				0.0	0.0	0.7	0.7
SLE	Q.P.						4.4				-4.2				0.0	0.0	0.6	0.7
CAM	SLU	0.41	21.77	0.00	23.35	5050.3	-331.6	1428.0	34402.1	0.04	0.24	-316.1	29879.1	0.01	0.16			
SLE	Rare					3607.6	-236.9	346.2				-225.8			1.2	1.7	42.2	26.6
SLE	Freq					3420.9	-224.6	328.3				-214.1			1.1	1.6	40.1	25.3
SLE	Q.P.					3358.6	-220.5	322.3				-210.2			1.1	1.6	39.3	24.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

259	SLU	0.77	18.10	0.00	18.10			1719.8	27205.4	0.06	0.27	-83.9	22218.0	0.00	0.17				
SLE	Rare							1228.5				-59.9				0.4	7.0	180.7	23.4
SLE	Freq							1164.9				-56.8				0.4	6.7	171.3	22.2
SLE	Q.P.							1143.7				-55.8				0.4	6.5	168.2	21.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		0.77		0.00		0.01													
Quasi Permanenti		0.77		0.00		0.01													
Nodo	x [m]	Afe [cm ²]	Afe _l [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{BE} [kg/cm ²]	σ _{bl} [kg/cm ²]	σ _{FE} [kg/cm ²]	σ _{ft} [kg/cm ²]	
Trave 220 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
259	SLU	0.25	18.10	0.00	18.10			24800.2	27490.9	0.90	0.25	-13531.7	22796.7	0.59	0.16				
SLE	Rare							6069.3				0.0				-0.0	33.5	879.7	130.0
SLE	Freq							5749.9				0.0				-0.0	31.8	833.4	123.2
SLE	Q.P.							5646.8				0.0				-0.0	31.2	818.4	121.0
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8404.2	0.0	15157.6	0.00	0.09	-8404.2	14968.3	0.56	0.10				
SLE	Rare					3607.6	-6003.4	0.0				-6003.5				38.0	-0.0	364.6	1567.0
SLE	Freq					3420.9	-5692.7	0.0				-5692.7				36.0	-0.0	345.7	1485.9
SLE	Q.P.					3358.6	-5589.1	0.0				-5589.1				35.4	-0.0	339.4	1458.9
261	SLU	4.91	18.10	0.00	11.40			22427.5	27440.2	0.82	0.25	-11751.0	14703.4	0.80	0.13				
SLE	Rare							5746.1				0.0				-0.0	32.6	828.3	136.3
SLE	Freq							5449.2				0.0				-0.0	30.9	785.5	129.2
SLE	Q.P.							5348.6				0.0				-0.0	30.3	771.0	126.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm			
Frequenti						2.58					0.14				0.00			
Quasi Permanenti						2.58					0.14				0.00			
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 220 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
261	SLU	0.25	18.10	0.00	11.40		22240.9	27440.2	0.81	0.25	-10347.9	14703.4	0.70	0.13				
SLE	Rare						6510.4				0.0				-0.0	36.9	938.5	154.4
SLE	Freq						6173.0				0.0				-0.0	35.0	889.9	146.4
SLE	Q.P.						6060.8				0.0				-0.0	34.3	873.7	143.7
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8404.2	0.0	15157.6	0.00	0.09	-8404.2	14968.3	0.56	0.10			
SLE	Rare					3607.6	-6003.4	0.0				-6003.4			38.0	-0.0	364.6	1567.0
SLE	Freq					3420.9	-5692.7	0.0				-5692.7			36.0	-0.0	345.7	1485.9
SLE	Q.P.					3358.6	-5589.1	0.0				-5589.1			35.4	-0.0	339.4	1458.9
263	SLU	4.91	18.10	0.00	11.40		21641.9	27440.2	0.79	0.25	-10881.0	14703.4	0.74	0.13				
SLE	Rare						5868.3				0.0				-0.0	33.3	846.0	139.2
SLE	Freq						5564.7				0.0				-0.0	31.5	802.2	132.0
SLE	Q.P.						5463.0				0.0				-0.0	31.0	787.5	129.6

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione					Intradosso				Estradosso			
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]		mm		mm												
Frequenti		2.58		0.14		0.00												
Quasi Permanenti		2.58		0.14		0.00												
Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bi}	σ _{fE}	σ _{fi}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 220 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
263	SLU	0.25	18.10	0.00	11.40		22776.6	27440.2	0.83	0.25	-11424.2	14703.4	0.78	0.13				
SLE	Rare						6112.7				0.0				-0.0	34.6	881.2	145.0
SLE	Freq						5796.9				0.0				-0.0	32.8	835.7	137.5
SLE	Q.P.						5689.7				0.0				-0.0	32.2	820.2	134.9
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8387.9	0.0	15157.6	0.00	0.09	-8387.9	14968.3	0.56	0.10			
SLE	Rare					3607.6	-5991.8	0.0				-5991.8			37.9	-0.0	363.9	1564.0
SLE	Freq					3420.9	-5681.7	0.0				-5681.7			36.0	-0.0	345.0	1483.0
SLE	Q.P.					3358.6	-5578.3	0.0				-5578.3			35.3	-0.0	338.8	1456.0
265	SLU	4.90	18.10	0.00	15.21		24170.2	27461.0	0.88	0.25	-14169.4	19344.8	0.73	0.14				
SLE	Rare						5384.8				0.0				-0.0	30.0	778.7	121.7
SLE	Freq						5100.0				0.0				-0.0	28.4	737.5	115.3
SLE	Q.P.						5008.9				0.0				-0.0	27.9	724.3	113.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.58	0.14	0.00
Quasi Permanenti	2.58	0.14	0.00

- VERIFICHE A TAGLIO Trave 269 259 Sez. 5 50x49 50x49 [cm] L_{asse} 1.02 L_{netta} 0.72 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	70078.3	12877.8	77099.1	70087.7	ø 14 2br. 10.0'

- VERIFICHE A TAGLIO Trave 259 261 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.76	0.51	16880.2	12877.8	77099.1	22885.8	ø 8 2br. 10.0'
0.76	4.40	3.63	16881.8	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.40	4.91	0.51	18606.1	11040.9	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 261 263 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	16869.3	11040.9	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	15130.3	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	16869.3	11040.9	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 263 265 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	17867.7	11040.9	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	16130.5	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	16875.1	12152.0	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 116 Travata 365 366

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 159 160
- 161 162
- 163 164
- 165 166
- 359 360

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 361 362
- 363 364

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 116 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																			
365	SLU	0.25	22.62	0.00	22.62			25895.3	33119.6	0.78	0.27	-24886.0	28283.9	0.88	0.17				
SLE	Rare							517.6				0.0				-0.0	2.6	61.0	11.8
SLE	Freq							517.6				0.0				-0.0	2.6	61.0	11.8
SLE	Q.P.							517.6				0.0				-0.0	2.6	61.0	11.8
CAM	SLU	2.07	9.42	0.00	9.42	796.3	-857.1	3710.4	15099.4	0.25	0.10	-4790.4	14894.5	0.32	0.11				
SLE	Rare					612.5	-659.3	0.0				-659.3				4.2	-0.0	39.5	173.1
SLE	Freq					612.5	-659.3	0.0				-659.3				4.2	-0.0	39.5	173.1
SLE	Q.P.					612.5	-659.3	0.0				-659.3				4.2	-0.0	39.5	173.1
366	SLU	3.90	22.62	0.00	22.62			25895.3	33119.6	0.78	0.27	-24886.0	28283.9	0.88	0.17				
SLE	Rare							517.6				0.0				-0.0	2.6	61.0	11.8
SLE	Freq							517.6				0.0				-0.0	2.6	61.0	11.8
SLE	Q.P.							517.6				0.0				-0.0	2.6	61.0	11.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.07	0.02	0.00
Quasi Permanenti	2.07	0.02	0.00

- VERIFICHE A TAGLIO Trave 365 366 Sez. 5 50x49 50x49 [cm] L_{asse} 4.15 L_{netta} 3.65 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	17940.7	13872.2	77099.1	22885.8	ø 8 2br. 10.0'
0.77	3.38	2.60	17620.4	10361.1	91701.3	27518.3	Tr.ø 10 2br. 25.0'
3.38	3.90	0.52	17940.7	13872.2	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 120 Travata 369 359 361 363 365

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 169 159 161 163 165
- 168 160 162 164 166
- 368 360 362 364 366

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 120 /1 Sez. 5 50x49 50x49 [cm] L_{asse}1.02 L_{netta}0.72 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
369	SLU	0.05	15.60	0.00	18.66			336.3	24384.5	0.01	0.25	-15.4	23063.0	0.00	0.15				
SLE	Rare							4.8				-4.5			0.0	0.0	0.8	0.7	
SLE	Freq							4.5				-4.2			0.0	0.0	0.8	0.7	
SLE	Q.P.							4.5				-4.2			0.0	0.0	0.7	0.7	
CAM	SLU	0.41	18.88	0.00	23.35	5050.3	-331.6	1430.0	30923.0	0.05	0.23	-316.1	29904.3	0.01	0.16				
SLE	Rare					3607.6	-236.9	346.7				-225.8			1.2	1.8	48.3	26.6	
SLE	Freq					3420.9	-224.6	328.7				-214.1			1.1	1.7	45.8	25.2	
SLE	Q.P.					3358.6	-220.5	322.8				-210.2			1.1	1.7	45.0	24.8	
359	SLU	0.77	15.21	0.00	18.10			1722.3	23765.4	0.07	0.25	-83.9	22241.4	0.00	0.18				
SLE	Rare							1230.2				-59.9			0.4	7.5	212.5	19.7	
SLE	Freq							1166.6				-56.8			0.4	7.1	201.5	18.7	
SLE	Q.P.							1145.4				-55.8			0.4	7.0	197.8	18.4	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm			
Frequenti						0.77					0.00				0.01			
Quasi Permanenti						0.77					0.00				0.01			
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 120 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
359	SLU	0.25	15.21	0.00	18.10		22455.3	23933.3	0.94	0.24	-11838.0	22822.0	0.52	0.16				
SLE	Rare						6339.9				0.0				-0.0	37.4	1080.0	119.5
SLE	Freq						6002.7				0.0				-0.0	35.4	1022.6	113.2
SLE	Q.P.						5895.9				0.0				-0.0	34.8	1004.4	111.2
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8404.2	0.0	15157.6	0.00	0.09	-8404.2	14968.3	0.56	0.10			
SLE	Rare					3607.6	-6003.4	0.0				-6003.4			38.0	-0.0	364.6	1567.0
SLE	Freq					3420.9	-5692.7	0.0				-5692.7			36.0	-0.0	345.7	1485.9
SLE	Q.P.					3358.6	-5589.1	0.0				-5589.1			35.4	-0.0	339.4	1458.9
361	SLU	4.91	15.21	0.00	11.40		20752.8	23834.5	0.87	0.23	-9893.5	14713.0	0.67	0.13				
SLE	Rare						6178.5				0.0				-0.0	37.2	1047.2	130.1
SLE	Freq						5859.4				0.0				-0.0	35.3	993.1	123.4
SLE	Q.P.						5752.2				0.0				-0.0	34.7	975.0	121.1

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione					Intradosso				Estradosso			
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]		mm		mm												
Frequenti		2.58		0.14		0.00												
Quasi Permanenti		2.58		0.14		0.00												
Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 120 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
361	SLU	0.25	15.21	0.00	11.40		20494.5	23834.5	0.86	0.23	-8789.6	14713.0	0.60	0.13				
SLE	Rare						6539.1				0.0				-0.0	39.4	1108.3	137.7
SLE	Freq						6200.1				0.0				-0.0	37.4	1050.9	130.5
SLE	Q.P.						6087.4				0.0				-0.0	36.7	1031.8	128.2
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8404.2	0.0	15157.6	0.00	0.09	-8404.2	14968.3	0.56	0.10			
SLE	Rare					3607.6	-6003.4	0.0				-6003.4			38.0	-0.0	364.6	1567.0
SLE	Freq					3420.9	-5692.7	0.0				-5692.7			36.0	-0.0	345.7	1485.9
SLE	Q.P.					3358.6	-5589.1	0.0				-5589.1			35.4	-0.0	339.4	1458.9
363	SLU	4.91	15.21	0.00	11.40		19781.1	23834.5	0.83	0.23	-9406.9	14713.0	0.64	0.13				
SLE	Rare						6072.1				0.0				-0.0	36.6	1029.2	127.8
SLE	Freq						5758.3				0.0				-0.0	34.7	976.0	121.2
SLE	Q.P.						5653.5				0.0				-0.0	34.1	958.2	119.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione		Intradosso		Estradosso												
		[m]		mm		mm												
Frequenti		2.58		0.14		0.00												
Quasi Permanenti		2.58		0.14		0.00												
Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 120 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
363	SLU	0.25	15.21	0.00	11.40			21096.6	23834.5	0.89	0.23	-9660.1	14713.0	0.66	0.13				
SLE	Rare							6541.2				0.0				-0.0	39.4	1108.7	137.7
SLE	Freq							6203.4				0.0				-0.0	37.4	1051.4	130.6
SLE	Q.P.							6089.8				0.0				-0.0	36.7	1032.2	128.2
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8387.9	0.0	15157.6	0.00	0.09	-8387.9	14968.3	0.56	0.10				
SLE	Rare					3607.6	-5991.8	0.0				-5991.8				37.9	-0.0	363.9	1564.0
SLE	Freq					3420.9	-5681.7	0.0				-5681.7				36.0	-0.0	345.0	1483.0
SLE	Q.P.					3358.6	-5578.3	0.0				-5578.3				35.3	-0.0	338.8	1456.0
365	SLU	4.90	15.21	0.00	15.21			21860.7	23880.7	0.92	0.24	-12413.6	19365.7	0.64	0.15				
SLE	Rare							5694.8				0.0				-0.0	33.9	968.1	114.0
SLE	Freq							5389.5				0.0				-0.0	32.0	916.2	107.9
SLE	Q.P.							5294.3				0.0				-0.0	31.5	900.0	106.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.58	0.14	0.00
Quasi Permanenti	2.58	0.14	0.00

- VERIFICHE A TAGLIO Trave 369 359 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	65864.8	12877.8	77099.1	70087.7	ø 14 2br. 10.0'

- VERIFICHE A TAGLIO Trave 359 361 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.25	0.75	0.50	16118.8	12877.8	77099.1	22885.8	ø 8 2br. 10.0'
0.75	4.41	3.65	16146.6	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.41	4.91	0.50	17837.7	11040.9	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 361 363 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	16097.6	11040.9	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	14358.6	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	16097.6	11040.9	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 363 365 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	17097.6	11040.9	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	15360.4	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	16108.0	12152.0	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 416 Travata 465 466

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 459 460
- 461 462
- 463 464

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{Mre} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 416 /1 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 q_{medio} 612.5 [kg/m] (VALORE CARATTERISTICO)																		
465	SLU	0.25	15.71	0.00	15.71		20138.4	24555.3	0.82	0.24	-19115.3	20062.2	0.95	0.14				
SLE	Rare						511.6				0.0				-0.0	3.0	84.2	10.7
SLE	Freq						511.6				0.0				-0.0	3.0	84.2	10.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Q.P.							511.6				0.0				-0.0	3.0	84.2	10.7
CAM	SLU	2.07	9.42	0.00	9.42	796.3	-857.1	2752.4	15157.6	0.18	0.09	-3818.6	14968.3	0.26	0.10				
SLE	Rare					612.5	-659.3	0.0				-659.3				4.2	-0.0	40.0	172.1
SLE	Freq					612.5	-659.3	0.0				-659.3				4.2	-0.0	40.0	172.1
SLE	Q.P.					612.5	-659.3	0.0				-659.3				4.2	-0.0	40.0	172.1
466	SLU	3.90	15.71	0.00	15.71			20138.4	24555.3	0.82	0.24	-19115.3	20062.2	0.95	0.14				
SLE	Rare							511.6				0.0				-0.0	3.0	84.2	10.7
SLE	Freq							511.6				0.0				-0.0	3.0	84.2	10.7
SLE	Q.P.							511.6				0.0				-0.0	3.0	84.2	10.7

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.07	0.02	0.00
Quasi Permanenti	2.07	0.02	0.00

- VERIFICHE A TAGLIO Trave 465 466 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.76	0.51	13341.8	12284.5	77099.1	22885.8	ø 8 2br. 10.0'
0.76	3.39	2.62	13027.6	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
3.39	3.90	0.51	13341.8	12284.5	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 420 Travata 469 459 461 463 465

N.B. Nella travata che segue sono incluse le verifiche delle travate:

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 468 460 462 464 466

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 420 /1 Sez. 5 50x49 50x49 [cm] L_{asse}1.02 L_{netta}0.72 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
469	SLU	0.05	12.96	0.00	15.77			335.8	21132.2	0.02	0.24	-6.4	19750.8	0.00	0.14				
SLE	Rare							4.8				-4.5			0.0	0.0	1.0	0.9	
SLE	Freq							4.5				-4.2			0.0	0.0	0.9	0.8	
SLE	Q.P.							4.4				-4.2			0.0	0.0	0.9	0.8	
CAM	SLU	0.41	16.24	0.00	20.46	5050.3	-331.6	1428.0	27483.2	0.05	0.21	-316.1	26607.6	0.01	0.15				
SLE	Rare					3607.6	-236.9	346.2				-225.8			1.3	1.9	55.4	29.8	
SLE	Freq					3420.9	-224.6	328.3				-214.1			1.2	1.8	52.5	28.2	
SLE	Q.P.					3358.6	-220.5	322.3				-210.2			1.2	1.8	51.6	27.7	
459	SLU	0.77	12.57	0.00	15.21			1719.8	20515.1	0.08	0.24	-83.9	18926.6	0.00	0.16				
SLE	Rare							1228.5				-59.9			0.4	8.1	252.5	16.0	
SLE	Freq							1164.9				-56.8			0.4	7.7	239.5	15.2	
SLE	Q.P.							1143.7				-55.8			0.4	7.6	235.1	14.9	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]	Intradosso mm	Estradosso mm
Frequenti		0.77	0.00	0.01
Quasi Permanenti		0.77	0.00	0.01

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 420 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

459	SLU	0.25	12.57	0.00	15.21			18831.2	20587.7	0.91	0.23	-7496.8	19385.0	0.39	0.15				
SLE	Rare							6529.3				0.0				-0.0	41.8	1325.0	107.5
SLE	Freq							6183.2				0.0				-0.0	39.6	1254.8	101.8
SLE	Q.P.							6072.9				0.0				-0.0	38.9	1232.4	100.0
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8404.2	0.0	15157.6	0.00	0.09	-8404.2	14968.3	0.56	0.10				
SLE	Rare					3607.6	-6003.4	0.0				-6003.4				38.0	-0.0	364.6	1567.0
SLE	Freq					3420.9	-5692.7	0.0				-5692.7				36.0	-0.0	345.7	1485.9
SLE	Q.P.					3358.6	-5589.1	0.0				-5589.1				35.4	-0.0	339.4	1458.9
461	SLU	4.91	12.57	0.00	9.42			16235.2	20433.8	0.79	0.21	-7071.4	12323.4	0.57	0.12				
SLE	Rare							5277.2				0.0				-0.0	34.3	1066.6	97.3
SLE	Freq							5005.1				0.0				-0.0	32.6	1011.6	92.3
SLE	Q.P.							4911.0				0.0				-0.0	31.9	992.6	90.6

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		2.58		0.14		0.00													
Quasi Permanenti		2.58		0.14		0.00													
Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 420 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
461	SLU	0.25	12.57	0.00	9.42			17496.1	20433.8	0.86	0.21	-6173.1	12323.4	0.50	0.12				
SLE	Rare							6550.3				0.0				-0.0	42.6	1323.9	120.8
SLE	Freq							6209.8				0.0				-0.0	40.4	1255.1	114.6
SLE	Q.P.							6097.2				0.0				-0.0	39.7	1232.3	112.5
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8404.2	0.0	15157.6	0.00	0.09	-8404.2	14968.3	0.56	0.10				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Rare					3607.6	-6003.4	0.0				-6003.4				38.0	-0.0	364.6	1567.0
SLE	Freq					3420.9	-5692.7	0.0				-5692.7				36.0	-0.0	345.7	1485.9
SLE	Q.P.					3358.6	-5589.1	0.0				-5589.1				35.4	-0.0	339.4	1458.9
463	SLU	4.91	12.57	0.00	9.42				16711.1	20433.8	0.82	0.21	-6852.9	12323.4	0.56	0.12			
SLE	Rare								5707.5							-0.0	37.1	1153.5	105.3
SLE	Freq								5412.4							-0.0	35.2	1093.9	99.8
SLE	Q.P.								5313.1							-0.0	34.6	1073.8	98.0

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]					Intradosso mm				Estradosso mm				
Frequenti						2.58					0.14				0.00				
Quasi Permanenti						2.58					0.14				0.00				
Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 420 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
463	SLU	0.25	12.57	0.00	9.42			16487.0	20433.8	0.81	0.21	-6880.5	12323.4	0.56	0.12				
SLE	Rare							5541.5								-0.0	36.0	1120.0	102.2
SLE	Freq							5256.0								-0.0	34.2	1062.3	97.0
SLE	Q.P.							5156.7								-0.0	33.5	1042.2	95.1
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8387.9	0.0	15157.6	0.00	0.09	-8387.9	14968.3	0.56	0.10				
SLE	Rare					3607.6	-5991.8	0.0				-5991.8				37.9	-0.0	363.9	1564.0
SLE	Freq					3420.9	-5681.7	0.0				-5681.7				36.0	-0.0	345.0	1483.0
SLE	Q.P.					3358.6	-5578.3	0.0				-5578.3				35.3	-0.0	338.8	1456.0
465	SLU	4.90	12.57	0.00	11.30			18267.4	20481.9	0.89	0.22	-8012.3	14632.2	0.55	0.13				
SLE	Rare							5919.1								-0.0	38.3	1198.0	95.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							5603.2				0.0				-0.0	36.2	1134.1	90.4
SLE	Q.P.							5503.9				0.0				-0.0	35.6	1114.0	88.8

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.58	0.14	0.00
Quasi Permanenti	2.58	0.14	0.00

- VERIFICHE A TAGLIO Trave 469 459 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	56806.9	12152.0	77099.1	70087.7	ø 14 2br. 10.0'

- VERIFICHE A TAGLIO Trave 459 461 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.76	0.51	14888.1	12152.0	77099.1	22885.8	ø 8 2br. 10.0'
0.76	4.40	3.63	14646.1	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.40	4.91	0.51	16370.4	10361.1	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 461 463 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	14855.0	10361.1	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	13116.0	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	14855.0	10361.1	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 463 465 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.25	0.77	0.52	15350.2	10361.1	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	13613.0	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	14864.5	11005.8	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 516 Travata 565 566

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 559 560
- 561 562
- 563 564

Nodo		x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 516 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																			
565	SLU	0.25	10.18	0.00	10.18			13076.1	17377.2	0.75	0.20	-11988.9	13299.2	0.90	0.12				
SLE	Rare							543.6				0.0				-0.0	3.8	133.8	7.5
SLE	Freq							543.6				0.0				-0.0	3.8	133.8	7.5
SLE	Q.P.							543.6				0.0				-0.0	3.8	133.8	7.5
CAM	SLU	2.07	9.42	0.00	9.42	796.3	-857.1	1596.8	15157.6	0.11	0.09	-2599.1	14968.3	0.17	0.10				
SLE	Rare					612.5	-659.3	0.0				-659.3				4.2	-0.0	40.0	172.1
SLE	Freq					612.5	-659.3	0.0				-659.3				4.2	-0.0	40.0	172.1
SLE	Q.P.					612.5	-659.3	0.0				-659.3				4.2	-0.0	40.0	172.1
566	SLU	3.90	10.18	0.00	10.18			13076.0	17377.2	0.75	0.20	-11988.9	13299.2	0.90	0.12				
SLE	Rare							543.6				0.0				-0.0	3.8	133.8	7.5
SLE	Freq							543.6				0.0				-0.0	3.8	133.8	7.5
SLE	Q.P.							543.6				0.0				-0.0	3.8	133.8	7.5

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.07	0.02	0.00
Quasi Permanenti	2.07	0.02	0.00

- VERIFICHE A TAGLIO Trave 565 566 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.76	0.51	9522.3	10630.4	77099.1	22885.8	ø 8 2br. 10.0'
0.76	3.39	2.62	9208.1	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
3.39	3.90	0.51	9522.3	10630.4	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 520 Travata 569 559 561 563 565

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 568 560 562 564 566

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 520 /1 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 q_{medio} 3607.6 [kg/m] (VALORE CARATTERISTICO)																		
569	SLU	0.05	9.82	0.00	13.13		335.8	17124.5	0.02	0.21	-6.4	16800.2	0.00	0.13				
SLE	Rare						4.8				-4.5				0.0	0.0	1.2	1.0
SLE	Freq						4.5				-4.2				0.0	0.0	1.2	1.0
SLE	Q.P.						4.4				-4.2				0.0	0.0	1.1	0.9
CAM	SLU	0.41	13.10	0.00	17.82	5050.3	-331.6	1428.0	23307.3	0.06	0.19	-316.1	23731.8	0.01	0.14			
SLE	Rare					3607.6	-236.9	346.2				-225.8			1.4	2.1	67.4	33.2
SLE	Freq					3420.9	-224.6	328.3				-214.1			1.3	2.0	63.9	31.5
SLE	Q.P.					3358.6	-220.5	322.3				-210.2			1.3	1.9	62.7	30.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

559	SLU	0.77	9.42	0.00	12.57			1719.8	16505.9	0.10	0.21	-83.9	15966.5	0.01	0.15				
SLE	Rare							1228.5				-59.9				0.5	9.1	328.6	14.6
SLE	Freq							1164.9				-56.8				0.4	8.7	311.6	13.9
SLE	Q.P.							1143.7				-55.8				0.4	8.5	305.9	13.6

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm													
Frequenti		0.77		0.00		0.01													
Quasi Permanenti		0.77		0.00		0.01													
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 520 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
559	SLU	0.25	9.42	0.00	12.57			14102.2	16481.9	0.86	0.21	-3065.6	16198.7	0.19	0.14				
SLE	Rare							6727.2				0.0				-0.0	49.0	1785.8	69.4
SLE	Freq							6344.4				0.0				-0.0	46.2	1684.2	65.5
SLE	Q.P.							6238.6				0.0				-0.0	45.4	1656.1	64.4
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8404.2	0.0	15157.6	0.00	0.09	-8404.2	14968.3	0.56	0.10				
SLE	Rare					3607.6	-6003.4	0.0				-6003.4				38.0	-0.0	364.6	1567.0
SLE	Freq					3420.9	-5692.7	0.0				-5692.7				36.0	-0.0	345.7	1485.9
SLE	Q.P.					3358.6	-5589.1	0.0				-5589.1				35.4	-0.0	339.4	1458.9
561	SLU	4.91	9.42	0.00	9.42			11755.7	16370.2	0.72	0.20	-3466.5	12325.3	0.28	0.12				
SLE	Rare							5125.3				0.0				-0.0	37.5	1358.5	55.6
SLE	Freq							4862.2				0.0				-0.0	35.6	1288.7	52.7
SLE	Q.P.							4767.9				0.0				-0.0	34.9	1263.7	51.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione [m]				Intradosso mm				Estradosso mm				
Frequenti						2.58				0.14				0.00				
Quasi Permanenti						2.58				0.14				0.00				
Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 520 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
561	SLU	0.25	9.42	0.00	9.42		13662.7	16370.2	0.83	0.20	-2826.1	12325.3	0.23	0.12				
SLE	Rare						6562.9				0.0				-0.0	48.0	1739.5	71.2
SLE	Freq						6221.9				0.0				-0.0	45.5	1649.1	67.5
SLE	Q.P.						6109.0				0.0				-0.0	44.7	1619.2	66.2
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8404.2	0.0	15157.6	0.00	0.09	-8404.2	14968.3	0.56	0.10			
SLE	Rare					3607.6	-6003.4	0.0				-6003.4			38.0	-0.0	364.6	1567.0
SLE	Freq					3420.9	-5692.7	0.0				-5692.7			36.0	-0.0	345.7	1485.9
SLE	Q.P.					3358.6	-5589.1	0.0				-5589.1			35.4	-0.0	339.4	1458.9
563	SLU	4.91	9.42	0.00	9.42		12833.0	16370.2	0.78	0.20	-3545.3	12325.3	0.29	0.12				
SLE	Rare						5673.5				0.0				-0.0	41.5	1503.7	61.5
SLE	Freq						5381.0				0.0				-0.0	39.4	1426.2	58.3
SLE	Q.P.						5279.9				0.0				-0.0	38.6	1399.4	57.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni						Sezione				Intradosso				Estradosso			
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				[m]			mm			mm			mm			mm			
		Frequenti		2.58			0.14			0.00									
		Quasi Permanenti		2.58			0.14			0.00									
Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	Mre		[kgm]	[kgm]	Mri		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 520 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
563	SLU	0.25	9.42	0.00	9.42			11966.9	16370.2	0.73	0.20	-3308.7	12325.3	0.27	0.12				
SLE	Rare							5346.8				0.0			-0.0	39.1	1417.2	58.0	
SLE	Freq							5072.2				0.0			-0.0	37.1	1344.4	55.0	
SLE	Q.P.							4974.1				0.0			-0.0	36.4	1318.4	53.9	
CAM	SLU	2.58	9.42	0.00	9.42	5050.3	-8387.9	0.0	15157.6	0.00	0.09	-8387.9	14968.3	0.56	0.10				
SLE	Rare					3607.6	-5991.8	0.0				-5991.8			37.9	-0.0	363.9	1564.0	
SLE	Freq					3420.9	-5681.6	0.0				-5681.7			36.0	-0.0	345.0	1483.0	
SLE	Q.P.					3358.6	-5578.3	0.0				-5578.3			35.3	-0.0	338.8	1456.0	
565	SLU	4.90	8.18	0.00	11.30			13586.7	14843.6	0.92	0.20	-3536.0	14635.0	0.24	0.14				
SLE	Rare							6171.6				0.0			-0.0	47.9	1217.0	32.3	
SLE	Freq							5815.2				0.0			-0.0	45.2	1146.7	30.5	
SLE	Q.P.							5719.6				0.0			-0.0	44.4	1127.8	30.0	

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.58	0.14	0.00
Quasi Permanenti	2.58	0.14	0.00

- VERIFICHE A TAGLIO Trave 569 559 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	47196.2	11403.9	77099.1	51493.0	ø 12 2br. 10.0'

- VERIFICHE A TAGLIO Trave 559 561 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.78	0.53	14007.4	11403.9	77099.1	22885.8	ø 8 2br. 10.0'
0.78	4.38	3.59	13024.0	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.38	4.91	0.53	14814.6	10361.1	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 561 563 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	13983.4	10361.1	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	12244.4	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	13983.4	10361.1	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 563 565 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	14477.8	10361.1	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	12740.7	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	13653.7	11005.8	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 1804 Travata 665 666

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 663 664

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{Mre} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 1804 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																		

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

665	SLU	0.25	10.18	0.00	10.18			5256.7	17370.2	0.30	0.21	-4483.9	13130.6	0.34	0.13				
SLE	Rare							386.4				0.0				-0.0	2.8	95.9	4.2
SLE	Freq							386.4				0.0				-0.0	2.8	95.9	4.2
SLE	Q.P.							386.4				0.0				-0.0	2.8	95.9	4.2
CAM	SLU	2.07	9.42	0.00	9.42	796.3	-857.1	157.0	15157.6	0.01	0.09	-1473.6	14968.3	0.10	0.10				
SLE	Rare					612.5	-659.3	0.0				-753.7				4.8	-0.0	45.8	196.7
SLE	Freq					612.5	-659.3	0.0				-753.7				4.8	-0.0	45.8	196.7
SLE	Q.P.					612.5	-659.3	0.0				-753.7				4.8	-0.0	45.8	196.7
666	SLU	3.90	10.18	0.00	10.18			5256.7	17370.2	0.30	0.21	-4483.9	13130.6	0.34	0.13				
SLE	Rare							386.4				0.0				-0.0	2.8	95.9	4.2
SLE	Freq							386.4				0.0				-0.0	2.8	95.9	4.2
SLE	Q.P.							386.4				0.0				-0.0	2.8	95.9	4.2

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm	
Frequenti	2.07	0.02	0.00	
Quasi Permanenti	2.07	0.02	0.00	

- VERIFICHE A TAGLIO Trave 665 666 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.74	0.49	9474.2	10630.4	77099.1	51493.0	∅ 12 2br. 10.0'
0.74	3.41	2.67	9174.1	10361.1	91701.3	17611.7	Tr.∅ 8 2br. 25.0'
3.41	3.90	0.49	9474.2	10630.4	77099.1	51493.0	∅ 12 2br. 10.0'

- Travata: 616 Travata 659 660

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 661 662

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 616 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																		
659	SLU	0.25	10.18	0.00	10.18		5746.8	17377.2	0.33	0.20	-4974.1	13299.2	0.37	0.12				
SLE	Rare						386.4				0.0				-0.0	2.7	95.1	5.3
SLE	Freq						386.4				0.0				-0.0	2.7	95.1	5.3
SLE	Q.P.						386.4				0.0				-0.0	2.7	95.1	5.3
CAM	SLU	2.07	9.42	0.00	9.42	796.3	-857.1	239.0	15157.6	0.02	0.09	-1555.6	14968.3	0.10	0.10			
SLE	Rare					612.5	-659.3	0.0			-753.7				4.8	-0.0	45.8	196.7
SLE	Freq					612.5	-659.3	0.0			-753.7				4.8	-0.0	45.8	196.7
SLE	Q.P.					612.5	-659.3	0.0			-753.7				4.8	-0.0	45.8	196.7
660	SLU	3.90	10.18	0.00	10.18		5746.8	17377.2	0.33	0.20	-4974.1	13299.2	0.37	0.12				
SLE	Rare						386.4				0.0				-0.0	2.7	95.1	5.3
SLE	Freq						386.4				0.0				-0.0	2.7	95.1	5.3
SLE	Q.P.						386.4				0.0				-0.0	2.7	95.1	5.3

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.07	0.02	0.00
Quasi Permanenti	2.07	0.02	0.00

- VERIFICHE A TAGLIO Trave 659 660 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.75	0.50	9522.3	10630.4	77099.1	22885.8	ø 8 2br. 10.0'
0.75	3.40	2.64	9214.1	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
3.40	3.90	0.50	9522.3	10630.4	77099.1	22885.8	ø 8 2br. 10.0'

- Travata: 620 Travata 669 659 661 663 665

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 668 660 662 664 666

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 620 /1 Sez. 5 50x49 50x49 [cm] L_{asse}1.02 L_{netta}0.72 q_{medio}2262.1 [kg/m] (VALORE CARATTERISTICO)																		
669	SLU	0.05	9.82	0.00	13.13		201.6	17124.5	0.01	0.21	-3.8	16800.2	0.00	0.13				
SLE	Rare						3.0				-2.8				0.0	0.0	0.8	0.6
SLE	Freq						2.7				-2.6				0.0	0.0	0.7	0.6
SLE	Q.P.						2.7				-2.5				0.0	0.0	0.7	0.6
CAM	SLU	0.41	13.10	0.00	17.82	3032.1	-199.1	857.3	23307.3	0.04	0.19	-189.8	23731.8	0.01	0.14			
SLE	Rare					2262.1	-148.5	217.1			-141.6				0.8	1.3	42.3	20.8
SLE	Freq					2062.9	-135.5	198.0			-129.1				0.8	1.2	38.5	19.0
SLE	Q.P.					2013.1	-132.2	193.2			-126.0				0.8	1.2	37.6	18.5
659	SLU	0.77	9.42	0.00	12.57		1032.5	16505.9	0.06	0.21	-50.4	15966.5	0.00	0.15				
SLE	Rare						770.3				-37.6				0.3	5.7	206.1	9.2
SLE	Freq						702.5				-34.3				0.3	5.2	187.9	8.4
SLE	Q.P.						685.5				-33.4				0.3	5.1	183.4	8.2

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm				Estradosso mm			
Frequenti		0.77										0.00				0.01			
Quasi Permanenti		0.77										0.00				0.01			
Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 620 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}2262.1 [kg/m] (VALORE CARATTERISTICO)																			
659	SLU	0.25	9.42	0.00	12.57			6782.5	16481.9	0.41	0.21	-828.7	16198.7	0.05	0.14				
SLE	Rare							3879.6				0.0				-0.0	28.3	1029.9	40.0
SLE	Freq							3561.5				0.0				-0.0	25.9	945.4	36.7
SLE	Q.P.							3503.4				0.0				-0.0	25.5	930.0	36.1
CAM	SLU	2.58	9.42	0.00	9.42	3032.1	-5045.7	0.0	15157.6	0.00	0.09	-5045.7	14968.3	0.34	0.10				
SLE	Rare					2262.1	-3764.4	0.0				-3764.4				23.8	-0.0	228.6	982.6
SLE	Freq					2062.9	-3432.9	0.0				-3432.9				21.7	-0.0	208.5	896.1
SLE	Q.P.					2013.1	-3350.0	0.0				-3350.0				21.2	-0.0	203.4	874.4
661	SLU	4.91	9.42	0.00	9.42			5370.0	16370.2	0.33	0.20	-807.8	12325.3	0.07	0.12				
SLE	Rare							3191.6				0.0				-0.0	23.4	845.9	34.6
SLE	Freq							2848.3				0.0				-0.0	20.8	754.9	30.9
SLE	Q.P.							2758.4				0.0				-0.0	20.2	731.1	29.9

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]										Intradosso mm				Estradosso mm			
Frequenti		2.58										0.09				0.00			
Quasi Permanenti		2.58										0.08				0.00			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo		x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 620 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}2262.1 [kg/m] (VALORE CARATTERISTICO)																			
661	SLU	0.25	9.42	0.00	9.42			6937.2	16370.2	0.42	0.20	-708.4	12325.3	0.06	0.12				
	SLE	Rare						4060.5				0.0				-0.0	29.7	1076.2	44.0
	SLE	Freq						3701.1				0.0				-0.0	27.1	981.0	40.1
	SLE	Q.P.						3611.1				0.0				-0.0	26.4	957.1	39.1
CAM	SLU	2.58	9.42	0.00	9.42	3032.1	-5045.7	0.0	15157.6	0.00	0.09	-5045.7	14968.3	0.34	0.10				
	SLE	Rare				2262.1	-3764.4	0.0				-3764.4				23.8	-0.0	228.6	982.6
	SLE	Freq				2062.9	-3432.9	0.0				-3432.9				21.7	-0.0	208.5	896.1
	SLE	Q.P.				2013.1	-3350.0	0.0				-3350.0				21.2	-0.0	203.4	874.4
663	SLU	4.91	9.42	0.00	9.42			6336.3	16370.2	0.39	0.20	-1229.1	12325.3	0.10	0.12				
	SLE	Rare						3438.6				0.0				-0.0	25.2	911.4	37.3
	SLE	Freq						3098.2				0.0				-0.0	22.7	821.2	33.6
	SLE	Q.P.						3010.6				0.0				-0.0	22.0	798.0	32.6

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni		Sezione [m]		Intradosso mm		Estradosso mm	
Frequenti		2.58		0.09		0.00	
Quasi Permanenti		2.58		0.08		0.00	

Nodo		x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 620 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}2262.1 [kg/m] (VALORE CARATTERISTICO)																			
663	SLU	0.25	9.42	0.00	9.42			5397.0	16370.2	0.33	0.20	-813.8	12325.3	0.07	0.12				
	SLE	Rare						3233.7				0.0				-0.0	23.7	857.1	35.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

SLE	Freq							2876.1				0.0				-0.0	21.1	762.3	31.2
SLE	Q.P.							2781.9				0.0				-0.0	20.4	737.4	30.2
CAM	SLU	2.58	9.42	0.00	9.42	3032.1	-5035.9	0.0	15157.6	0.00	0.09	-5035.9	14968.3	0.34	0.10				
SLE	Rare					2262.1	-3757.1	0.0				-3757.1				23.8	-0.0	228.2	980.7
SLE	Freq					2062.9	-3426.3	0.0				-3426.3				21.7	-0.0	208.1	894.3
SLE	Q.P.					2013.1	-3343.6	0.0				-3343.6				21.2	-0.0	203.1	872.7
665	SLU	4.90	9.42	0.00	9.42			6378.6	16370.2	0.39	0.20	-1204.9	12325.3	0.10	0.12				
SLE	Rare							3418.5				0.0				-0.0	25.0	906.1	37.1
SLE	Freq							3143.3				0.0				-0.0	23.0	833.1	34.1
SLE	Q.P.							3098.0				0.0				-0.0	22.7	821.1	33.6

- Controllo Fessurazione

Calcolo diretto ampiezza fessure

Combinazioni	Sezione [m]	Intradosso mm	Estradosso mm
Frequenti	2.58	0.09	0.00
Quasi Permanenti	2.58	0.08	0.00

- VERIFICHE A TAGLIO Trave 669 659 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	46573.9	11403.9	77099.1	51493.0	ø 12 2br. 10.0'

- VERIFICHE A TAGLIO Trave 659 661 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.75	0.50	10872.4	11403.9	77099.1	22885.8	ø 8 2br. 10.0'
0.75	4.41	3.65	10666.0	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.41	4.91	0.50	11679.6	10361.1	77099.1	22885.8	ø 8 2br. 10.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

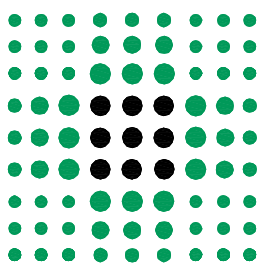
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 661 663 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	10848.4	10361.1	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	9806.1	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	10848.4	10361.1	77099.1	22885.8	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 663 665 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	10850.0	10361.1	77099.1	22885.8	ø 8 2br. 10.0'
0.77	4.39	3.62	9808.8	10361.1	91701.3	17611.7	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	10850.0	10361.1	77099.1	22885.8	ø 8 2br. 10.0'



GRUPPO DI LAVORO:

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 per. ind. Paolo Crovini
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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
 AMPLIAMENTO E RISTRUTTURAZIONE
 PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
 STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 3
 PROGETTO E VERIFICA PILASTRI PREFABBRICATI IN C.A.**

PROGETTO STRUTTURE
 Dott. ing. MAURO FERRARI
 Via Aristotele n. 5
 Tel. 3356030441 - 0522 865441
 42122 - Reggio Emilia

ELABORATO

RS. 04

SCALA

IL DIRETTORE GENERALE
 dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
 dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
 ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
 geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
 ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
 ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10:1

- Verifiche pilastri

- Modalità di verifica

I pilastri vengono verificati (a discrezione dell'operatore) secondo le seguenti modalità:

- Presso-tenso flessione deviata.
- Presso-tenso flessione retta. In tale caso viene svolta prima la verifica a presso-tenso flessione considerando come azioni agenti lo sforzo normale ed il momento M_x agente sulla sezione poi, disgiuntamente, considerando come azioni agenti lo sforzo normale e l'altro momento M_y . A discrezione dell'operatore tali momenti (a favore della sicurezza) possono essere incrementati di un fattore di amplificazione anch'esso a discrezione dell'utente.

Per ogni pilastro le verifiche vengono svolte sia nella sezione di sommità che in quella di base in tutte le combinazioni di carico.

Nelle stampe vengono quindi riportate per le due sezioni di verifica succitate:

La combinazione di carico, le sollecitazioni (sforzo normale e momenti) che inducono le massime tensioni nel calcestruzzo, nel ferro teso e nel ferro compresso.

Il programma, per ogni sezione, una volta posizionati i ferri d'angolo sulla sezione, introduce lungo i bordi eventuali ferri di completamento così da rispettare l'interasse massimo fra i ferri imposto dall'operatore.

La verifica procede considerando (quanto a diametri) fissi i ferri di bordo, eventualmente introdotti, ed incrementando negli angoli il numero di ferri presenti ovvero il diametro degli stessi.

Tutti gli angoli della sezione vengono armati nella stesso modo sia quanto a diametro dei ferri presenti che quanto a numero di ferri.

Si noti che in ottemperanza a quanto prescritto nel punto **3.1.3** del *D.M. 14 febbraio 1992*, il programma, qualora la tensione media dell'intera sezione superi la tensione ammissibile per compressione semplice, considera tale situazione non verificata benchè possa risultare soddisfatta la verifica a pressoflessione utilizzando la sigma massima del calcestruzzo impiegato.

- Sezioni Impiegate:

Sezione Numero	Dimensioni	Cl	f_{cd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro [cm]	cotg(θ)
2	B 50 [cm] H 30 [cm]	C35/45	211.7	224.1	168.1	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
4	B 50 [cm] H 30 [cm]	C35/45	211.7	224.1	168.1	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
11	B 50 [cm] H 30 [cm]	C28/35	164.6	174.3	130.7	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
1	B 50 [cm] H 50 [cm]	C35/45	211.7	224.1	168.1	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
3	B 50 [cm] H 50 [cm]	C35/45	211.7	224.1	168.1	B 450 C	3913.0	3600.0	4500.0	2.50	2.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

12	B 50 [cm] H 50 [cm]	C28/35	164.6	174.3	130.7	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
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- Verifiche Pilastri:

N.B.

- Nella formula (7.4.28) del punto 7.4.6.2.2. TU2008 nel calcolo di A_{st} è stato inclusa l'area totale delle staffe in entrambe le direzioni.
- La formula (7.4.28) del punto 7.4.6.2.2. TU2008 in "CDB" viene applicata alle sole regioni critiche terminali.
- Fattore di sovraresistenza $\gamma_{R,d}=1.10$

- Pilastro: 1/101 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
1	4	-79525.0	9344.8	-8821.1	9.89	1.17	0.68
101	4	-78306.2	-9344.8	8821.1	2.56	6.43	0.68

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	10000.8	27721.3	9440.3	48963.7	$\phi 12/15.0'$
0.51	2.57	10000.8	12320.6	9440.3	21761.7	$\phi 8/15.0'$
2.57	3.08	10000.8	27721.3	9440.3	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
1	Ft. 37	-98138.6	2916.5	-62.2	-497.7
	Fc. 36	-98869.7	2916.6	-62.7	-1160.0
	ClsMax 36	-98869.7	2916.6	-62.7	-86.1
	ClsMed 36	-98869.7	2916.6	-62.7	-55.5
101	Ft. 37	-96919.9	-5895.5	42.7	-150.8
	Fc. 36	-97651.0	-5895.8	41.8	-1480.5
	ClsMax 36	-97651.0	-5895.8	41.8	-116.4
	ClsMed 36	-97651.0	-5895.8	41.8	-58.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Frequenti

1	Ft. 39	-90129.9	2343.8	-69.9	-493.2
	Fc. 39	-90129.9	2343.8	-69.9	-1023.5
	ClsMax 39	-90129.9	2343.8	-69.9	-75.3
	ClsMed 39	-90129.9	2343.8	-69.9	-50.6
101	Ft. 39	-88911.2	-4735.2	55.0	-219.2
	Fc. 39	-88911.2	-4735.2	55.0	-1277.0
	ClsMax 39	-88911.2	-4735.2	55.0	-99.3
	ClsMed 39	-88911.2	-4735.2	55.0	-49.9

Combinazioni Quasi Permanenti

1	Ft. 41	-87704.1	2153.0	-72.6	-493.7
	Fc. 41	-87704.1	2153.0	-72.6	-982.2
	ClsMax 41	-87704.1	2153.0	-72.6	-71.9
	ClsMed 41	-87704.1	2153.0	-72.6	-49.2
101	Ft. 41	-86485.3	-4348.5	58.8	-241.3
	Fc. 41	-86485.3	-4348.5	58.8	-1214.1
	ClsMax 41	-86485.3	-4348.5	58.8	-93.9
	ClsMed 41	-86485.3	-4348.5	58.8	-48.5

- Pilastro: 101/201 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/20.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
101	4	-59659.7	7462.1	-9150.0	2.55	1.00	0.61
201	4	-58133.4	-8403.0	10764.0	3.94	1.84	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7672.2	27721.3	9064.5	48963.7	$\varnothing 12/15.0'$
0.79	3.28	7672.2	9240.4	9064.5	16321.2	$\varnothing 8/20.0'$
3.28	3.90	7672.2	27721.3	9064.5	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
101	Ft. 37	-72203.2	5664.6	-33.3	109.6
	Fc. 36	-72935.2	5665.1	-32.9	-1266.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-72935.2	5665.1	-32.9	-102.6
	ClsMed 36	-72935.2	5665.1	-32.9	-51.2
201	Ft. 37	-70676.9	-4154.6	-57.8	-126.9
	Fc. 36	-71408.9	-4155.3	-59.7	-1066.7
	ClsMax 36	-71408.9	-4155.3	-59.7	-83.6
	ClsMed 36	-71408.9	-4155.3	-59.7	-41.6

Combinazioni Frequenti

101	Ft. 39	-67821.6	4689.6	-45.7	-17.3
	Fc. 39	-67821.6	4689.6	-45.7	-1102.8
	ClsMax 39	-67821.6	4689.6	-45.7	-88.0
	ClsMed 39	-67821.6	4689.6	-45.7	-43.8
201	Ft. 39	-66295.3	-3612.0	-37.9	-154.6
	Fc. 39	-66295.3	-3612.0	-37.9	-961.0
	ClsMax 39	-66295.3	-3612.0	-37.9	-74.8
	ClsMed 39	-66295.3	-3612.0	-37.9	-37.3

Combinazioni Quasi Permanenti

101	Ft. 41	-66605.0	4364.8	-49.7	-56.1
	Fc. 41	-66605.0	4364.8	-49.7	-1053.1
	ClsMax 41	-66605.0	4364.8	-49.7	-83.5
	ClsMed 41	-66605.0	4364.8	-49.7	-41.6
201	Ft. 41	-65078.8	-3431.4	-31.9	-164.9
	Fc. 41	-65078.8	-3431.4	-31.9	-930.3
	ClsMax 41	-65078.8	-3431.4	-31.9	-72.2
	ClsMed 41	-65078.8	-3431.4	-31.9	-36.5

- Pilastro: 201/301 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
201	18	-48301.9	8444.5	11364.0	4.75	300.93	0.64
301	4	-44055.0	-8423.7	10790.6	6.00	1.25	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8096.6	27721.3	10371.5	48963.7	$\phi 12/15.0'$
0.79	3.26	8096.6	9240.4	10371.5	16321.2	$\phi 8/20.0'$
3.26	3.88	8096.6	27721.3	10371.5	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
201	Ft. 37	-55065.3	2968.8	37.6	-133.3
	Fc. 36	-55799.4	2969.9	38.7	-738.9
	ClsMax 36	-55799.4	2969.9	38.7	-57.8
	ClsMed 36	-55799.4	2969.9	38.7	-29.3
301	Ft. 37	-53546.5	-3193.8	-115.6	-91.2
	Fc. 36	-54280.6	-3195.3	-118.4	-755.8
	ClsMax 36	-54280.6	-3195.3	-118.4	-59.7
	ClsMed 36	-54280.6	-3195.3	-118.4	-29.5
Combinazioni Frequenti					
201	Ft. 39	-51597.7	2777.9	27.3	-125.9
	Fc. 39	-51597.7	2777.9	27.3	-685.8
	ClsMax 39	-51597.7	2777.9	27.3	-53.7
	ClsMed 39	-51597.7	2777.9	27.3	-27.1
301	Ft. 39	-50079.0	-2934.4	-97.5	-92.0
	Fc. 39	-50079.0	-2934.4	-97.5	-695.0
	ClsMax 39	-50079.0	-2934.4	-97.5	-54.8
	ClsMed 39	-50079.0	-2934.4	-97.5	-27.1
Combinazioni Quasi Permanenti					
201	Ft. 41	-50686.5	2714.7	24.2	-125.3
	Fc. 41	-50686.5	2714.7	24.2	-672.1
	ClsMax 41	-50686.5	2714.7	24.2	-52.6
	ClsMed 41	-50686.5	2714.7	24.2	-26.6
301	Ft. 41	-49167.8	-2848.5	-92.3	-94.2
	Fc. 41	-49167.8	-2848.5	-92.3	-678.7
	ClsMax 41	-49167.8	-2848.5	-92.3	-53.5
	ClsMed 41	-49167.8	-2848.5	-92.3	-26.5

- Pilastro: 301/401 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
301	4	-31742.6	8423.7	-10790.6	5.24	1.22	0.67
401	4	-30223.9	-8423.7	10790.6	5.50	1.18	0.67

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	7670.2	27721.3	9825.3	48963.7	ø 12/15.0'
0.79	3.26	7670.2	9240.4	9825.3	16321.2	ø 8/20.0'
3.26	3.88	7670.2	27721.3	9825.3	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
301	Ft. 37	-38095.6	3405.1	66.5	118.1
	Fc. 36	-38833.0	3406.1	68.1	-667.4
	ClsMax 36	-38833.0	3406.1	68.1	-55.5
	ClsMed 36	-38833.0	3406.1	68.1	-27.5
401	Ft. 37	-36576.8	-3366.7	-150.5	141.8
	Fc. 36	-37314.2	-3367.0	-154.1	-660.6
	ClsMax 36	-37314.2	-3367.0	-154.1	-55.1
	ClsMed 36	-37314.2	-3367.0	-154.1	-27.0
Combinazioni Frequenti					
301	Ft. 39	-35515.5	3085.7	53.8	91.2
	Fc. 39	-35515.5	3085.7	53.8	-606.1
	ClsMax 39	-35515.5	3085.7	53.8	-50.3
	ClsMed 39	-35515.5	3085.7	53.8	-25.0
401	Ft. 39	-33996.8	-3056.9	-130.9	115.6
	Fc. 39	-33996.8	-3056.9	-130.9	-599.7
	ClsMax 39	-33996.8	-3056.9	-130.9	-50.0
	ClsMed 39	-33996.8	-3056.9	-130.9	-24.5
Combinazioni Quasi Permanenti					
301	Ft. 41	-34901.3	2979.6	50.0	78.9
	Fc. 41	-34901.3	2979.6	50.0	-589.0
	ClsMax 41	-34901.3	2979.6	50.0	-48.7
	ClsMed 41	-34901.3	2979.6	50.0	-24.2
401	Ft. 41	-33382.5	-2953.8	-125.6	103.3
	Fc. 41	-33382.5	-2953.8	-125.6	-582.7
	ClsMax 41	-33382.5	-2953.8	-125.6	-48.5
	ClsMed 41	-33382.5	-2953.8	-125.6	-23.8

- Pilastro: 401/501 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
401	18	-17770.6	8423.7	-10844.4	4.54	125.89	0.72

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

501	23	-17068.8	-4284.6	-8956.7	1.65	1.00	0.44
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7922.1	27721.3	10588.8	48963.7	ø 12/15.0'
0.79	3.26	7922.1	9240.4	10588.8	16321.2	ø 8/20.0'
3.26	3.88	7922.1	27721.3	10588.8	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
401	Ft. 37	-21167.4	3378.0	63.5	467.8
	Fc. 36	-21909.0	3383.5	64.9	-556.1
	ClsMax 36	-21909.0	3383.5	64.9	-51.3
	ClsMed 36	-21909.0	3383.5	64.9	-25.4
501	Ft. 37	-19648.6	-3413.1	-58.0	519.4
	Fc. 36	-20390.3	-3424.6	-62.0	-550.0
	ClsMax 36	-20390.3	-3424.6	-62.0	-51.6
	ClsMed 36	-20390.3	-3424.6	-62.0	-25.5
Combinazioni Frequenti					
401	Ft. 39	-19477.4	3072.9	51.4	418.9
	Fc. 39	-19477.4	3072.9	51.4	-501.4
	ClsMax 39	-19477.4	3072.9	51.4	-46.5
	ClsMed 39	-19477.4	3072.9	51.4	-23.0
501	Ft. 39	-17958.7	-3104.4	-44.3	469.1
	Fc. 39	-17958.7	-3104.4	-44.3	-493.5
	ClsMax 39	-17958.7	-3104.4	-44.3	-46.6
	ClsMed 39	-17958.7	-3104.4	-44.3	-23.1
Combinazioni Quasi Permanenti					
401	Ft. 41	-19161.4	2973.1	47.8	396.7
	Fc. 41	-19161.4	2973.1	47.8	-487.0
	ClsMax 41	-19161.4	2973.1	47.8	-45.0
	ClsMed 41	-19161.4	2973.1	47.8	-22.3
501	Ft. 41	-17642.6	-3005.4	-41.1	446.8
	Fc. 41	-17642.6	-3005.4	-41.1	-479.4
	ClsMax 41	-17642.6	-3005.4	-41.1	-45.1
	ClsMed 41	-17642.6	-3005.4	-41.1	-22.4

- Pilastro: 501/601 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
501	2	-5073.0	4188.3	298.5	1.00	1.00	0.31
601	23	-2377.3	-850.9	-5230.6	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5325.4	9240.4	7572.8	16321.2	$\varnothing 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

501	Ft. 37	-3753.4	3083.5	209.3	933.8
	Fc. 36	-4504.8	3060.5	210.2	-396.4
	ClsMax 37	-3753.4	3083.5	209.3	-44.6
	ClsMed 37	-3753.4	3083.5	209.3	-21.2
601	Ft. 36	-4017.3	-1960.6	-269.4	556.2
	Fc. 36	-4017.3	-1960.6	-269.4	-282.3
	ClsMax 36	-4017.3	-1960.6	-269.4	-30.3
	ClsMed 36	-4017.3	-1960.6	-269.4	-13.7

Combinazioni Frequenti

501	Ft. 39	-2945.3	2793.1	184.9	861.1
	Fc. 39	-2945.3	2793.1	184.9	-349.3
	ClsMax 39	-2945.3	2793.1	184.9	-40.2
	ClsMed 39	-2945.3	2793.1	184.9	-19.1
601	Ft. 40	-2739.6	-1119.2	-245.2	314.8
	Fc. 40	-2739.6	-1119.2	-245.2	-176.8
	ClsMax 40	-2739.6	-1119.2	-245.2	-18.4
	ClsMed 40	-2739.6	-1119.2	-245.2	-7.9

Combinazioni Quasi Permanenti

501	Ft. 41	-2926.5	2688.6	177.0	825.5
	Fc. 41	-2926.5	2688.6	177.0	-337.0
	ClsMax 41	-2926.5	2688.6	177.0	-38.7
	ClsMed 41	-2926.5	2688.6	177.0	-18.4
601	Ft. 41	-2439.0	-912.3	-244.2	255.7
	Fc. 41	-2439.0	-912.3	-244.2	-151.3
	ClsMax 41	-2439.0	-912.3	-244.2	-15.5
	ClsMed 41	-2439.0	-912.3	-244.2	-6.5

- Pilastro: 2/102 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: 6 ϕ 20 Af=18.85 [cm²] < 1 ϕ 20 x 4 V + 1 ϕ 20 x 2 B + 0 ϕ 20 x 2 H >

Staffe: ϕ 12/15.0' x 53.0+ ϕ 8/12.5' x 202.0+ ϕ 12/15.0' x 53.0

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
2	12	-79577.1	9344.8	-8821.1	15.59	1.57	0.68
102	12	-78358.3	-9344.8	8821.1	2.66	6.12	0.68

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.53	9998.8	27721.3	9438.5	48963.7	ϕ 12/15.0'
0.53	2.55	9998.8	14784.7	9438.5	26114.0	ϕ 8/12.5'
2.55	3.08	9998.8	27721.3	9438.5	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
2	Ft. 37	-98043.5	2989.0	-41.9	-490.5
	Fc. 36	-98797.7	2989.1	-42.9	-1165.8
	ClsMax 36	-98797.7	2989.1	-42.9	-86.6
	ClsMed 36	-98797.7	2989.1	-42.9	-55.4
102	Ft. 37	-96824.8	-6037.1	0.1	-133.6
	Fc. 36	-97578.9	-6037.3	0.1	-1493.2
	ClsMax 36	-97578.9	-6037.3	0.1	-117.7
	ClsMed 36	-97578.9	-6037.3	0.1	-58.8
Combinazioni Frequenti					
2	Ft. 39	-89980.5	2401.1	-45.2	-487.5
	Fc. 39	-89980.5	2401.1	-45.2	-1026.7
	ClsMax 39	-89980.5	2401.1	-45.2	-75.6
	ClsMed 39	-89980.5	2401.1	-45.2	-50.5
102	Ft. 39	-88761.8	-4847.3	3.2	-209.5
	Fc. 39	-88761.8	-4847.3	3.2	-1284.1
	ClsMax 39	-88761.8	-4847.3	3.2	-100.0
	ClsMed 39	-88761.8	-4847.3	3.2	-50.0
Combinazioni Quasi Permanenti					
2	Ft. 41	-87544.3	2205.2	-46.6	-488.6
	Fc. 41	-87544.3	2205.2	-46.6	-984.6
	ClsMax 41	-87544.3	2205.2	-46.6	-72.2
	ClsMed 41	-87544.3	2205.2	-46.6	-49.1
102	Ft. 41	-86325.5	-4450.9	4.3	-232.9
	Fc. 41	-86325.5	-4450.9	4.3	-1219.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-86325.5	-4450.9	4.3	-94.5
	ClsMed 41	-86325.5	-4450.9	4.3	-48.4

- Pilastro: 102/202 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ϕ 20 Af=18.85 [cm²] < 1 ϕ 20 x 4 V + 1 ϕ 20 x 2 B + 0 ϕ 20 x 2 H >

Staffe: ϕ 12/15.0' x 62.2+ ϕ 8/20.0' x 248.7+ ϕ 12/15.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
102	4	-60347.2	7462.1	-9474.8	3.49	1.00	0.62
202	12	-58365.2	-8403.0	10764.0	5.42	2.28	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7678.2	27721.3	9149.6	48963.7	ϕ 12/15.0'
0.79	3.28	7678.2	9240.4	9149.6	16321.2	ϕ 8/20.0'
3.28	3.90	7678.2	27721.3	9149.6	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
102	Ft. 37	-72467.2	5801.5	-38.9	135.8
	Fc. 36	-73221.0	5801.9	-40.2	-1287.1
	ClsMax 36	-73221.0	5801.9	-40.2	-104.7
	ClsMed 36	-73221.0	5801.9	-40.2	-52.2
202	Ft. 37	-70940.9	-4242.5	8.3	-122.0
	Fc. 36	-71694.8	-4243.1	8.7	-1075.1
	ClsMax 36	-71694.8	-4243.1	8.7	-84.3
	ClsMed 36	-71694.8	-4243.1	8.7	-42.1
Combinazioni Frequenti					
102	Ft. 39	-68000.3	4803.3	-37.5	-0.4
	Fc. 39	-68000.3	4803.3	-37.5	-1117.9
	ClsMax 39	-68000.3	4803.3	-37.5	-89.5
	ClsMed 39	-68000.3	4803.3	-37.5	-44.6
202	Ft. 39	-66474.0	-3690.2	11.4	-149.4
	Fc. 39	-66474.0	-3690.2	11.4	-969.1
	ClsMax 39	-66474.0	-3690.2	11.4	-75.6
	ClsMed 39	-66474.0	-3690.2	11.4	-37.8
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

102	Ft. 41	-66762.6	4470.7	-37.4	-42.1
	Fc. 41	-66762.6	4470.7	-37.4	-1066.5
	ClsMax 41	-66762.6	4470.7	-37.4	-84.8
	ClsMed 41	-66762.6	4470.7	-37.4	-42.3
202	Ft. 41	-65236.4	-3506.3	12.6	-159.4
	Fc. 41	-65236.4	-3506.3	12.6	-938.4
	ClsMax 41	-65236.4	-3506.3	12.6	-73.0
	ClsMed 41	-65236.4	-3506.3	12.6	-36.6

- Pilastro: 202/302 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
202	28	-53879.3	8444.5	-11404.8	2.02	117.40	0.64
302	12	-44268.8	-8423.7	10790.6	18.77	1.78	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8101.2	27721.3	10520.8	48963.7	$\varnothing 12/15.0'$
0.79	3.26	8101.2	9240.4	10520.8	16321.2	$\varnothing 8/20.0'$
3.26	3.88	8101.2	27721.3	10520.8	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
202	Ft. 37	-55420.3	3032.4	-109.2	-124.5
	Fc. 36	-56173.5	3033.3	-111.5	-753.4
	ClsMax 36	-56173.5	3033.3	-111.5	-59.0
	ClsMed 36	-56173.5	3033.3	-111.5	-29.5
302	Ft. 37	-53901.6	-3270.0	55.9	-89.9
	Fc. 36	-54654.8	-3271.3	57.2	-762.1
	ClsMax 36	-54654.8	-3271.3	57.2	-60.3
	ClsMed 36	-54654.8	-3271.3	57.2	-30.0
Combinazioni Frequenti					
202	Ft. 39	-51880.4	2840.5	-98.4	-116.7
	Fc. 39	-51880.4	2840.5	-98.4	-699.4
	ClsMax 39	-51880.4	2840.5	-98.4	-54.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-51880.4	2840.5	-98.4	-27.2
302	Ft. 39	-50361.6	-3005.5	51.2	-89.9
	Fc. 39	-50361.6	-3005.5	51.2	-701.2
	ClsMax 39	-50361.6	-3005.5	51.2	-55.4
	ClsMed 39	-50361.6	-3005.5	51.2	-27.6

Combinazioni Quasi Permanenti

202	Ft. 41	-50951.4	2776.8	-95.5	-116.0
	Fc. 41	-50951.4	2776.8	-95.5	-685.5
	ClsMax 41	-50951.4	2776.8	-95.5	-53.7
	ClsMed 41	-50951.4	2776.8	-95.5	-26.7
302	Ft. 41	-49432.7	-2917.8	50.1	-91.9
	Fc. 41	-49432.7	-2917.8	50.1	-684.9
	ClsMax 41	-49432.7	-2917.8	50.1	-54.1
	ClsMed 41	-49432.7	-2917.8	50.1	-26.9

- Pilastro: 302/402 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
302	12	-31915.4	8423.7	-10790.6	12.38	1.73	0.67
402	12	-30396.6	-8423.7	10790.6	14.50	1.73	0.67

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7684.7	27721.3	9872.1	48963.7	$\varnothing 12/15.0'$
0.79	3.26	7684.7	9240.4	9872.1	16321.2	$\varnothing 8/20.0'$
3.26	3.88	7684.7	27721.3	9872.1	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
302	Ft. 37	-38455.3	3491.1	-152.4	138.2
	Fc. 36	-39207.6	3491.7	-155.8	-687.9
	ClsMax 36	-39207.6	3491.7	-155.8	-57.3
	ClsMed 36	-39207.6	3491.7	-155.8	-28.1
402	Ft. 37	-36936.5	-3447.4	94.0	148.2
	Fc. 36	-37688.8	-3447.1	95.8	-667.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-37688.8	-3447.1	95.8	-55.9
	ClsMed 36	-37688.8	-3447.1	95.8	-27.6

Combinazioni Frequenti

302	Ft. 39	-35818.1	3163.4	-139.1	110.0
	Fc. 39	-35818.1	3163.4	-139.1	-624.9
	ClsMax 39	-35818.1	3163.4	-139.1	-52.0
	ClsMed 39	-35818.1	3163.4	-139.1	-25.5
402	Ft. 39	-34299.4	-3130.6	85.8	122.3
	Fc. 39	-34299.4	-3130.6	85.8	-606.6
	ClsMax 39	-34299.4	-3130.6	85.8	-50.7
	ClsMed 39	-34299.4	-3130.6	85.8	-25.1

Combinazioni Quasi Permanenti

302	Ft. 41	-35189.8	3054.4	-135.8	97.1
	Fc. 41	-35189.8	3054.4	-135.8	-607.4
	ClsMax 41	-35189.8	3054.4	-135.8	-50.4
	ClsMed 41	-35189.8	3054.4	-135.8	-24.7
402	Ft. 41	-33671.1	-3024.9	83.7	109.8
	Fc. 41	-33671.1	-3024.9	83.7	-589.5
	ClsMax 41	-33671.1	-3024.9	83.7	-49.2
	ClsMed 41	-33671.1	-3024.9	83.7	-24.3

- Pilastro: 402/502 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
402	15	-17924.7	8423.7	-10790.6	8.08	9.40	0.72
502	27	-17377.8	-5052.3	-9905.8	1.00	1.00	0.51

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8083.9	27721.3	10878.4	48963.7	$\phi 12/15.0'$
0.79	3.26	8083.9	9240.4	10878.4	16321.2	$\phi 8/20.0'$
3.26	3.88	8083.9	27721.3	10878.4	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

402	Ft. 37	-21446.7	3467.2	-227.5	505.9
	Fc. 36	-22197.2	3472.8	-233.2	-587.0
	ClsMax 36	-22197.2	3472.8	-233.2	-54.1
	ClsMed 36	-22197.2	3472.8	-233.2	-26.0
502	Ft. 37	-19928.0	-3516.3	256.9	566.6
	Fc. 36	-20678.4	-3529.3	261.2	-586.5
	ClsMax 36	-20678.4	-3529.3	261.2	-54.9
	ClsMed 36	-20678.4	-3529.3	261.2	-26.3

Combinazioni Frequenti

402	Ft. 39	-19721.1	3154.3	-208.4	454.7
	Fc. 39	-19721.1	3154.3	-208.4	-529.8
	ClsMax 39	-19721.1	3154.3	-208.4	-49.1
	ClsMed 39	-19721.1	3154.3	-208.4	-23.6
502	Ft. 39	-18202.4	-3197.8	237.2	513.5
	Fc. 39	-18202.4	-3197.8	237.2	-527.8
	ClsMax 39	-18202.4	-3197.8	237.2	-49.7
	ClsMed 39	-18202.4	-3197.8	237.2	-23.8

Combinazioni Quasi Permanenti

402	Ft. 41	-19396.1	3051.9	-203.9	431.7
	Fc. 41	-19396.1	3051.9	-203.9	-515.0
	ClsMax 41	-19396.1	3051.9	-203.9	-47.5
	ClsMed 41	-19396.1	3051.9	-203.9	-22.9
502	Ft. 41	-17877.3	-3096.0	232.1	490.2
	Fc. 41	-17877.3	-3096.0	232.1	-513.0
	ClsMax 41	-17877.3	-3096.0	232.1	-48.2
	ClsMed 41	-17877.3	-3096.0	232.1	-23.0

- Pilastro: 502/602 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$ Ast/s=0.100531 < $0.08 fcd bst/fyd 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
502	2	-5394.6	4203.9	24.9	1.00	1.00	0.30
602	27	-2558.9	-1238.2	-4295.4	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5387.3	9240.4	5800.4	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
502	Ft. 37	-3978.7	3095.3	13.6	902.8
	Fc. 36	-4732.0	3067.3	7.9	-372.0
	ClsMax 37	-3978.7	3095.3	13.6	-42.7
	ClsMed 37	-3978.7	3095.3	13.6	-21.3
602	Ft. 36	-4244.5	-2010.7	79.6	539.4
	Fc. 36	-4244.5	-2010.7	79.6	-265.0
	ClsMax 36	-4244.5	-2010.7	79.6	-29.0
	ClsMed 36	-4244.5	-2010.7	79.6	-14.1
Combinazioni Frequenti					
502	Ft. 39	-3156.4	2807.9	19.3	835.6
	Fc. 39	-3156.4	2807.9	19.3	-330.2
	ClsMax 39	-3156.4	2807.9	19.3	-38.6
	ClsMed 39	-3156.4	2807.9	19.3	-19.2
602	Ft. 40	-2947.2	-1148.9	67.2	293.6
	Fc. 40	-2947.2	-1148.9	67.2	-159.0
	ClsMax 40	-2947.2	-1148.9	67.2	-16.9
	ClsMed 40	-2947.2	-1148.9	67.2	-8.1
Combinazioni Quasi Permanenti					
502	Ft. 41	-3133.4	2702.8	19.3	801.1
	Fc. 41	-3133.4	2702.8	19.3	-319.0
	ClsMax 41	-3133.4	2702.8	19.3	-37.2
	ClsMed 41	-3133.4	2702.8	19.3	-18.5
602	Ft. 41	-2645.9	-936.4	65.7	232.6
	Fc. 41	-2645.9	-936.4	65.7	-133.2
	ClsMax 41	-2645.9	-936.4	65.7	-14.0
	ClsMed 41	-2645.9	-936.4	65.7	-6.7

- Pilastro: 3/103 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 55.0 + \phi 8/12.5' \times 198.0 + \phi 12/15.0' \times 55.0$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
3	12	-76444.5	-9344.8	-8821.1	538.85	1.56	0.68
103	12	-75225.8	-9344.8	8821.1	3.06	5.77	0.68

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.00	0.55	10012.0	27721.3	9450.9	48963.7	ø 12/15.0'
0.55	2.53	10012.0	14784.7	9450.9	26114.0	ø 8/12.5'
2.53	3.08	10012.0	27721.3	9450.9	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
3	Ft. 37	-97846.1	2894.5	-92.8	-495.3
	Fc. 36	-98599.0	2894.4	-93.8	-1157.7
	ClsMax 36	-98599.0	2894.4	-93.8	-85.9
	ClsMed 36	-98599.0	2894.4	-93.8	-55.3
103	Ft. 37	-96627.3	-5838.6	106.9	-150.3
	Fc. 36	-97380.2	-5838.5	107.0	-1476.9
	ClsMax 36	-97380.2	-5838.5	107.0	-116.0
	ClsMed 36	-97380.2	-5838.5	107.0	-57.7
Combinazioni Frequenti					
3	Ft. 39	-89819.2	2323.8	-89.6	-491.2
	Fc. 39	-89819.2	2323.8	-89.6	-1020.3
	ClsMax 39	-89819.2	2323.8	-89.6	-75.0
	ClsMed 39	-89819.2	2323.8	-89.6	-50.4
103	Ft. 39	-88600.4	-4685.4	96.5	-218.8
	Fc. 39	-88600.4	-4685.4	96.5	-1272.2
	ClsMax 39	-88600.4	-4685.4	96.5	-98.8
	ClsMed 39	-88600.4	-4685.4	96.5	-49.7
Combinazioni Quasi Permanenti					
3	Ft. 41	-87394.5	2133.5	-88.9	-491.9
	Fc. 41	-87394.5	2133.5	-88.9	-978.7
	ClsMax 41	-87394.5	2133.5	-88.9	-71.7
	ClsMed 41	-87394.5	2133.5	-88.9	-49.0
103	Ft. 41	-86175.7	-4301.0	93.1	-241.2
	Fc. 41	-86175.7	-4301.0	93.1	-1208.9
	ClsMax 41	-86175.7	-4301.0	93.1	-93.5
	ClsMed 41	-86175.7	-4301.0	93.1	-48.3

- Pilastro: 103/203 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/20.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
103	4	-57700.9	7462.1	-9528.4	6.43	1.00	0.63

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

203	12	-55680.1	-8774.6	10764.0	10.76	2.27	0.75
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7704.0	27721.3	9117.6	48963.7	ø 12/15.0'
0.79	3.28	7704.0	9240.4	9117.6	16321.2	ø 8/20.0'
3.28	3.90	7704.0	27721.3	9117.6	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
103	Ft. 37	-72366.4	5677.9	-118.6	118.1
	Fc. 36	-73119.0	5678.2	-120.0	-1277.1
	ClsMax 36	-73119.0	5678.2	-120.0	-103.5
	ClsMed 36	-73119.0	5678.2	-120.0	-51.3
203	Ft. 37	-70840.1	-4221.0	35.9	-121.6
	Fc. 36	-71592.7	-4221.6	36.5	-1074.0
	ClsMax 36	-71592.7	-4221.6	36.5	-84.2
	ClsMed 36	-71592.7	-4221.6	36.5	-42.0
Combinazioni Frequenti					
103	Ft. 39	-67926.0	4703.5	-105.7	-10.9
	Fc. 39	-67926.0	4703.5	-105.7	-1110.6
	ClsMax 39	-67926.0	4703.5	-105.7	-88.7
	ClsMed 39	-67926.0	4703.5	-105.7	-44.0
203	Ft. 39	-66399.8	-3673.2	32.7	-149.0
	Fc. 39	-66399.8	-3673.2	32.7	-968.3
	ClsMax 39	-66399.8	-3673.2	32.7	-75.5
	ClsMed 39	-66399.8	-3673.2	32.7	-37.6
Combinazioni Quasi Permanenti					
103	Ft. 41	-66696.8	4378.8	-101.8	-50.4
	Fc. 41	-66696.8	4378.8	-101.8	-1060.1
	ClsMax 41	-66696.8	4378.8	-101.8	-84.1
	ClsMed 41	-66696.8	4378.8	-101.8	-41.7
203	Ft. 41	-65170.5	-3490.8	31.8	-159.1
	Fc. 41	-65170.5	-3490.8	31.8	-937.6
	ClsMax 41	-65170.5	-3490.8	31.8	-72.9
	ClsMed 41	-65170.5	-3490.8	31.8	-36.6

- Pilastro: 203/303 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: \varnothing 12/15.0' x 61.8+ \varnothing 8/20.0' x 247.3+ \varnothing 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
203	29	-55073.9	8444.5	-11435.8	1.74	121.04	0.64
303	8	-43470.5	-8423.7	10790.6	296.19	1.17	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8129.3	27721.3	15133.4	48963.7	\varnothing 12/15.0'
0.79	3.26	8129.3	9240.4	15133.4	16321.2	\varnothing 8/20.0'
3.26	3.88	8129.3	27721.3	15133.4	48963.7	\varnothing 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
203	Ft. 37	-55328.3	3092.5	-107.4	-117.8
	Fc. 36	-56080.4	3093.5	-109.9	-758.6
	ClsMax 36	-56080.4	3093.5	-109.9	-59.5
	ClsMed 36	-56080.4	3093.5	-109.9	-29.5
303	Ft. 37	-53809.5	-3300.0	74.9	-84.1
	Fc. 36	-54561.6	-3301.3	76.4	-766.0
	ClsMax 36	-54561.6	-3301.3	76.4	-60.6
	ClsMed 36	-54561.6	-3301.3	76.4	-30.1
Combinazioni Frequenti					
203	Ft. 39	-51808.4	2891.0	-93.0	-111.4
	Fc. 39	-51808.4	2891.0	-93.0	-703.5
	ClsMax 39	-51808.4	2891.0	-93.0	-55.3
	ClsMed 39	-51808.4	2891.0	-93.0	-27.4
303	Ft. 39	-50289.6	-3031.3	64.6	-85.2
	Fc. 39	-50289.6	-3031.3	64.6	-704.3
	ClsMax 39	-50289.6	-3031.3	64.6	-55.7
	ClsMed 39	-50289.6	-3031.3	64.6	-27.7
Combinazioni Quasi Permanenti					
203	Ft. 41	-50885.8	2824.1	-89.0	-111.1
	Fc. 41	-50885.8	2824.1	-89.0	-689.3
	ClsMax 41	-50885.8	2824.1	-89.0	-54.1
	ClsMed 41	-50885.8	2824.1	-89.0	-26.8
303	Ft. 41	-49367.0	-2942.2	61.7	-87.7
	Fc. 41	-49367.0	-2942.2	61.7	-687.8
	ClsMax 41	-49367.0	-2942.2	61.7	-54.4
	ClsMed 41	-49367.0	-2942.2	61.7	-27.0

- Pilastro: 303/403 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8+ $\phi 8/20.0'$ x 247.3+ $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
303	5	-31022.8	8584.1	-10790.6	3168.35	1.18	0.68
403	14	-29197.7	-8423.7	10790.6	8.02	9.60	0.68

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7729.5	27721.3	14385.4	48963.7	$\phi 12/15.0'$
0.79	3.26	7729.5	9240.4	14385.4	16321.2	$\phi 8/20.0'$
3.26	3.88	7729.5	27721.3	14385.4	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
303	Ft. 37	-38388.6	3500.4	-175.3	143.3
	Fc. 36	-39139.9	3500.9	-178.8	-690.6
	ClSMax 36	-39139.9	3500.9	-178.8	-57.6
	ClSMed 36	-39139.9	3500.9	-178.8	-28.1
403	Ft. 37	-36869.8	-3463.1	100.3	153.4
	Fc. 36	-37621.2	-3462.7	102.0	-669.6
	ClSMax 36	-37621.2	-3462.7	102.0	-56.1
	ClSMed 36	-37621.2	-3462.7	102.0	-27.7
Combinazioni Frequenti					
303	Ft. 39	-35765.5	3172.4	-155.6	114.1
	Fc. 39	-35765.5	3172.4	-155.6	-627.1
	ClSMax 39	-35765.5	3172.4	-155.6	-52.2
	ClSMed 39	-35765.5	3172.4	-155.6	-25.6
403	Ft. 39	-34246.8	-3144.8	86.8	126.2
	Fc. 39	-34246.8	-3144.8	86.8	-608.1
	ClSMax 39	-34246.8	-3144.8	86.8	-50.9
	ClSMed 39	-34246.8	-3144.8	86.8	-25.1
Combinazioni Quasi Permanenti					
303	Ft. 41	-35141.6	3063.2	-150.2	100.9
	Fc. 41	-35141.6	3063.2	-150.2	-609.4
	ClSMax 41	-35141.6	3063.2	-150.2	-50.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-35141.6	3063.2	-150.2	-24.8
403	Ft. 41	-33622.8	-3038.6	82.9	113.3
	Fc. 41	-33622.8	-3038.6	82.9	-590.8
	ClsMax 41	-33622.8	-3038.6	82.9	-49.3
	ClsMed 41	-33622.8	-3038.6	82.9	-24.4

- Pilastro: 403/503 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
403	12	-18072.8	8592.6	-10790.6	5.96	1.92	0.72
503	27	-17023.0	-5790.7	-10330.7	1.00	1.00	0.56

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8208.2	27721.3	10990.4	48963.7	$\varnothing 12/15.0'$
0.79	3.26	8208.2	9240.4	10990.4	16321.2	$\varnothing 8/20.0'$
3.26	3.88	8208.2	27721.3	10990.4	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
403	Ft. 37	-21403.9	3488.0	-276.5	519.0
	Fc. 36	-22153.6	3493.5	-283.0	-594.6
	ClsMax 36	-22153.6	3493.5	-283.0	-54.9
	ClsMed 36	-22153.6	3493.5	-283.0	-26.2
503	Ft. 37	-19885.1	-3536.1	368.0	587.1
	Fc. 36	-20634.9	-3548.8	374.2	-601.1
	ClsMax 36	-20634.9	-3548.8	374.2	-56.2
	ClsMed 36	-20634.9	-3548.8	374.2	-26.4
Combinazioni Frequenti					
403	Ft. 39	-19686.8	3172.6	-249.9	466.0
	Fc. 39	-19686.8	3172.6	-249.9	-536.3
	ClsMax 39	-19686.8	3172.6	-249.9	-49.7
	ClsMed 39	-19686.8	3172.6	-249.9	-23.7
503	Ft. 39	-18168.0	-3215.3	337.2	531.6
	Fc. 39	-18168.0	-3215.3	337.2	-540.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-18168.0	-3215.3	337.2	-50.8
	ClsMed 39	-18168.0	-3215.3	337.2	-23.9

Combinazioni Quasi Permanenti

403	Ft. 41	-19364.3	3069.3	-243.1	442.3
	Fc. 41	-19364.3	3069.3	-243.1	-521.1
	ClsMax 41	-19364.3	3069.3	-243.1	-48.1
	ClsMed 41	-19364.3	3069.3	-243.1	-23.0
503	Ft. 41	-17845.6	-3112.7	329.0	507.6
	Fc. 41	-17845.6	-3112.7	329.0	-525.6
	ClsMax 41	-17845.6	-3112.7	329.0	-49.3
	ClsMed 41	-17845.6	-3112.7	329.0	-23.2

- Pilastro: 503/603 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0' \times 100.6$ Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
503	32	-3570.5	4224.7	446.7	1.00	1.00	0.32
603	4	-2792.8	-1137.5	4090.6	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5408.5	9240.4	4817.1	16321.2	$\varnothing 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

503	Ft. 37	-3962.8	3108.3	173.7	929.9
	Fc. 36	-4715.7	3080.8	171.3	-395.4
	ClsMax 37	-3962.8	3108.3	173.7	-44.6
	ClsMed 37	-3962.8	3108.3	173.7	-21.4
603	Ft. 36	-4228.2	-2016.8	46.8	537.6
	Fc. 36	-4228.2	-2016.8	46.8	-261.1
	ClsMax 36	-4228.2	-2016.8	46.8	-28.7
	ClsMed 36	-4228.2	-2016.8	46.8	-14.1

Combinazioni Frequenti

503	Ft. 39	-3142.9	2819.3	175.3	861.6
	Fc. 39	-3142.9	2819.3	175.3	-352.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-3142.9	2819.3	175.3	-40.5
	ClsMed 39	-3142.9	2819.3	175.3	-19.3
603	Ft. 40	-2934.3	-1153.9	31.4	291.0
	Fc. 40	-2934.3	-1153.9	31.4	-154.8
	ClsMax 40	-2934.3	-1153.9	31.4	-16.6
	ClsMed 40	-2934.3	-1153.9	31.4	-8.2

Combinazioni Quasi Permanenti

503	Ft. 41	-3120.6	2713.7	175.0	826.9
	Fc. 41	-3120.6	2713.7	175.0	-341.3
	ClsMax 41	-3120.6	2713.7	175.0	-39.1
	ClsMed 41	-3120.6	2713.7	175.0	-18.6
603	Ft. 41	-2633.1	-941.2	30.2	230.0
	Fc. 41	-2633.1	-941.2	30.2	-129.1
	ClsMax 41	-2633.1	-941.2	30.2	-13.7
	ClsMed 41	-2633.1	-941.2	30.2	-6.7

- Pilastro: 4/104 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/15.0' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
4	6	-71478.1	-4459.8	-13059.6	1.96	2.51	0.58
104	6	-70259.4	4459.8	-13059.6	2.97	76.25	0.58

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	8870.2	27721.3	16022.8	48963.7	$\varnothing 12/15.0'$
0.51	2.57	8870.2	12320.6	16022.8	21761.7	$\varnothing 8/15.0'$
2.57	3.08	8870.2	27721.3	16022.8	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
4	Ft. 38	-83731.8	108.2	496.8	-653.3
	Fc. 36	-88879.7	174.8	560.9	-811.5
	ClsMax 36	-88879.7	174.8	560.9	-55.2
	ClsMed 36	-88879.7	174.8	560.9	-49.9
104	Ft. 38	-82513.1	-172.9	-1138.1	-585.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-87660.9	-298.8	-1267.0	-870.7
	ClsMax 36	-87660.9	-298.8	-1267.0	-60.3
	ClsMed 36	-87660.9	-298.8	-1267.0	-49.2

Combinazioni Frequenti

4	Ft. 40	-80877.5	91.5	477.6	-632.7
	Fc. 39	-82308.9	115.0	499.5	-744.7
	ClsMax 39	-82308.9	115.0	499.5	-50.5
	ClsMed 39	-82308.9	115.0	499.5	-46.2
104	Ft. 40	-79658.8	-141.9	-1096.6	-568.0
	Fc. 39	-81090.1	-186.5	-1139.9	-793.0
	ClsMax 39	-81090.1	-186.5	-1139.9	-54.7
	ClsMed 39	-81090.1	-186.5	-1139.9	-45.5

Combinazioni Quasi Permanenti

4	Ft. 41	-80592.9	92.8	478.2	-630.1
	Fc. 41	-80592.9	92.8	478.2	-726.1
	ClsMax 41	-80592.9	92.8	478.2	-49.2
	ClsMed 41	-80592.9	92.8	478.2	-45.2
104	Ft. 41	-79374.2	-144.6	-1096.9	-565.2
	Fc. 41	-79374.2	-144.6	-1096.9	-770.5
	ClsMax 41	-79374.2	-144.6	-1096.9	-53.0
	ClsMed 41	-79374.2	-144.6	-1096.9	-44.5

- Pilastro: 104/204 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/20.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
104	27	-77144.5	5734.8	10500.2	1.00	1.00	0.55
204	14	-56586.0	-8403.0	10764.0	15.31	7.18	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7191.3	27721.3	13063.3	48963.7	$\phi 12/15.0'$
0.79	3.28	7191.3	9240.4	13063.3	16321.2	$\phi 8/20.0'$
3.28	3.90	7191.3	27721.3	13063.3	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

104	Ft. 37	-70823.7	1549.3	805.1	-360.7
	Fc. 36	-71549.3	1544.6	802.4	-836.5
	ClsMax 36	-71549.3	1544.6	802.4	-61.2
	ClsMed 36	-71549.3	1544.6	802.4	-40.1
204	Ft. 37	-69297.4	-2647.6	-109.2	-281.1
	Fc. 36	-70023.0	-2646.4	-106.8	-890.8
	ClsMax 36	-70023.0	-2646.4	-106.8	-67.4
	ClsMed 36	-70023.0	-2646.4	-106.8	-39.3

Combinazioni Frequenti

104	Ft. 39	-66485.6	1345.2	723.5	-353.3
	Fc. 39	-66485.6	1345.2	723.5	-765.6
	ClsMax 39	-66485.6	1345.2	723.5	-55.8
	ClsMed 39	-66485.6	1345.2	723.5	-37.3
204	Ft. 39	-64959.4	-2389.5	-94.7	-274.4
	Fc. 39	-64959.4	-2389.5	-94.7	-818.8
	ClsMax 39	-64959.4	-2389.5	-94.7	-61.8
	ClsMed 39	-64959.4	-2389.5	-94.7	-36.4

Combinazioni Quasi Permanenti

104	Ft. 41	-65281.4	1275.6	695.4	-353.1
	Fc. 41	-65281.4	1275.6	695.4	-745.5
	ClsMax 41	-65281.4	1275.6	695.4	-54.2
	ClsMed 41	-65281.4	1275.6	695.4	-36.6
204	Ft. 41	-63755.2	-2303.1	-89.1	-274.3
	Fc. 41	-63755.2	-2303.1	-89.1	-798.6
	ClsMax 41	-63755.2	-2303.1	-89.1	-60.2
	ClsMed 41	-63755.2	-2303.1	-89.1	-35.8

- Pilastro: 204/304 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8 + $\phi 8/20.0'$ x 247.3 + $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
204	29	-55017.0	8444.5	-11509.5	1.46	22.85	0.64
304	14	-42773.9	-8423.7	10790.6	15.47	7.11	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8141.9	27721.3	15280.2	48963.7	$\phi 12/15.0'$
0.79	3.26	8141.9	9240.4	15280.2	16321.2	$\phi 8/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	8141.9	27721.3	15280.2	48963.7	ø 12/15.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

204	Ft. 37	-54173.6	3662.1	-573.0	-0.2
	Fc. 36	-54901.1	3663.9	-578.1	-847.0
	ClsMax 36	-54901.1	3663.9	-578.1	-67.8
	ClsMed 36	-54901.1	3663.9	-578.1	-32.1
304	Ft. 37	-52654.9	-3488.7	407.5	-22.5
	Fc. 36	-53382.4	-3490.4	412.1	-803.6
	ClsMax 36	-53382.4	-3490.4	412.1	-64.2
	ClsMed 36	-53382.4	-3490.4	412.1	-30.8

Combinazioni Frequenti

204	Ft. 39	-50718.7	3349.1	-517.0	-13.1
	Fc. 39	-50718.7	3349.1	-517.0	-777.1
	ClsMax 39	-50718.7	3349.1	-517.0	-62.2
	ClsMed 39	-50718.7	3349.1	-517.0	-29.5
304	Ft. 39	-49200.0	-3180.7	369.8	-32.7
	Fc. 39	-49200.0	-3180.7	369.8	-735.8
	ClsMax 39	-49200.0	-3180.7	369.8	-58.7
	ClsMed 39	-49200.0	-3180.7	369.8	-28.2

Combinazioni Quasi Permanenti

204	Ft. 41	-49809.6	3245.4	-500.1	-19.5
	Fc. 41	-49809.6	3245.4	-500.1	-757.6
	ClsMax 41	-49809.6	3245.4	-500.1	-60.5
	ClsMed 41	-49809.6	3245.4	-500.1	-28.7
304	Ft. 41	-48290.8	-3078.6	358.7	-38.1
	Fc. 41	-48290.8	-3078.6	358.7	-717.0
	ClsMax 41	-48290.8	-3078.6	358.7	-57.1
	ClsMed 41	-48290.8	-3078.6	358.7	-27.5

- Pilastro: 304/404 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

Staffe: ø 12/15.0' x 61.8+ø 8/20.0' x 247.3+ø 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
304	14	-28674.4	8423.7	-10790.6	16.91	7.03	0.68
404	14	-27155.7	-8594.7	10790.6	18.21	7.69	0.69

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7744.7	27721.3	14485.1	48963.7	∅ 12/15.0'
0.79	3.26	7744.7	9240.4	14485.1	16321.2	∅ 8/20.0'
3.26	3.88	7744.7	27721.3	14485.1	48963.7	∅ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

304	Ft. 37	-37492.5	3378.6	-432.2	155.5
	Fc. 36	-38222.9	3379.1	-439.7	-693.0
	ClSMax 36	-38222.9	3379.1	-439.7	-57.6
	ClSMed 36	-38222.9	3379.1	-439.7	-27.3
404	Ft. 37	-35973.8	-3402.1	409.7	183.9
	Fc. 36	-36704.1	-3402.0	415.8	-684.6
	ClSMax 36	-36704.1	-3402.0	415.8	-57.4
	ClSMed 36	-36704.1	-3402.0	415.8	-27.2

Combinazioni Frequenti

304	Ft. 39	-34924.7	3070.3	-393.5	127.8
	Fc. 39	-34924.7	3070.3	-393.5	-630.3
	ClSMax 39	-34924.7	3070.3	-393.5	-52.4
	ClSMed 39	-34924.7	3070.3	-393.5	-24.8
404	Ft. 39	-33406.0	-3092.2	372.2	155.1
	Fc. 39	-33406.0	-3092.2	372.2	-622.0
	ClSMax 39	-33406.0	-3092.2	372.2	-52.1
	ClSMed 39	-33406.0	-3092.2	372.2	-24.7

Combinazioni Quasi Permanenti

304	Ft. 41	-34312.3	2967.8	-383.1	115.2
	Fc. 41	-34312.3	2967.8	-383.1	-612.9
	ClSMax 41	-34312.3	2967.8	-383.1	-50.8
	ClSMed 41	-34312.3	2967.8	-383.1	-24.1
404	Ft. 41	-32793.5	-2988.9	361.7	141.7
	Fc. 41	-32793.5	-2988.9	361.7	-604.4
	ClSMax 41	-32793.5	-2988.9	361.7	-50.5
	ClSMed 41	-32793.5	-2988.9	361.7	-24.0

- Pilastro: 404/504 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af} = 27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
404	12	-17231.7	9112.3	-10790.6	9.20	1.80	0.76
504	27	-16295.4	-6487.5	-10115.9	1.00	1.00	0.60

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8261.7	27721.3	13117.0	48963.7	ø 12/15.0'
0.79	3.26	8261.7	9240.4	13117.0	16321.2	ø 8/20.0'
3.26	3.88	8261.7	27721.3	13117.0	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

404	Ft. 37	-20861.4	3471.6	-661.7	574.0
	Fc. 36	-21595.4	3476.8	-673.7	-631.6
	ClsMax 36	-21595.4	3476.8	-673.7	-58.0
	ClsMed 36	-21595.4	3476.8	-673.7	-26.1
504	Ft. 37	-19342.6	-3504.4	781.2	642.6
	Fc. 36	-20076.7	-3516.3	793.8	-640.3
	ClsMax 36	-20076.7	-3516.3	793.8	-59.5
	ClsMed 36	-20076.7	-3516.3	793.8	-26.3

Combinazioni Frequenti

404	Ft. 39	-19180.5	3155.9	-605.5	516.2
	Fc. 39	-19180.5	3155.9	-605.5	-570.1
	ClsMax 39	-19180.5	3155.9	-605.5	-52.6
	ClsMed 39	-19180.5	3155.9	-605.5	-23.7
504	Ft. 39	-17661.7	-3185.8	720.2	583.1
	Fc. 39	-17661.7	-3185.8	720.2	-576.9
	ClsMax 39	-17661.7	-3185.8	720.2	-53.9
	ClsMed 39	-17661.7	-3185.8	720.2	-23.8

Combinazioni Quasi Permanenti

404	Ft. 41	-18864.9	3052.3	-590.8	491.1
	Fc. 41	-18864.9	3052.3	-590.8	-553.9
	ClsMax 41	-18864.9	3052.3	-590.8	-50.9
	ClsMed 41	-18864.9	3052.3	-590.8	-22.9
504	Ft. 41	-17346.1	-3083.6	704.0	557.9
	Fc. 41	-17346.1	-3083.6	704.0	-560.8
	ClsMax 41	-17346.1	-3083.6	704.0	-52.3
	ClsMed 41	-17346.1	-3083.6	704.0	-23.0

- Pilastro: 504/604 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \varnothing 24 Af=27.14 [cm^2] < 1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H >$

Staffe: $\varnothing 8/20.0' \times 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
504	32	-3554.0	4670.6	138.9	1.00	1.00	0.36
604	4	-2687.8	-1176.5	4035.8	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5366.7	9240.4	4251.1	16321.2	$\varnothing 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
504	Ft. 37	-3804.9	3099.3	-119.0	924.7
	Fc. 36	-4548.5	3074.2	-127.0	-387.1
	ClsMax 37	-3804.9	3099.3	-119.0	-43.8
	ClsMed 37	-3804.9	3099.3	-119.0	-21.3
604	Ft. 36	-4061.0	-1984.5	311.1	568.4
	Fc. 36	-4061.0	-1984.5	311.1	-290.7
	ClsMax 36	-4061.0	-1984.5	311.1	-31.1
	ClsMed 36	-4061.0	-1984.5	311.1	-13.9
Combinazioni Frequenti					
504	Ft. 39	-2999.5	2810.4	-89.1	851.6
	Fc. 39	-2999.5	2810.4	-89.1	-338.5
	ClsMax 39	-2999.5	2810.4	-89.1	-39.4
	ClsMed 39	-2999.5	2810.4	-89.1	-19.2
604	Ft. 40	-2788.7	-1138.9	266.5	322.6
	Fc. 40	-2788.7	-1138.9	266.5	-182.0
	ClsMax 40	-2788.7	-1138.9	266.5	-18.9
	ClsMed 40	-2788.7	-1138.9	266.5	-8.1
Combinazioni Quasi Permanenti					
504	Ft. 41	-2978.8	2705.7	-81.8	816.1
	Fc. 41	-2978.8	2705.7	-81.8	-326.3
	ClsMax 41	-2978.8	2705.7	-81.8	-37.9
	ClsMed 41	-2978.8	2705.7	-81.8	-18.5
604	Ft. 41	-2491.3	-931.1	263.5	262.9
	Fc. 41	-2491.3	-931.1	263.5	-156.2
	ClsMax 41	-2491.3	-931.1	263.5	-15.9
	ClsMed 41	-2491.3	-931.1	263.5	-6.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 5/105 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 0φ20 x 2 H >

Staffe: ø 12/15.0' x 51.3+ø 8/15.0' x 205.3+ø 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
5	27	-45234.1	6984.9	8771.4	1.65	1.44	0.60
105	27	-44015.3	-6984.9	8771.4	2.50	7.79	0.61

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	10611.7	27721.3	11815.1	48963.7	ø 12/15.0'
0.51	2.57	10611.7	12320.6	11815.1	21761.7	ø 8/15.0'
2.57	3.08	10611.7	27721.3	11815.1	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
5	Ft. 38	-51014.8	9.5	-1130.7	-338.9
	Fc. 36	-53691.2	27.6	-1212.9	-550.6
	ClsMax 36	-53691.2	27.6	-1212.9	-38.1
	ClsMed 36	-53691.2	27.6	-1212.9	-30.1
105	Ft. 38	-49796.1	32.3	2277.3	-235.6
	Fc. 36	-52472.4	6.6	2455.5	-636.1
	ClsMax 36	-52472.4	6.6	2455.5	-45.1
	ClsMed 36	-52472.4	6.6	2455.5	-29.4
Combinazioni Frequenti					
5	Ft. 40	-49492.6	6.7	-1101.2	-328.7
	Fc. 39	-50227.1	13.6	-1128.1	-513.2
	ClsMax 39	-50227.1	13.6	-1128.1	-35.5
	ClsMed 39	-50227.1	13.6	-1128.1	-28.2
105	Ft. 40	-48273.8	34.5	2216.7	-227.3
	Fc. 39	-49008.4	24.4	2275.8	-594.7
	ClsMax 39	-49008.4	24.4	2275.8	-42.2
	ClsMed 39	-49008.4	24.4	2275.8	-27.5
Combinazioni Quasi Permanenti					
5	Ft. 41	-49335.0	7.5	-1100.7	-327.4
	Fc. 41	-49335.0	7.5	-1100.7	-502.8
	ClsMax 41	-49335.0	7.5	-1100.7	-34.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-49335.0	7.5	-1100.7	-27.7
105	Ft. 41	-48116.3	32.9	2216.4	-226.2
	Fc. 41	-48116.3	32.9	2216.4	-583.5
	ClsMax 41	-48116.3	32.9	2216.4	-41.4
	ClsMed 41	-48116.3	32.9	2216.4	-27.0

- Pilastro: 105/205 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
105	4	-44487.3	-4677.6	-9473.4	1.00	1.00	0.50
205	20	-25914.2	-8324.6	-4394.0	2.20	5.44	0.67

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9215.9	27721.3	10644.5	48963.7	$\phi 12/15.0'$
0.79	3.28	9215.9	12320.6	10644.5	21761.7	$\phi 8/15.0'$
3.28	3.90	9215.9	27721.3	10644.5	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
105	Ft. 37	-42483.9	796.0	-2166.2	-98.2
	Fc. 36	-42883.1	793.2	-2168.6	-619.9
	ClsMax 36	-42883.1	793.2	-2168.6	-46.1
	ClsMed 36	-42883.1	793.2	-2168.6	-24.1
205	Ft. 37	-40957.6	-1487.6	1252.9	-80.9
	Fc. 36	-41356.9	-1486.7	1254.7	-611.8
	ClsMax 36	-41356.9	-1486.7	1254.7	-46.6
	ClsMed 36	-41356.9	-1486.7	1254.7	-23.2
Combinazioni Frequenti					
105	Ft. 39	-40132.7	713.6	-2027.7	-98.5
	Fc. 39	-40132.7	713.6	-2027.7	-576.8
	ClsMax 39	-40132.7	713.6	-2027.7	-42.8
	ClsMed 39	-40132.7	713.6	-2027.7	-22.5
205	Ft. 39	-38606.5	-1357.4	1206.5	-79.2
	Fc. 39	-38606.5	-1357.4	1206.5	-570.5

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	ClsMax 39	-38606.5	-1357.4	1206.5	-43.4
	ClsMed 39	-38606.5	-1357.4	1206.5	-21.7

Combinazioni Quasi Permanenti

105	Ft. 41	-39482.1	685.2	-1982.3	-99.8
	Fc. 41	-39482.1	685.2	-1982.3	-564.6
	ClsMax 41	-39482.1	685.2	-1982.3	-41.8
	ClsMed 41	-39482.1	685.2	-1982.3	-22.1
205	Ft. 41	-37955.8	-1313.7	1191.7	-79.7
	Fc. 41	-37955.8	-1313.7	1191.7	-559.0
	ClsMax 41	-37955.8	-1313.7	1191.7	-42.5
	ClsMed 41	-37955.8	-1313.7	1191.7	-21.3

- Pilastro: 205/305 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
205	20	-20597.4	8365.8	4415.7	2.09	1.06	0.54
305	20	-19078.7	-8345.2	-4404.9	2.12	1.48	0.55

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10408.1	27721.3	11006.5	48963.7	$\phi 12/15.0'$
0.79	3.26	10408.1	12320.6	11006.5	21761.7	$\phi 8/15.0'$
3.26	3.88	10408.1	27721.3	11006.5	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
205	Ft. 37	-32701.7	2149.4	-747.3	25.2
	Fc. 36	-33097.7	2150.1	-751.7	-535.8
	ClsMax 36	-33097.7	2150.1	-751.7	-42.9
	ClsMed 36	-33097.7	2150.1	-751.7	-19.2
305	Ft. 37	-31182.9	-2018.9	930.6	38.9
	Fc. 36	-31579.0	-2019.5	934.4	-524.9
	ClsMax 36	-31579.0	-2019.5	934.4	-42.0
	ClsMed 36	-31579.0	-2019.5	934.4	-18.3
Combinazioni Frequenti					

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205	Ft. 39	-30818.0	1973.5	-748.7	20.2
	Fc. 39	-30818.0	1973.5	-748.7	-499.4
	ClsMax 39	-30818.0	1973.5	-748.7	-39.9
	ClsMed 39	-30818.0	1973.5	-748.7	-17.8
305	Ft. 39	-29299.2	-1850.9	916.0	33.7
	Fc. 39	-29299.2	-1850.9	916.0	-488.3
	ClsMax 39	-29299.2	-1850.9	916.0	-39.0
	ClsMed 39	-29299.2	-1850.9	916.0	-17.0

Combinazioni Quasi Permanenti

205	Ft. 41	-30322.1	1915.1	-750.6	17.3
	Fc. 41	-30322.1	1915.1	-750.6	-489.4
	ClsMax 41	-30322.1	1915.1	-750.6	-39.1
	ClsMed 41	-30322.1	1915.1	-750.6	-17.4
305	Ft. 41	-28803.4	-1795.1	912.4	30.7
	Fc. 41	-28803.4	-1795.1	912.4	-478.0
	ClsMax 41	-28803.4	-1795.1	912.4	-38.2
	ClsMed 41	-28803.4	-1795.1	912.4	-16.6

- Pilastro: 305/405 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8 + $\phi 8/15.0'$ x 247.3 + $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
305	20	-14537.9	8345.2	4404.9	2.23	1.56	0.58
405	20	-13019.1	-9327.2	-4404.9	2.40	1.46	0.67

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9588.7	27721.3	10477.0	48963.7	$\phi 12/15.0'$
0.79	3.26	9588.7	12320.6	10477.0	21761.7	$\phi 8/15.0'$
3.26	3.88	9588.7	27721.3	10477.0	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
305	Ft. 37	-22751.0	1945.3	-1185.3	166.4
	Fc. 36	-23141.8	1945.0	-1191.4	-489.3
	ClsMax 36	-23141.8	1945.0	-1191.4	-40.5

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	ClsMed 36	-23141.8	1945.0	-1191.4	-16.4
405	Ft. 37	-21232.2	-1960.8	1058.5	182.7
	Fc. 36	-21623.1	-1960.1	1062.7	-472.3
	ClsMax 36	-21623.1	-1960.1	1062.7	-39.4
	ClsMed 36	-21623.1	-1960.1	1062.7	-16.1

Combinazioni Frequenti

305	Ft. 39	-21349.4	1780.1	-1146.5	150.3
	Fc. 39	-21349.4	1780.1	-1146.5	-453.8
	ClsMax 39	-21349.4	1780.1	-1146.5	-37.5
	ClsMed 39	-21349.4	1780.1	-1146.5	-15.1
405	Ft. 39	-19830.6	-1794.2	1030.3	166.8
	Fc. 39	-19830.6	-1794.2	1030.3	-437.9
	ClsMax 39	-19830.6	-1794.2	1030.3	-36.5
	ClsMed 39	-19830.6	-1794.2	1030.3	-14.8

Combinazioni Quasi Permanenti

305	Ft. 41	-21012.5	1724.9	-1135.6	143.0
	Fc. 41	-21012.5	1724.9	-1135.6	-443.6
	ClsMax 41	-21012.5	1724.9	-1135.6	-36.6
	ClsMed 41	-21012.5	1724.9	-1135.6	-14.7
405	Ft. 41	-19493.7	-1738.5	1022.3	159.2
	Fc. 41	-19493.7	-1738.5	1022.3	-427.8
	ClsMax 41	-19493.7	-1738.5	1022.3	-35.6
	ClsMed 41	-19493.7	-1738.5	1022.3	-14.4

- Pilastro: 405/505 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4$ V + $1\varnothing 24 \times 2$ B + $0\varnothing 12 \times 2$ H >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
405	8	-13102.3	9901.9	-6385.7	3.00	1.06	0.73
505	27	-8700.3	-6154.0	-6577.2	1.00	1.00	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8868.7	27721.3	12143.2	48963.7	$\varnothing 12/15.0'$
0.79	3.26	8868.7	9240.4	12143.2	16321.2	$\varnothing 8/20.0'$
3.26	3.88	8868.7	27721.3	12143.2	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
405	Ft. 37	-12674.2	2017.6	-1283.5	434.1
	Fc. 36	-13057.2	2019.6	-1293.9	-467.1
	ClsMax 36	-13057.2	2019.6	-1293.9	-41.9
	ClsMed 36	-13057.2	2019.6	-1293.9	-15.9
505	Ft. 37	-11155.4	-2045.4	1478.5	517.7
	Fc. 36	-11538.4	-2051.6	1490.2	-486.2
	ClsMax 36	-11538.4	-2051.6	1490.2	-44.2
	ClsMed 36	-11538.4	-2051.6	1490.2	-16.2
Combinazioni Frequenti					
405	Ft. 39	-11766.4	1845.4	-1240.2	401.2
	Fc. 39	-11766.4	1845.4	-1240.2	-432.4
	ClsMax 39	-11766.4	1845.4	-1240.2	-38.8
	ClsMed 39	-11766.4	1845.4	-1240.2	-14.6
505	Ft. 39	-10247.6	-1870.4	1424.8	482.8
	Fc. 39	-10247.6	-1870.4	1424.8	-449.4
	ClsMax 39	-10247.6	-1870.4	1424.8	-41.0
	ClsMed 39	-10247.6	-1870.4	1424.8	-14.8
Combinazioni Quasi Permanenti					
405	Ft. 41	-11591.5	1788.7	-1229.3	387.2
	Fc. 41	-11591.5	1788.7	-1229.3	-422.8
	ClsMax 41	-11591.5	1788.7	-1229.3	-37.9
	ClsMed 41	-11591.5	1788.7	-1229.3	-14.2
505	Ft. 41	-10072.7	-1814.1	1410.8	468.3
	Fc. 41	-10072.7	-1814.1	1410.8	-439.6
	ClsMax 41	-10072.7	-1814.1	1410.8	-40.0
	ClsMed 41	-10072.7	-1814.1	1410.8	-14.4

- Pilastro: 505/605 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$ Ast/s=0.100531 < $0.08 fcd bst/fyd 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
505	27	-1729.5	3505.8	-3023.1	1.00	1.00	0.30
605	27	-1242.0	-1200.9	-1332.2	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	1.18	3724.8	9240.4	1613.1	16321.2	ø 8/20.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

505	Ft. 37	-2448.0	1719.1	-947.7	630.9
	Fc. 36	-2825.0	1703.3	-952.7	-331.7
	ClsMax 37	-2448.0	1719.1	-947.7	-33.9
	ClsMed 37	-2448.0	1719.1	-947.7	-12.5
605	Ft. 36	-2337.5	-1081.6	524.7	356.7
	Fc. 36	-2337.5	-1081.6	524.7	-204.5
	ClsMax 36	-2337.5	-1081.6	524.7	-20.7
	ClsMed 36	-2337.5	-1081.6	524.7	-7.9

Combinazioni Frequenti

505	Ft. 39	-2025.9	1573.8	-932.1	595.8
	Fc. 39	-2025.9	1573.8	-932.1	-308.7
	ClsMax 39	-2025.9	1573.8	-932.1	-31.7
	ClsMed 39	-2025.9	1573.8	-932.1	-11.5
605	Ft. 40	-1674.2	-638.3	489.7	228.0
	Fc. 40	-1674.2	-638.3	489.7	-144.6
	ClsMax 40	-1674.2	-638.3	489.7	-14.1
	ClsMed 40	-1674.2	-638.3	489.7	-4.9

Combinazioni Quasi Permanenti

505	Ft. 41	-2010.9	1520.1	-928.5	577.9
	Fc. 41	-2010.9	1520.1	-928.5	-302.1
	ClsMax 41	-2010.9	1520.1	-928.5	-30.9
	ClsMed 41	-2010.9	1520.1	-928.5	-11.1
605	Ft. 41	-1523.4	-529.1	487.2	197.5
	Fc. 41	-1523.4	-529.1	487.2	-130.3
	ClsMax 41	-1523.4	-529.1	487.2	-12.5
	ClsMed 41	-1523.4	-529.1	487.2	-4.3

- Pilastro: 6/106 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af} = 25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
6	25	-146839.6	24594.5	5522.3	10.79	1.05	0.56
106	25	-144808.3	24594.5	5522.3	42.03	1.72	0.56

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	32696.3	73445.6	8826.7	73445.6	ø 12/10.0'
0.51	2.57	32696.3	36722.8	8826.7	36722.8	ø 12/20.0'
2.57	3.08	32696.3	73445.6	8826.7	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

6	Ft. 38	-155357.1	-679.9	-60.5	-774.2
	Fc. 36	-170063.2	-1274.6	-56.5	-951.0
	ClsMax 36	-170063.2	-1274.6	-56.5	-64.3
	ClsMed 36	-170063.2	-1274.6	-56.5	-59.1
106	Ft. 38	-153325.8	1586.8	-60.2	-719.7
	Fc. 36	-168032.0	2857.9	-69.0	-1017.6
	ClsMax 36	-168032.0	2857.9	-69.0	-69.8
	ClsMed 36	-168032.0	2857.9	-69.0	-58.4

Combinazioni Frequenti

6	Ft. 40	-148156.7	-481.9	-60.3	-746.2
	Fc. 39	-152484.1	-680.2	-58.6	-830.7
	ClsMax 39	-152484.1	-680.2	-58.6	-55.9
	ClsMed 39	-152484.1	-680.2	-58.6	-53.0
106	Ft. 40	-146125.4	1163.5	-55.7	-702.9
	Fc. 39	-150452.8	1587.3	-58.2	-864.0
	ClsMax 39	-150452.8	1587.3	-58.2	-58.7
	ClsMed 39	-150452.8	1587.3	-58.2	-52.3

Combinazioni Quasi Permanenti

6	Ft. 41	-147582.1	-481.9	-59.9	-743.3
	Fc. 41	-147582.1	-481.9	-59.9	-795.7
	ClsMax 41	-147582.1	-481.9	-59.9	-53.4
	ClsMed 41	-147582.1	-481.9	-59.9	-51.3
106	Ft. 41	-145550.8	1163.6	-55.3	-699.9
	Fc. 41	-145550.8	1163.6	-55.3	-817.8
	ClsMax 41	-145550.8	1163.6	-55.3	-55.3
	ClsMed 41	-145550.8	1163.6	-55.3	-50.6

- Pilastro: 106/206 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 62.2+ø 12/20.0' x 248.7+ø 12/10.0' x 62.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
106	8	-115046.6	-18591.1	-6697.4	5.61	1.00	0.46
206	7	-111989.5	21100.2	3550.9	73.11	3.44	0.47

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25917.0	73445.6	6919.6	73445.6	Ø 12/10.0'
0.79	3.28	25917.0	36722.8	6919.6	36722.8	Ø 12/20.0'
3.28	3.90	25917.0	73445.6	6919.6	73445.6	Ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

106	Ft. 38	-119852.7	-161.2	-0.6	-617.1
	Fc. 36	-128998.8	-986.8	2.1	-720.4
	ClsMax 36	-128998.8	-986.8	2.1	-48.7
	ClsMed 36	-128998.8	-986.8	2.1	-44.8
206	Ft. 38	-117309.0	-1416.9	-118.9	-537.3
	Fc. 36	-126455.0	-1318.3	-134.1	-729.6
	ClsMax 36	-126455.0	-1318.3	-134.1	-49.6
	ClsMed 36	-126455.0	-1318.3	-134.1	-44.0

Combinazioni Frequenti

106	Ft. 40	-114504.3	112.7	-1.0	-591.5
	Fc. 39	-116978.0	-162.8	0.0	-617.8
	ClsMax 39	-116978.0	-162.8	0.0	-41.3
	ClsMed 39	-116978.0	-162.8	0.0	-40.7
206	Ft. 40	-111960.6	-1448.0	-111.3	-508.3
	Fc. 39	-114434.3	-1414.7	-115.7	-670.7
	ClsMax 39	-114434.3	-1414.7	-115.7	-45.7
	ClsMed 39	-114434.3	-1414.7	-115.7	-39.8

Combinazioni Quasi Permanenti

106	Ft. 41	-113929.4	112.4	-0.9	-588.5
	Fc. 41	-113929.4	112.4	-0.9	-599.5
	ClsMax 41	-113929.4	112.4	-0.9	-40.0
	ClsMed 41	-113929.4	112.4	-0.9	-39.6
206	Ft. 41	-111385.6	-1447.6	-110.6	-505.4
	Fc. 41	-111385.6	-1447.6	-110.6	-656.1
	ClsMax 41	-111385.6	-1447.6	-110.6	-44.8
	ClsMed 41	-111385.6	-1447.6	-110.6	-38.7

- Pilastro: 206/306 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4$ V + $1\varnothing 24 \times 2$ B + $1\varnothing 24 \times 2$ H >

Staffe: $\varnothing 12/10.0'$ x 61.8 + $\varnothing 12/20.0'$ x 247.3 + $\varnothing 12/10.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
206	24	-85964.6	-19606.4	5657.7	23.81	1.00	0.41
306	14	-84878.1	-17807.2	5161.4	154.40	12.27	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29689.6	73445.6	7684.2	73445.6	$\varnothing 12/10.0'$
0.79	3.26	29689.6	36722.8	7684.2	36722.8	$\varnothing 12/20.0'$
3.26	3.88	29689.6	73445.6	7684.2	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
206	Ft. 38	-91578.5	2782.5	19.2	-326.9
	Fc. 36	-98442.5	3235.4	20.7	-630.0
	ClsMax 36	-98442.5	3235.4	20.7	-44.1
	ClsMed 36	-98442.5	3235.4	20.7	-32.4
306	Ft. 38	-89047.3	-2378.4	-147.5	-326.7
	Fc. 36	-95911.2	-2668.4	-161.6	-598.6
	ClsMax 36	-95911.2	-2668.4	-161.6	-41.7
	ClsMed 36	-95911.2	-2668.4	-161.6	-31.5
Combinazioni Frequenti					
206	Ft. 40	-86987.7	2629.7	18.9	-311.1
	Fc. 39	-88700.0	2780.2	19.4	-561.7
	ClsMax 39	-88700.0	2780.2	19.4	-39.3
	ClsMed 39	-88700.0	2780.2	19.4	-29.2
306	Ft. 40	-84456.5	-2279.9	-139.2	-308.8
	Fc. 39	-86168.8	-2376.1	-143.0	-536.7
	ClsMax 39	-86168.8	-2376.1	-143.0	-37.4
	ClsMed 39	-86168.8	-2376.1	-143.0	-28.3
Combinazioni Quasi Permanenti					
206	Ft. 41	-86412.0	2629.2	18.9	-308.3
	Fc. 41	-86412.0	2629.2	18.9	-543.7
	ClsMax 41	-86412.0	2629.2	18.9	-38.0
	ClsMed 41	-86412.0	2629.2	18.9	-28.4
306	Ft. 41	-83880.8	-2279.4	-138.3	-306.1
	Fc. 41	-83880.8	-2279.4	-138.3	-520.9

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	ClsMax 41	-83880.8	-2279.4	-138.3	-36.3
	ClsMed 41	-83880.8	-2279.4	-138.3	-27.6

- Pilastro: 306/406 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ϕ 24 Af=36.19 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 1 ϕ 24 x 2 H >

Staffe: ϕ 12/10.0' x 61.8+ ϕ 12/20.0' x 247.3+ ϕ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
306	35	-58428.1	17807.2	-4940.3	3.41	5.87	0.38
406	4	-56030.7	19800.1	3968.3	17.54	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28486.9	73445.6	6739.5	73445.6	ϕ 12/10.0'
0.79	3.26	28486.9	36722.8	6739.5	36722.8	ϕ 12/20.0'
3.26	3.88	28486.9	73445.6	6739.5	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
306	Ft. 38	-63251.9	2097.6	32.0	-217.2
	Fc. 36	-67798.0	2269.4	37.3	-436.7
	ClsMax 36	-67798.0	2269.4	37.3	-30.6
	ClsMed 36	-67798.0	2269.4	37.3	-22.3
406	Ft. 38	-60720.6	-2078.6	-133.8	-201.0
	Fc. 36	-65266.7	-2274.9	-145.4	-429.3
	ClsMax 36	-65266.7	-2274.9	-145.4	-30.2
	ClsMed 36	-65266.7	-2274.9	-145.4	-21.4
Combinazioni Frequenti					
306	Ft. 40	-59429.1	2036.9	30.0	-201.1
	Fc. 39	-60367.6	2093.3	31.8	-392.0
	ClsMax 39	-60367.6	2093.3	31.8	-27.5
	ClsMed 39	-60367.6	2093.3	31.8	-19.8
406	Ft. 40	-56897.8	-2007.0	-124.8	-185.7
	Fc. 39	-57836.3	-2070.9	-127.3	-382.8
	ClsMax 39	-57836.3	-2070.9	-127.3	-26.9
	ClsMed 39	-57836.3	-2070.9	-127.3	-19.0
Combinazioni Quasi Permanenti					

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306	Ft. 41	-58852.2	2036.1	30.0	-198.3
	Fc. 41	-58852.2	2036.1	30.0	-381.9
	ClsMax 41	-58852.2	2036.1	30.0	-26.8
	ClsMed 41	-58852.2	2036.1	30.0	-19.3
406	Ft. 41	-56320.9	-2005.5	-123.5	-183.0
	Fc. 41	-56320.9	-2005.5	-123.5	-372.2
	ClsMax 41	-56320.9	-2005.5	-123.5	-26.2
	ClsMed 41	-56320.9	-2005.5	-123.5	-18.5

- Pilastro: 406/506 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
406	25	-31718.9	-19818.9	3559.7	66.58	1.78	0.50
506	15	-29249.2	15875.9	3687.1	7.80	14.73	0.39

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	24353.1	73445.6	5916.8	73445.6	ø 12/10.0'
0.79	3.26	24353.1	36722.8	5916.8	36722.8	ø 12/20.0'
3.26	3.88	24353.1	73445.6	5916.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
406	Ft. 37	-35774.1	2736.9	83.6	-51.0
	Fc. 36	-37220.7	2737.2	83.1	-308.8
	ClsMax 36	-37220.7	2737.2	83.1	-22.4
	ClsMed 36	-37220.7	2737.2	83.1	-12.2
506	Ft. 37	-33242.9	-3158.0	-200.9	-14.1
	Fc. 36	-34689.5	-3154.1	-204.1	-320.3
	ClsMax 36	-34689.5	-3154.1	-204.1	-23.5
	ClsMed 36	-34689.5	-3154.1	-204.1	-11.5
Combinazioni Frequenti					
406	Ft. 39	-32087.4	2474.7	73.3	-44.9
	Fc. 39	-32087.4	2474.7	73.3	-271.4
	ClsMax 39	-32087.4	2474.7	73.3	-19.8

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	ClsMed 39	-32087.4	2474.7	73.3	-10.5
506	Ft. 39	-29556.2	-2862.2	-177.5	-9.9
	Fc. 39	-29556.2	-2862.2	-177.5	-281.2
	ClsMax 39	-29556.2	-2862.2	-177.5	-20.7
	ClsMed 39	-29556.2	-2862.2	-177.5	-10.0

Combinazioni Quasi Permanenti

406	Ft. 41	-31340.8	2387.4	69.7	-45.3
	Fc. 41	-31340.8	2387.4	69.7	-263.7
	ClsMax 41	-31340.8	2387.4	69.7	-19.2
	ClsMed 41	-31340.8	2387.4	69.7	-10.3
506	Ft. 41	-28809.5	-2762.2	-170.7	-11.1
	Fc. 41	-28809.5	-2762.2	-170.7	-272.7
	ClsMax 41	-28809.5	-2762.2	-170.7	-20.1
	ClsMed 41	-28809.5	-2762.2	-170.7	-9.7

- Pilastro: 506/606 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
506	24	-3901.0	2221.9	2127.4	1.00	1.00	0.13
606	1	-6958.8	-1727.1	-0.5	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1327.7	25501.9	813.5	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
506	Ft. 37	-5114.2	1361.4	1.1	146.2
	Fc. 36	-6561.9	1365.9	1.2	-119.6
	ClsMax 37	-5114.2	1361.4	1.1	-9.6
	ClsMed 37	-5114.2	1361.4	1.1	-4.8
606	Ft. 36	-4874.4	-1224.0	-0.3	121.4
	Fc. 36	-4874.4	-1224.0	-0.3	-105.5
	ClsMax 36	-4874.4	-1224.0	-0.3	-8.6
	ClsMed 36	-4874.4	-1224.0	-0.3	-4.3

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Frequenti

506	Ft. 39	-3733.7	1227.3	1.0	166.1
	Fc. 39	-3733.7	1227.3	1.0	-103.2
	ClsMax 39	-3733.7	1227.3	1.0	-8.7
	ClsMed 39	-3733.7	1227.3	1.0	-4.3
606	Ft. 40	-2647.7	-702.1	-0.3	75.0
	Fc. 40	-2647.7	-702.1	-0.3	-60.2
	ClsMax 40	-2647.7	-702.1	-0.3	-4.9
	ClsMed 40	-2647.7	-702.1	-0.3	-2.5

Combinazioni Quasi Permanenti

506	Ft. 41	-3756.1	1184.1	0.9	154.0
	Fc. 41	-3756.1	1184.1	0.9	-100.0
	ClsMax 41	-3756.1	1184.1	0.9	-8.4
	ClsMed 41	-3756.1	1184.1	0.9	-4.2
606	Ft. 41	-2068.6	-574.1	-0.3	64.9
	Fc. 41	-2068.6	-574.1	-0.3	-49.1
	ClsMax 41	-2068.6	-574.1	-0.3	-4.0
	ClsMed 41	-2068.6	-574.1	-0.3	-2.0

- Pilastro: 7/107 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
7	25	-146013.9	25399.0	5480.8	6.30	1.04	0.58
107	25	-143982.6	25399.0	5480.8	110.83	1.69	0.58

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	32915.6	73445.6	8837.6	73445.6	$\varnothing 12/10.0'$
0.51	2.57	32915.6	36722.8	8837.6	36722.8	$\varnothing 12/20.0'$
2.57	3.08	32915.6	73445.6	8837.6	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
7	Ft. 38	-154869.4	-691.4	-73.9	-770.4
	Fc. 36	-169518.2	-1285.4	-72.1	-949.5

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	ClsMax 36	-169518.2	-1285.4	-72.1	-64.2
	ClsMed 36	-169518.2	-1285.4	-72.1	-58.9
107	Ft. 38	-152838.2	1632.1	-32.2	-716.4
	Fc. 36	-167487.0	2909.2	-36.3	-1015.7
	ClsMax 36	-167487.0	2909.2	-36.3	-69.7
	ClsMed 36	-167487.0	2909.2	-36.3	-58.2

Combinazioni Frequenti

7	Ft. 40	-147700.2	-493.4	-72.6	-742.7
	Fc. 39	-152011.5	-691.4	-71.5	-829.5
	ClsMax 39	-152011.5	-691.4	-71.5	-55.8
	ClsMed 39	-152011.5	-691.4	-71.5	-52.8
107	Ft. 40	-145669.0	1206.6	-29.9	-699.7
	Fc. 39	-149980.3	1632.4	-31.0	-862.4
	ClsMax 39	-149980.3	1632.4	-31.0	-58.6
	ClsMed 39	-149980.3	1632.4	-31.0	-52.1

Combinazioni Quasi Permanenti

7	Ft. 41	-147128.6	-493.4	-72.1	-739.7
	Fc. 41	-147128.6	-493.4	-72.1	-794.4
	ClsMax 41	-147128.6	-493.4	-72.1	-53.3
	ClsMed 41	-147128.6	-493.4	-72.1	-51.1
107	Ft. 41	-145097.4	1206.7	-29.6	-696.7
	Fc. 41	-145097.4	1206.7	-29.6	-816.3
	ClsMax 41	-145097.4	1206.7	-29.6	-55.2
	ClsMed 41	-145097.4	1206.7	-29.6	-50.4

- Pilastro: 107/207 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
107	8	-115283.6	-18591.1	-6729.8	3.44	1.00	0.46
207	11	-111828.6	21918.1	3550.9	20.32	3.27	0.48

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25936.4	73445.6	6890.7	73445.6	$\varnothing 12/10.0'$
0.79	3.28	25936.4	36722.8	6890.7	36722.8	$\varnothing 12/20.0'$
3.28	3.90	25936.4	73445.6	6890.7	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
107	Ft. 37	-127242.6	-988.3	-58.7	-612.8
	Fc. 36	-128671.8	-987.7	-59.7	-721.5
	ClsMax 36	-128671.8	-987.7	-59.7	-48.8
	ClsMed 36	-128671.8	-987.7	-59.7	-44.7
207	Ft. 38	-117007.1	-1406.5	-42.0	-540.0
	Fc. 36	-126128.0	-1310.4	-48.4	-723.3
	ClsMax 36	-126128.0	-1310.4	-48.4	-49.1
	ClsMed 36	-126128.0	-1310.4	-48.4	-43.8
Combinazioni Frequenti					
107	Ft. 40	-114223.8	111.8	-52.2	-587.6
	Fc. 39	-116692.4	-163.6	-53.3	-618.9
	ClsMax 39	-116692.4	-163.6	-53.3	-41.4
	ClsMed 39	-116692.4	-163.6	-53.3	-40.6
207	Ft. 40	-111680.1	-1437.2	-38.7	-510.9
	Fc. 39	-114148.7	-1404.7	-40.6	-665.0
	ClsMax 39	-114148.7	-1404.7	-40.6	-45.3
	ClsMed 39	-114148.7	-1404.7	-40.6	-39.7
Combinazioni Quasi Permanenti					
107	Ft. 41	-113652.1	111.5	-51.8	-584.7
	Fc. 41	-113652.1	111.5	-51.8	-600.5
	ClsMax 41	-113652.1	111.5	-51.8	-40.1
	ClsMed 41	-113652.1	111.5	-51.8	-39.5
207	Ft. 41	-111108.4	-1436.8	-38.4	-507.9
	Fc. 41	-111108.4	-1436.8	-38.4	-650.6
	ClsMax 41	-111108.4	-1436.8	-38.4	-44.4
	ClsMed 41	-111108.4	-1436.8	-38.4	-38.6

- Pilastro: 207/307 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \phi 24$ Af=36.19 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 1\phi 24 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
207	20	-87492.5	-20030.0	5710.0	8.76	1.00	0.42
307	33	-82238.2	-17807.2	-5184.1	3.13	9.02	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	29667.9	73445.6	7690.7	73445.6	ø 12/10.0'
0.79	3.26	29667.9	36722.8	7690.7	36722.8	ø 12/20.0'
3.26	3.88	29667.9	73445.6	7690.7	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
207	Ft. 38	-91379.2	2797.4	-95.3	-321.9
	Fc. 36	-98230.1	3254.0	-105.5	-633.5
	ClsMax 36	-98230.1	3254.0	-105.5	-44.4
	ClsMed 36	-98230.1	3254.0	-105.5	-32.3
307	Ft. 38	-88848.0	-2379.5	-15.8	-331.5
	Fc. 36	-95698.9	-2669.9	-16.7	-591.1
	ClsMax 36	-95698.9	-2669.9	-16.7	-41.2
	ClsMed 36	-95698.9	-2669.9	-16.7	-31.5
Combinazioni Frequenti					
207	Ft. 40	-86807.9	2643.9	-89.3	-306.5
	Fc. 39	-88519.6	2795.8	-92.0	-564.7
	ClsMax 39	-88519.6	2795.8	-92.0	-39.5
	ClsMed 39	-88519.6	2795.8	-92.0	-29.1
307	Ft. 40	-84276.6	-2281.4	-15.0	-313.4
	Fc. 39	-85988.3	-2377.8	-15.1	-530.2
	ClsMax 39	-85988.3	-2377.8	-15.1	-36.9
	ClsMed 39	-85988.3	-2377.8	-15.1	-28.3
Combinazioni Quasi Permanenti					
207	Ft. 41	-86236.0	2643.6	-88.6	-303.7
	Fc. 41	-86236.0	2643.6	-88.6	-546.5
	ClsMax 41	-86236.0	2643.6	-88.6	-38.2
	ClsMed 41	-86236.0	2643.6	-88.6	-28.3
307	Ft. 41	-83704.7	-2281.1	-14.8	-310.6
	Fc. 41	-83704.7	-2281.1	-14.8	-514.7
	ClsMax 41	-83704.7	-2281.1	-14.8	-35.8
	ClsMed 41	-83704.7	-2281.1	-14.8	-27.5

- Pilastro: 307/407 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
307	35	-57686.6	17807.2	-4866.4	2.50	5.05	0.38

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

407	7	-56672.0	21580.9	3559.7	32.61	1.14	0.47
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28515.0	73445.6	6753.3	73445.6	ø 12/10.0'
0.79	3.26	28515.0	36722.8	6753.3	36722.8	ø 12/20.0'
3.26	3.88	28515.0	73445.6	6753.3	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
307	Ft. 38	-63111.3	2091.7	-101.2	-213.7
	Fc. 36	-67649.8	2262.3	-109.0	-438.9
	ClsMax 36	-67649.8	2262.3	-109.0	-30.8
	ClsMed 36	-67649.8	2262.3	-109.0	-22.2
407	Ft. 38	-60580.1	-2068.8	-16.3	-206.0
	Fc. 36	-65118.6	-2264.0	-16.3	-422.3
	ClsMax 36	-65118.6	-2264.0	-16.3	-29.6
	ClsMed 36	-65118.6	-2264.0	-16.3	-21.4
Combinazioni Frequenti					
307	Ft. 40	-59309.4	2032.4	-95.6	-197.8
	Fc. 39	-60250.0	2088.6	-97.4	-394.2
	ClsMax 39	-60250.0	2088.6	-97.4	-27.7
	ClsMed 39	-60250.0	2088.6	-97.4	-19.8
407	Ft. 40	-56778.2	-1998.6	-13.8	-190.5
	Fc. 39	-57718.7	-2062.4	-13.1	-376.8
	ClsMax 39	-57718.7	-2062.4	-13.1	-26.5
	ClsMed 39	-57718.7	-2062.4	-13.1	-19.0
Combinazioni Quasi Permanenti					
307	Ft. 41	-58737.2	2031.7	-94.8	-195.0
	Fc. 41	-58737.2	2031.7	-94.8	-384.1
	ClsMax 41	-58737.2	2031.7	-94.8	-27.0
	ClsMed 41	-58737.2	2031.7	-94.8	-19.3
407	Ft. 41	-56205.9	-1997.3	-13.1	-187.7
	Fc. 41	-56205.9	-1997.3	-13.1	-366.4
	ClsMax 41	-56205.9	-1997.3	-13.1	-25.7
	ClsMed 41	-56205.9	-1997.3	-13.1	-18.5

- Pilastro: 407/507 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: \varnothing 12/10.0' x 61.8+ \varnothing 12/20.0' x 247.3+ \varnothing 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
407	25	-31872.7	-20399.3	3559.7	10.34	1.97	0.51
507	4	-28446.9	16023.5	3487.8	3.77	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	24375.3	73445.6	5849.5	73445.6	\varnothing 12/10.0'
0.79	3.26	24375.3	36722.8	5849.5	36722.8	\varnothing 12/20.0'
3.26	3.88	24375.3	73445.6	5849.5	73445.6	\varnothing 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
407	Ft. 37	-35682.3	2751.5	-139.6	-47.4
	Fc. 36	-37114.9	2751.5	-143.7	-311.6
	ClsMax 36	-37114.9	2751.5	-143.7	-22.7
	ClsMed 36	-37114.9	2751.5	-143.7	-12.2
507	Ft. 37	-33151.1	-3203.2	140.9	-14.1
	Fc. 36	-34583.6	-3200.2	143.8	-319.2
	ClsMax 36	-34583.6	-3200.2	143.8	-23.5
	ClsMed 36	-34583.6	-3200.2	143.8	-11.5
Combinazioni Frequenti					
407	Ft. 39	-32013.2	2487.6	-126.4	-41.6
	Fc. 39	-32013.2	2487.6	-126.4	-274.0
	ClsMax 39	-32013.2	2487.6	-126.4	-20.0
	ClsMed 39	-32013.2	2487.6	-126.4	-10.5
507	Ft. 39	-29482.0	-2902.2	128.3	-9.7
	Fc. 39	-29482.0	-2902.2	128.3	-280.5
	ClsMax 39	-29482.0	-2902.2	128.3	-20.7
	ClsMed 39	-29482.0	-2902.2	128.3	-10.1
Combinazioni Quasi Permanenti					
407	Ft. 41	-31267.7	2399.6	-123.5	-42.0
	Fc. 41	-31267.7	2399.6	-123.5	-266.3
	ClsMax 41	-31267.7	2399.6	-123.5	-19.4
	ClsMed 41	-31267.7	2399.6	-123.5	-10.3
507	Ft. 41	-28736.5	-2800.8	125.0	-10.9
	Fc. 41	-28736.5	-2800.8	125.0	-272.0
	ClsMax 41	-28736.5	-2800.8	125.0	-20.0
	ClsMed 41	-28736.5	-2800.8	125.0	-9.8

- Pilastro: 507/607 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
507	20	-3933.3	2525.9	2172.5	1.00	1.00	0.15
607	1	-6827.1	-1692.5	-0.1	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1261.8	25501.9	803.9	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
507	Ft. 37	-5039.9	1263.4	0.2	125.0
	Fc. 36	-6469.0	1262.9	0.2	-111.2
	ClsMax 37	-5039.9	1263.4	0.2	-8.8
	ClsMed 37	-5039.9	1263.4	0.2	-4.4
607	Ft. 36	-4781.5	-1199.5	-0.1	118.8
	Fc. 36	-4781.5	-1199.5	-0.1	-103.4
	ClsMax 36	-4781.5	-1199.5	-0.1	-8.4
	ClsMed 36	-4781.5	-1199.5	-0.1	-4.2
Combinazioni Frequenti					
507	Ft. 39	-3679.3	1141.7	0.2	146.1
	Fc. 39	-3679.3	1141.7	0.2	-96.5
	ClsMax 39	-3679.3	1141.7	0.2	-8.1
	ClsMed 39	-3679.3	1141.7	0.2	-4.0
607	Ft. 40	-2586.3	-685.9	-0.1	73.3
	Fc. 40	-2586.3	-685.9	-0.1	-58.8
	ClsMax 40	-2586.3	-685.9	-0.1	-4.8
	ClsMed 40	-2586.3	-685.9	-0.1	-2.4
Combinazioni Quasi Permanenti					
507	Ft. 41	-3702.2	1101.0	0.2	134.7
	Fc. 41	-3702.2	1101.0	0.2	-93.5
	ClsMax 41	-3702.2	1101.0	0.2	-7.8
	ClsMed 41	-3702.2	1101.0	0.2	-3.9
607	Ft. 41	-2014.7	-559.8	-0.1	63.4

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	Fc. 41	-2014.7	-559.8	-0.1	-47.8
	ClsMax 41	-2014.7	-559.8	-0.1	-3.9
	ClsMed 41	-2014.7	-559.8	-0.1	-2.0

- Pilastro: 8/108 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
8	4	-149975.6	-23281.8	-7379.3	2.34	1.00	0.56
108	8	-147642.9	23281.8	-6370.9	6.23	1.48	0.55

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	32303.3	73445.6	8834.7	73445.6	$\varnothing 12/10.0'$
0.51	2.57	32303.3	36722.8	8834.7	36722.8	$\varnothing 12/20.0'$
2.57	3.08	32303.3	73445.6	8834.7	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
8	Ft. 38	-154766.2	-646.4	-85.2	-771.5
	Fc. 36	-169393.9	-1227.5	-85.0	-946.7
	ClsMax 36	-169393.9	-1227.5	-85.0	-64.0
	ClsMed 36	-169393.9	-1227.5	-85.0	-58.9
108	Ft. 38	-152734.9	1558.8	-8.5	-720.5
	Fc. 36	-167362.6	2816.4	-9.1	-1009.2
	ClsMax 36	-167362.6	2816.4	-9.1	-69.2
	ClsMed 36	-167362.6	2816.4	-9.1	-58.2
Combinazioni Frequenti					
8	Ft. 40	-147604.2	-452.6	-83.4	-743.7
	Fc. 39	-151908.6	-646.2	-82.8	-827.3
	ClsMax 39	-151908.6	-646.2	-82.8	-55.6
	ClsMed 39	-151908.6	-646.2	-82.8	-52.8
108	Ft. 40	-145573.0	1139.9	-7.3	-703.5
	Fc. 39	-149877.4	1559.2	-7.3	-857.2
	ClsMax 39	-149877.4	1559.2	-7.3	-58.2
	ClsMed 39	-149877.4	1559.2	-7.3	-52.1

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

8	Ft. 41	-147032.7	-452.5	-82.9	-740.7
	Fc. 41	-147032.7	-452.5	-82.9	-792.5
	ClsMax 41	-147032.7	-452.5	-82.9	-53.2
	ClsMed 41	-147032.7	-452.5	-82.9	-51.1
108	Ft. 41	-145001.5	1140.0	-7.0	-700.5
	Fc. 41	-145001.5	1140.0	-7.0	-811.5
	ClsMax 41	-145001.5	1140.0	-7.0	-54.9
	ClsMed 41	-145001.5	1140.0	-7.0	-50.4

- Pilastro: 108/208 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
108	8	-115852.1	-18591.1	-6730.6	2.51	1.00	0.46
208	11	-112062.2	22930.2	3550.9	11.27	3.26	0.51

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25959.5	73445.6	6886.9	73445.6	$\phi 12/10.0'$
0.79	3.28	25959.5	36722.8	6886.9	36722.8	$\phi 12/20.0'$
3.28	3.90	25959.5	73445.6	6886.9	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
108	Ft. 38	-119525.1	-77.4	-71.5	-616.0
	Fc. 36	-128640.7	-886.3	-78.7	-717.4
	ClsMax 36	-128640.7	-886.3	-78.7	-48.5
	ClsMed 36	-128640.7	-886.3	-78.7	-44.7
208	Ft. 38	-116981.3	-1421.6	-38.9	-539.3
	Fc. 36	-126096.9	-1328.8	-44.1	-723.8
	ClsMax 36	-126096.9	-1328.8	-44.1	-49.2
	ClsMed 36	-126096.9	-1328.8	-44.1	-43.8
Combinazioni Frequenti					
108	Ft. 40	-114199.9	191.0	-67.4	-582.9
	Fc. 39	-116666.8	-78.9	-69.4	-615.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-116666.8	-78.9	-69.4	-41.1
	ClsMed 39	-116666.8	-78.9	-69.4	-40.6
208	Ft. 40	-111656.1	-1451.1	-36.1	-510.2
	Fc. 39	-114123.0	-1419.8	-37.6	-665.5
	ClsMax 39	-114123.0	-1419.8	-37.6	-45.3
	ClsMed 39	-114123.0	-1419.8	-37.6	-39.7

Combinazioni Quasi Permanenti

108	Ft. 41	-113628.2	190.7	-67.0	-580.0
	Fc. 41	-113628.2	190.7	-67.0	-604.9
	ClsMax 41	-113628.2	190.7	-67.0	-40.5
	ClsMed 41	-113628.2	190.7	-67.0	-39.5
208	Ft. 41	-111084.5	-1450.7	-35.8	-507.3
	Fc. 41	-111084.5	-1450.7	-35.8	-651.1
	ClsMax 41	-111084.5	-1450.7	-35.8	-44.4
	ClsMed 41	-111084.5	-1450.7	-35.8	-38.6

- Pilastro: 208/308 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
208	22	-84505.9	-21861.6	4336.0	114.71	1.00	0.44
308	33	-82386.8	-17807.2	-5185.3	2.55	9.08	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29733.2	73445.6	7689.9	73445.6	$\varnothing 12/10.0'$
0.79	3.26	29733.2	36722.8	7689.9	36722.8	$\varnothing 12/20.0'$
3.26	3.88	29733.2	73445.6	7689.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
208	Ft. 38	-91342.4	2808.3	-92.5	-321.4
	Fc. 36	-98186.0	3262.7	-103.3	-633.6
	ClsMax 36	-98186.0	3262.7	-103.3	-44.4
	ClsMed 36	-98186.0	3262.7	-103.3	-32.3
308	Ft. 38	-88811.2	-2406.2	-11.7	-330.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-95654.7	-2699.0	-11.2	-592.0
	ClsMax 36	-95654.7	-2699.0	-11.2	-41.2
	ClsMed 36	-95654.7	-2699.0	-11.2	-31.4

Combinazioni Frequenti

208	Ft. 40	-86773.6	2655.7	-86.2	-305.9
	Fc. 39	-88482.9	2807.0	-89.2	-564.9
	ClsMax 39	-88482.9	2807.0	-89.2	-39.5
	ClsMed 39	-88482.9	2807.0	-89.2	-29.1
308	Ft. 40	-84242.4	-2307.2	-11.3	-312.2
	Fc. 39	-85951.7	-2404.5	-11.0	-531.1
	ClsMax 39	-85951.7	-2404.5	-11.0	-37.0
	ClsMed 39	-85951.7	-2404.5	-11.0	-28.2

Combinazioni Quasi Permanenti

208	Ft. 41	-86201.7	2655.5	-85.6	-303.1
	Fc. 41	-86201.7	2655.5	-85.6	-546.7
	ClsMax 41	-86201.7	2655.5	-85.6	-38.2
	ClsMed 41	-86201.7	2655.5	-85.6	-28.3
308	Ft. 41	-83670.5	-2306.9	-11.2	-309.4
	Fc. 41	-83670.5	-2306.9	-11.2	-515.5
	ClsMax 41	-83670.5	-2306.9	-11.2	-35.9
	ClsMed 41	-83670.5	-2306.9	-11.2	-27.5

- Pilastro: 308/408 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
308	35	-57260.4	17807.2	-4865.3	1.97	5.02	0.38
408	7	-56819.5	22513.8	3559.7	13.68	1.15	0.49

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28555.2	73445.6	6746.9	73445.6	$\varnothing 12/10.0'$
0.79	3.26	28555.2	36722.8	6746.9	36722.8	$\varnothing 12/20.0'$
3.26	3.88	28555.2	73445.6	6746.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

308	Ft. 38	-63088.9	2132.9	-107.0	-211.5
	Fc. 36	-67622.9	2309.9	-116.5	-441.2
	ClsMax 36	-67622.9	2309.9	-116.5	-31.0
	ClsMed 36	-67622.9	2309.9	-116.5	-22.2
408	Ft. 38	-60557.6	-2099.7	-15.6	-204.5
	Fc. 36	-65091.7	-2298.9	-14.3	-423.7
	ClsMax 36	-65091.7	-2298.9	-14.3	-29.7
	ClsMed 36	-65091.7	-2298.9	-14.3	-21.4

Combinazioni Frequenti

308	Ft. 40	-59288.5	2071.7	-100.9	-195.7
	Fc. 39	-60227.6	2130.1	-103.3	-396.2
	ClsMax 39	-60227.6	2130.1	-103.3	-27.9
	ClsMed 39	-60227.6	2130.1	-103.3	-19.8
408	Ft. 40	-56757.3	-2028.1	-13.4	-189.1
	Fc. 39	-57696.3	-2093.2	-12.3	-378.0
	ClsMax 39	-57696.3	-2093.2	-12.3	-26.6
	ClsMed 39	-57696.3	-2093.2	-12.3	-19.0

Combinazioni Quasi Permanenti

308	Ft. 41	-58716.2	2071.1	-100.2	-193.0
	Fc. 41	-58716.2	2071.1	-100.2	-385.9
	ClsMax 41	-58716.2	2071.1	-100.2	-27.1
	ClsMed 41	-58716.2	2071.1	-100.2	-19.3
408	Ft. 41	-56185.0	-2026.8	-12.7	-186.3
	Fc. 41	-56185.0	-2026.8	-12.7	-367.6
	ClsMax 41	-56185.0	-2026.8	-12.7	-25.8
	ClsMed 41	-56185.0	-2026.8	-12.7	-18.5

- Pilastro: 408/508 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \phi 24$ Af=36.19 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $1\phi 24 \times 2$ H >

Staffe: $\phi 12/10.0'$ x 61.8 + $\phi 12/20.0'$ x 247.3 + $\phi 12/10.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
408	27	-31647.6	-22736.0	3559.7	55.92	2.65	0.58
508	4	-28332.1	16276.5	3575.1	2.39	1.00	0.41

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	24264.0	73445.6	5805.8	73445.6	$\phi 12/10.0'$
0.79	3.26	24264.0	36722.8	5805.8	36722.8	$\phi 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	24264.0	73445.6	5805.8	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

408	Ft. 37	-35666.7	2795.5	-147.2	-45.0
	Fc. 36	-37099.3	2795.1	-151.4	-313.8
	ClsMax 36	-37099.3	2795.1	-151.4	-22.8
	ClsMed 36	-37099.3	2795.1	-151.4	-12.2
508	Ft. 37	-33135.4	-3270.1	160.1	-9.8
	Fc. 36	-34568.0	-3266.5	163.1	-323.0
	ClsMax 36	-34568.0	-3266.5	163.1	-23.8
	ClsMed 36	-34568.0	-3266.5	163.1	-11.6

Combinazioni Frequenti

408	Ft. 39	-32000.1	2526.8	-132.3	-39.6
	Fc. 39	-32000.1	2526.8	-132.3	-275.9
	ClsMax 39	-32000.1	2526.8	-132.3	-20.1
	ClsMed 39	-32000.1	2526.8	-132.3	-10.5
508	Ft. 39	-29468.9	-2961.5	144.6	-5.8
	Fc. 39	-29468.9	-2961.5	144.6	-284.0
	ClsMax 39	-29468.9	-2961.5	144.6	-21.0
	ClsMed 39	-29468.9	-2961.5	144.6	-10.2

Combinazioni Quasi Permanenti

408	Ft. 41	-31255.5	2437.0	-128.8	-40.1
	Fc. 41	-31255.5	2437.0	-128.8	-268.1
	ClsMax 41	-31255.5	2437.0	-128.8	-19.5
	ClsMed 41	-31255.5	2437.0	-128.8	-10.3
508	Ft. 41	-28724.2	-2857.4	140.4	-7.2
	Fc. 41	-28724.2	-2857.4	140.4	-275.4
	ClsMax 41	-28724.2	-2857.4	140.4	-20.3
	ClsMed 41	-28724.2	-2857.4	140.4	-9.9

- Pilastro: 508/608 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
508	20	-4015.4	3034.5	2169.4	1.00	1.00	0.17
608	1	-6825.8	-1697.1	-0.3	1.00	1.00	0.05

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1273.8	25501.9	802.6	25501.9	ø 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
508	Ft. 37	-5038.7	1246.9	0.6	121.1
	Fc. 36	-6468.0	1246.7	0.6	-109.9
	ClsMax 37	-5038.7	1246.9	0.6	-8.7
	ClsMed 37	-5038.7	1246.9	0.6	-4.4
608	Ft. 36	-4780.5	-1202.7	-0.2	119.6
	Fc. 36	-4780.5	-1202.7	-0.2	-103.6
	ClsMax 36	-4780.5	-1202.7	-0.2	-8.4
	ClsMed 36	-4780.5	-1202.7	-0.2	-4.2
Combinazioni Frequenti					
508	Ft. 39	-3678.2	1127.0	0.6	142.4
	Fc. 39	-3678.2	1127.0	0.6	-95.4
	ClsMax 39	-3678.2	1127.0	0.6	-8.0
	ClsMed 39	-3678.2	1127.0	0.6	-4.0
608	Ft. 40	-2585.4	-688.7	-0.2	74.0
	Fc. 40	-2585.4	-688.7	-0.2	-59.1
	ClsMax 40	-2585.4	-688.7	-0.2	-4.8
	ClsMed 40	-2585.4	-688.7	-0.2	-2.4
Combinazioni Quasi Permanenti					
508	Ft. 41	-3701.2	1086.9	0.5	131.2
	Fc. 41	-3701.2	1086.9	0.5	-92.4
	ClsMax 41	-3701.2	1086.9	0.5	-7.7
	ClsMed 41	-3701.2	1086.9	0.5	-3.8
608	Ft. 41	-2013.7	-562.6	-0.2	64.1
	Fc. 41	-2013.7	-562.6	-0.2	-48.0
	ClsMax 41	-2013.7	-562.6	-0.2	-4.0
	ClsMed 41	-2013.7	-562.6	-0.2	-2.0

- Pilastro: 9/109 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 51.3+ø 12/20.0' x 205.3+ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
9	4	-145129.0	-22071.4	-10950.9	2.16	1.41	0.58
109	4	-143097.8	-22071.4	-10950.9	36.15	3.89	0.58

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	29890.6	73445.6	14288.9	73445.6	Ø 12/10.0'
0.51	2.57	29890.6	36722.8	14288.9	36722.8	Ø 12/20.0'
2.57	3.08	29890.6	73445.6	14288.9	73445.6	Ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
9	Ft. 38	-145528.4	2759.6	554.4	-598.5
	Fc. 36	-157500.4	2968.2	625.0	-995.0
	ClMax 36	-157500.4	2968.2	625.0	-68.7
	ClMed 36	-157500.4	2968.2	625.0	-54.7
109	Ft. 38	-143497.2	-5567.8	-1350.6	-413.6
	Fc. 36	-155469.2	-5960.0	-1499.1	-1171.3
	ClMax 36	-155469.2	-5960.0	-1499.1	-83.1
	ClMed 36	-155469.2	-5960.0	-1499.1	-54.0
Combinazioni Frequenti					
9	Ft. 40	-139306.7	2681.2	534.0	-570.8
	Fc. 39	-142739.6	2748.5	558.3	-904.2
	ClMax 39	-142739.6	2748.5	558.3	-62.5
	ClMed 39	-142739.6	2748.5	558.3	-49.6
109	Ft. 40	-137275.5	-5417.6	-1302.9	-390.7
	Fc. 39	-140708.4	-5543.5	-1352.8	-1067.2
	ClMax 39	-140708.4	-5543.5	-1352.8	-75.8
	ClMed 39	-140708.4	-5543.5	-1352.8	-48.9
Combinazioni Quasi Permanenti					
9	Ft. 41	-138749.0	2679.0	534.8	-568.0
	Fc. 41	-138749.0	2679.0	534.8	-878.8
	ClMax 41	-138749.0	2679.0	534.8	-60.7
	ClMed 41	-138749.0	2679.0	534.8	-48.2
109	Ft. 41	-136717.7	-5412.7	-1303.3	-388.0
	Fc. 41	-136717.7	-5412.7	-1303.3	-1037.6
	ClMax 41	-136717.7	-5412.7	-1303.3	-73.7
	ClMed 41	-136717.7	-5412.7	-1303.3	-47.5

- Pilastro: 109/209 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
109	27	-109792.0	17032.8	9018.5	1.00	1.00	0.46
209	7	-111748.0	23887.6	3550.9	9.79	3.88	0.53

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25045.5	73445.6	8600.4	73445.6	$\varnothing 12/10.0'$
0.79	3.28	25045.5	36722.8	8600.4	36722.8	$\varnothing 12/20.0'$
3.28	3.90	25045.5	73445.6	8600.4	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
109	Ft. 38	-118678.0	5136.4	860.5	-328.7
	Fc. 36	-127745.0	5529.8	956.5	-979.7
	ClSMax 36	-127745.0	5529.8	956.5	-69.7
	ClSMed 36	-127745.0	5529.8	956.5	-44.4
209	Ft. 38	-116134.3	-2984.8	-242.9	-449.4
	Fc. 36	-125201.3	-3254.0	-271.5	-823.3
	ClSMax 36	-125201.3	-3254.0	-271.5	-57.2
	ClSMed 36	-125201.3	-3254.0	-271.5	-43.5
Combinazioni Frequenti					
109	Ft. 40	-113390.3	4990.0	832.6	-309.6
	Fc. 39	-115846.3	5117.4	865.6	-893.4
	ClSMax 39	-115846.3	5117.4	865.6	-63.6
	ClSMed 39	-115846.3	5117.4	865.6	-40.3
209	Ft. 40	-110846.6	-2889.3	-233.8	-426.9
	Fc. 39	-113302.6	-2977.5	-243.5	-746.5
	ClSMax 39	-113302.6	-2977.5	-243.5	-51.9
	ClSMed 39	-113302.6	-2977.5	-243.5	-39.4
Combinazioni Quasi Permanenti					
109	Ft. 41	-112824.0	4986.2	833.7	-306.8
	Fc. 41	-112824.0	4986.2	833.7	-869.7
	ClSMax 41	-112824.0	4986.2	833.7	-61.9
	ClSMed 41	-112824.0	4986.2	833.7	-39.2
209	Ft. 41	-110280.2	-2887.8	-233.9	-424.0
	Fc. 41	-110280.2	-2887.8	-233.9	-726.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-110280.2	-2887.8	-233.9	-50.5
	ClsMed 41	-110280.2	-2887.8	-233.9	-38.3

- Pilastro: 209/309 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ϕ 24 Af=36.19 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 1 ϕ 24 x 2 H >

Staffe: ϕ 12/10.0' x 61.8+ ϕ 12/20.0' x 247.3+ ϕ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
209	27	-83114.6	-24161.5	3568.5	8.43	1.05	0.48
309	33	-80420.6	-17807.2	-5217.2	2.24	12.92	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29848.6	73445.6	7824.0	73445.6	ϕ 12/10.0'
0.79	3.26	29848.6	36722.8	7824.0	36722.8	ϕ 12/20.0'
3.26	3.88	29848.6	73445.6	7824.0	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
209	Ft. 38	-90542.7	1718.5	-421.0	-351.3
	Fc. 36	-97316.9	1917.2	-466.2	-585.6
	ClsMax 36	-97316.9	1917.2	-466.2	-40.6
	ClsMed 36	-97316.9	1917.2	-466.2	-32.0
309	Ft. 38	-88011.5	-2108.8	151.9	-333.4
	Fc. 36	-94785.7	-2330.0	168.3	-578.3
	ClsMax 36	-94785.7	-2330.0	168.3	-40.2
	ClsMed 36	-94785.7	-2330.0	168.3	-31.2
Combinazioni Frequenti					
209	Ft. 40	-86017.3	1654.1	-401.8	-332.7
	Fc. 39	-87708.5	1720.8	-415.9	-527.3
	ClsMax 39	-87708.5	1720.8	-415.9	-36.5
	ClsMed 39	-87708.5	1720.8	-415.9	-28.8
309	Ft. 40	-83486.1	-2034.3	144.8	-314.7
	Fc. 39	-85177.3	-2107.9	149.9	-520.2
	ClsMax 39	-85177.3	-2107.9	149.9	-36.1
	ClsMed 39	-85177.3	-2107.9	149.9	-28.0
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

209	Ft. 41	-85450.5	1654.5	-400.8	-329.9
	Fc. 41	-85450.5	1654.5	-400.8	-512.6
	ClsMax 41	-85450.5	1654.5	-400.8	-35.5
	ClsMed 41	-85450.5	1654.5	-400.8	-28.1
309	Ft. 41	-82919.2	-2034.2	144.4	-311.9
	Fc. 41	-82919.2	-2034.2	144.4	-505.6
	ClsMax 41	-82919.2	-2034.2	144.4	-35.1
	ClsMed 41	-82919.2	-2034.2	144.4	-27.3

- Pilastro: 309/409 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
309	34	-57041.5	17807.2	-4748.2	1.63	4.89	0.38
409	7	-54060.6	23427.4	3559.7	9.21	1.11	0.52

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28505.8	73445.6	6720.7	73445.6	ø 12/10.0'
0.79	3.26	28505.8	36722.8	6720.7	36722.8	ø 12/20.0'
3.26	3.88	28505.8	73445.6	6720.7	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
309	Ft. 38	-62547.1	2429.1	-146.1	-193.9
	Fc. 36	-67037.4	2671.8	-157.8	-456.2
	ClsMax 36	-67037.4	2671.8	-157.8	-32.3
	ClsMed 36	-67037.4	2671.8	-157.8	-22.0
409	Ft. 38	-60015.8	-2224.3	56.1	-194.5
	Fc. 36	-64506.1	-2449.0	63.5	-429.6
	ClsMax 36	-64506.1	-2449.0	63.5	-30.3
	ClsMed 36	-64506.1	-2449.0	63.5	-21.2
Combinazioni Frequenti					
309	Ft. 40	-58779.2	2345.1	-136.8	-179.5
	Fc. 39	-59708.2	2425.2	-139.4	-408.3
	ClsMax 39	-59708.2	2425.2	-139.4	-28.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-59708.2	2425.2	-139.4	-19.6
409	Ft. 40	-56248.0	-2143.3	54.3	-179.6
	Fc. 39	-57177.0	-2216.6	56.9	-382.9
	ClsMax 39	-57177.0	-2216.6	56.9	-27.0
	ClsMed 39	-57177.0	-2216.6	56.9	-18.8

Combinazioni Quasi Permanenti

309	Ft. 41	-58211.5	2344.3	-135.5	-176.8
	Fc. 41	-58211.5	2344.3	-135.5	-397.2
	ClsMax 41	-58211.5	2344.3	-135.5	-28.1
	ClsMed 41	-58211.5	2344.3	-135.5	-19.1
409	Ft. 41	-55680.2	-2141.7	54.5	-176.9
	Fc. 41	-55680.2	-2141.7	54.5	-372.1
	ClsMax 41	-55680.2	-2141.7	54.5	-26.2
	ClsMed 41	-55680.2	-2141.7	54.5	-18.3

- Pilastro: 409/509 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
409	27	-31454.7	-23839.4	3559.7	20.50	2.98	0.61
509	4	-27999.9	16559.4	3838.8	1.77	1.00	0.42

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	24273.2	73445.6	5733.9	73445.6	$\varnothing 12/10.0'$
0.79	3.26	24273.2	36722.8	5733.9	36722.8	$\varnothing 12/20.0'$
3.26	3.88	24273.2	73445.6	5733.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
409	Ft. 37	-35364.8	2807.5	-327.4	-35.0
	Fc. 36	-36787.9	2806.5	-334.3	-320.9
	ClsMax 36	-36787.9	2806.5	-334.3	-23.4
	ClsMed 36	-36787.9	2806.5	-334.3	-12.1
509	Ft. 37	-32833.5	-3347.9	413.7	8.6
	Fc. 36	-34256.7	-3343.3	421.2	-337.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-34256.7	-3343.3	421.2	-24.9
	ClsMed 36	-34256.7	-3343.3	421.2	-11.7

Combinazioni Frequenti

409	Ft. 39	-31730.1	2539.9	-294.9	-30.4
	Fc. 39	-31730.1	2539.9	-294.9	-282.4
	ClsMax 39	-31730.1	2539.9	-294.9	-20.7
	ClsMed 39	-31730.1	2539.9	-294.9	-10.4
509	Ft. 39	-29198.8	-3029.5	373.4	10.9
	Fc. 39	-29198.8	-3029.5	373.4	-297.0
	ClsMax 39	-29198.8	-3029.5	373.4	-22.1
	ClsMed 39	-29198.8	-3029.5	373.4	-10.3

Combinazioni Quasi Permanenti

409	Ft. 41	-30992.9	2450.3	-286.4	-31.2
	Fc. 41	-30992.9	2450.3	-286.4	-274.4
	ClsMax 41	-30992.9	2450.3	-286.4	-20.1
	ClsMed 41	-30992.9	2450.3	-286.4	-10.2
509	Ft. 41	-28461.6	-2921.9	362.4	8.7
	Fc. 41	-28461.6	-2921.9	362.4	-287.9
	ClsMax 41	-28461.6	-2921.9	362.4	-21.4
	ClsMed 41	-28461.6	-2921.9	362.4	-10.0

- Pilastro: 509/609 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
509	4	-3489.3	3929.9	-1458.9	1.00	1.00	0.20
609	33	-1515.6	-1280.6	-2.6	1.00	1.00	0.06

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1463.3	25501.9	798.2	25501.9	$\varnothing 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
509	Ft. 37	-5026.1	1270.2	0.4	127.1
	Fc. 36	-6448.9	1272.6	0.3	-111.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 37	-5026.1	1270.2	0.4	-8.9
	ClsMed 37	-5026.1	1270.2	0.4	-4.4
609	Ft. 36	-4761.4	-1212.0	-0.2	122.5
	Fc. 36	-4761.4	-1212.0	-0.2	-104.3
	ClsMax 36	-4761.4	-1212.0	-0.2	-8.5
	ClsMed 36	-4761.4	-1212.0	-0.2	-4.2

Combinazioni Frequenti

509	Ft. 39	-3671.6	1145.2	0.4	147.3
	Fc. 39	-3671.6	1145.2	0.4	-96.8
	ClsMax 39	-3671.6	1145.2	0.4	-8.1
	ClsMed 39	-3671.6	1145.2	0.4	-4.0
609	Ft. 40	-2575.9	-697.5	-0.2	76.5
	Fc. 40	-2575.9	-697.5	-0.2	-59.7
	ClsMax 40	-2575.9	-697.5	-0.2	-4.9
	ClsMed 40	-2575.9	-697.5	-0.2	-2.4

Combinazioni Quasi Permanenti

509	Ft. 41	-3694.3	1104.3	0.4	135.9
	Fc. 41	-3694.3	1104.3	0.4	-93.7
	ClsMax 41	-3694.3	1104.3	0.4	-7.8
	ClsMed 41	-3694.3	1104.3	0.4	-3.9
609	Ft. 41	-2006.8	-571.9	-0.2	66.7
	Fc. 41	-2006.8	-571.9	-0.2	-48.7
	ClsMax 41	-2006.8	-571.9	-0.2	-4.0
	ClsMed 41	-2006.8	-571.9	-0.2	-2.0

- Pilastro: 10/110 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
10	27	-68669.3	16987.4	9200.9	1.00	1.24	0.49
110	27	-66638.0	-14563.7	9200.9	1.71	2.79	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31869.0	73445.6	14603.9	73445.6	$\varnothing 12/10.0'$
0.51	2.57	31869.0	36722.8	14603.9	36722.8	$\varnothing 12/20.0'$
2.57	3.08	31869.0	73445.6	14603.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
10	Ft. 38	-86547.9	1613.5	-1014.6	-324.1
	Fc. 36	-92493.7	1757.7	-1107.4	-620.8
	ClsMax 36	-92493.7	1757.7	-1107.4	-43.3
	ClsMed 36	-92493.7	1757.7	-1107.4	-32.1
110	Ft. 38	-84516.6	-3141.7	1942.1	-194.8
	Fc. 36	-90462.5	-3391.3	2136.4	-739.0
	ClsMax 36	-90462.5	-3391.3	2136.4	-53.0
	ClsMed 36	-90462.5	-3391.3	2136.4	-31.4
Combinazioni Frequenti					
10	Ft. 40	-83437.8	1561.4	-980.5	-312.1
	Fc. 39	-85137.6	1608.5	-1010.6	-570.6
	ClsMax 39	-85137.6	1608.5	-1010.6	-39.8
	ClsMed 39	-85137.6	1608.5	-1010.6	-29.6
110	Ft. 40	-81406.5	-3048.9	1875.5	-186.3
	Fc. 39	-83106.4	-3129.8	1939.8	-678.5
	ClsMax 39	-83106.4	-3129.8	1939.8	-48.6
	ClsMed 39	-83106.4	-3129.8	1939.8	-28.9
Combinazioni Quasi Permanenti					
10	Ft. 41	-83155.7	1560.5	-979.7	-310.7
	Fc. 41	-83155.7	1560.5	-979.7	-556.4
	ClsMax 41	-83155.7	1560.5	-979.7	-38.8
	ClsMed 41	-83155.7	1560.5	-979.7	-28.9
110	Ft. 41	-81124.5	-3046.6	1875.0	-184.9
	Fc. 41	-81124.5	-3046.6	1875.0	-661.0
	ClsMax 41	-81124.5	-3046.6	1875.0	-47.4
	ClsMed 41	-81124.5	-3046.6	1875.0	-28.2

- Pilastro: 110/210 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
110	27	-59217.9	17341.2	6332.9	1.00	1.00	0.47
210	11	-69700.9	20138.7	-3365.5	4.89	1.68	0.49

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	25855.1	73445.6	9933.1	73445.6	ø 12/10.0'
0.79	3.28	25855.1	36722.8	9933.1	36722.8	ø 12/20.0'
3.28	3.90	25855.1	73445.6	9933.1	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
110	Ft. 38	-69877.8	3031.3	-1549.7	-142.8
	Fc. 36	-74444.1	3283.0	-1697.8	-629.0
	ClSMax 36	-74444.1	3283.0	-1697.8	-45.3
	ClSMed 36	-74444.1	3283.0	-1697.8	-25.9
210	Ft. 38	-67334.1	-1684.2	512.5	-244.8
	Fc. 36	-71900.4	-1837.9	548.3	-490.3
	ClSMax 36	-71900.4	-1837.9	548.3	-34.3
	ClSMed 36	-71900.4	-1837.9	548.3	-25.0
Combinazioni Frequenti					
110	Ft. 40	-67215.1	2939.9	-1496.3	-135.9
	Fc. 39	-68452.0	3021.9	-1544.7	-577.8
	ClSMax 39	-68452.0	3021.9	-1544.7	-41.6
	ClSMed 39	-68452.0	3021.9	-1544.7	-23.8
210	Ft. 40	-64671.3	-1630.3	500.4	-234.1
	Fc. 39	-65908.2	-1680.8	512.2	-449.7
	ClSMax 39	-65908.2	-1680.8	512.2	-31.4
	ClSMed 39	-65908.2	-1680.8	512.2	-22.9
Combinazioni Quasi Permanenti					
110	Ft. 41	-66929.9	2938.0	-1495.3	-134.5
	Fc. 41	-66929.9	2938.0	-1495.3	-563.4
	ClSMax 41	-66929.9	2938.0	-1495.3	-40.5
	ClSMed 41	-66929.9	2938.0	-1495.3	-23.3
210	Ft. 41	-64386.1	-1629.6	500.3	-232.7
	Fc. 41	-64386.1	-1629.6	500.3	-438.7
	ClSMax 41	-64386.1	-1629.6	500.3	-30.7
	ClSMed 41	-64386.1	-1629.6	500.3	-22.4

- Pilastro: 210/310 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
210	23	-45137.3	-20195.5	2930.1	6.23	1.00	0.45

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

310	27	-42406.6	-13948.2	-2362.8	1.09	1.00	0.29
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	30377.6	73445.6	6230.8	73445.6	ø 12/10.0'
0.79	3.26	30377.6	36722.8	6230.8	36722.8	ø 12/20.0'
3.26	3.88	30377.6	73445.6	6230.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
210	Ft. 38	-53418.5	1046.0	-3.2	-216.7
	Fc. 36	-56831.8	1150.2	15.1	-331.9
	ClsMax 36	-56831.8	1150.2	15.1	-22.9
	ClsMed 36	-56831.8	1150.2	15.1	-18.7
310	Ft. 38	-50887.2	-1252.2	147.1	-188.7
	Fc. 36	-54300.6	-1372.7	144.1	-335.1
	ClsMax 36	-54300.6	-1372.7	144.1	-23.3
	ClsMed 36	-54300.6	-1372.7	144.1	-17.8
Combinazioni Frequenti					
210	Ft. 40	-51141.6	1013.2	-5.8	-206.8
	Fc. 39	-51994.7	1048.4	1.2	-303.0
	ClsMax 39	-51994.7	1048.4	1.2	-20.9
	ClsMed 39	-51994.7	1048.4	1.2	-17.1
310	Ft. 40	-48610.4	-1212.4	147.0	-179.2
	Fc. 39	-49463.4	-1252.7	145.8	-306.0
	ClsMax 39	-49463.4	-1252.7	145.8	-21.3
	ClsMed 39	-49463.4	-1252.7	145.8	-16.3
Combinazioni Quasi Permanenti					
210	Ft. 41	-50856.9	1013.6	-4.9	-205.4
	Fc. 41	-50856.9	1013.6	-4.9	-296.0
	ClsMax 41	-50856.9	1013.6	-4.9	-20.4
	ClsMed 41	-50856.9	1013.6	-4.9	-16.7
310	Ft. 41	-48325.6	-1212.5	146.8	-177.8
	Fc. 41	-48325.6	-1212.5	146.8	-298.6
	ClsMax 41	-48325.6	-1212.5	146.8	-20.8
	ClsMed 41	-48325.6	-1212.5	146.8	-15.9

- Pilastro: 310/410 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: \varnothing 12/10.0' x 61.8+ \varnothing 12/20.0' x 247.3+ \varnothing 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
310	20	-32153.5	13948.2	2545.1	2.46	1.00	0.31
410	7	-35149.6	20112.6	2474.1	4.43	1.00	0.48

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27775.2	73445.6	4851.4	73445.6	\varnothing 12/10.0'
0.79	3.26	27775.2	36722.8	4851.4	36722.8	\varnothing 12/20.0'
3.26	3.88	27775.2	73445.6	4851.4	73445.6	\varnothing 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
310	Ft. 38	-37023.1	1461.8	-407.0	-99.5
	Fc. 36	-39288.1	1602.0	-430.4	-284.0
	ClMax 36	-39288.1	1602.0	-430.4	-20.3
	ClMed 36	-39288.1	1602.0	-430.4	-12.9
410	Ft. 38	-34491.8	-1313.3	186.5	-103.4
	Fc. 36	-36756.8	-1438.2	194.5	-253.8
	ClMax 36	-36756.8	-1438.2	194.5	-18.0
	ClMed 36	-36756.8	-1438.2	194.5	-12.1
Combinazioni Frequenti					
310	Ft. 39	-35602.0	1461.8	-401.2	-92.7
	Fc. 39	-35602.0	1461.8	-401.2	-258.3
	ClMax 39	-35602.0	1461.8	-401.2	-18.4
	ClMed 39	-35602.0	1461.8	-401.2	-11.7
410	Ft. 40	-32600.0	-1269.5	185.3	-96.1
	Fc. 39	-33070.8	-1310.6	188.3	-229.6
	ClMax 39	-33070.8	-1310.6	188.3	-16.3
	ClMed 39	-33070.8	-1310.6	188.3	-10.9
Combinazioni Quasi Permanenti					
310	Ft. 41	-34847.0	1415.1	-393.4	-91.4
	Fc. 41	-34847.0	1415.1	-393.4	-252.2
	ClMax 41	-34847.0	1415.1	-393.4	-18.0
	ClMed 41	-34847.0	1415.1	-393.4	-11.5
410	Ft. 41	-32315.8	-1269.0	185.6	-94.7
	Fc. 41	-32315.8	-1269.0	185.6	-223.9
	ClMax 41	-32315.8	-1269.0	185.6	-15.9
	ClMed 41	-32315.8	-1269.0	185.6	-10.6

- Pilastro: 410/510 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
410	27	-16607.6	-20601.9	-2770.1	6.70	1.48	0.59
510	35	-14565.2	-18344.1	-986.8	1.00	1.43	0.52

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	23937.8	73445.6	4844.6	73445.6	ø 12/10.0'
0.79	3.26	23937.8	36722.8	4844.6	36722.8	ø 12/20.0'
3.26	3.88	23937.8	73445.6	4844.6	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
410	Ft. 37	-21006.4	1716.6	-446.7	-7.2
	Fc. 36	-21715.3	1714.3	-452.7	-203.4
	ClSMax 36	-21715.3	1714.3	-452.7	-15.0
	ClSMed 36	-21715.3	1714.3	-452.7	-7.2
510	Ft. 37	-18475.1	-2110.0	661.5	43.1
	Fc. 36	-19184.0	-2106.5	668.0	-222.6
	ClSMax 36	-19184.0	-2106.5	668.0	-16.7
	ClSMed 36	-19184.0	-2106.5	668.0	-7.2
Combinazioni Frequenti					
410	Ft. 39	-19182.0	1562.5	-422.9	-6.1
	Fc. 39	-19182.0	1562.5	-422.9	-182.9
	ClSMax 39	-19182.0	1562.5	-422.9	-13.5
	ClSMed 39	-19182.0	1562.5	-422.9	-6.4
510	Ft. 39	-16650.7	-1919.5	628.0	42.1
	Fc. 39	-16650.7	-1919.5	628.0	-201.0
	ClSMax 39	-16650.7	-1919.5	628.0	-15.2
	ClSMed 39	-16650.7	-1919.5	628.0	-6.4
Combinazioni Quasi Permanenti					
410	Ft. 41	-18810.1	1510.3	-417.0	-6.9
	Fc. 41	-18810.1	1510.3	-417.0	-178.5
	ClSMax 41	-18810.1	1510.3	-417.0	-13.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-18810.1	1510.3	-417.0	-6.2
510	Ft. 41	-16278.9	-1854.9	619.0	39.9
	Fc. 41	-16278.9	-1854.9	619.0	-195.5
	ClsMax 41	-16278.9	-1854.9	619.0	-14.8
	ClsMed 41	-16278.9	-1854.9	619.0	-6.2

- Pilastro: 510/610 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0'$ x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
510	15	-3054.0	4603.8	1003.8	1.00	1.00	0.24
610	35	-431.5	-1116.9	-1.2	1.00	1.00	0.06

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1531.9	25501.9	508.4	25501.9	$\varnothing 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
510	Ft. 37	-3380.5	545.9	0.2	21.7
	Fc. 36	-4084.2	544.0	0.2	-50.9
	ClsMax 36	-4084.2	544.0	0.2	-3.8
	ClsMed 36	-4084.2	544.0	0.2	-1.9
610	Ft. 36	-2396.7	-624.7	-0.1	65.2
	Fc. 36	-2396.7	-624.7	-0.1	-53.7
	ClsMax 36	-2396.7	-624.7	-0.1	-4.4
	ClsMed 36	-2396.7	-624.7	-0.1	-2.2
Combinazioni Frequenti					
510	Ft. 39	-2712.2	500.0	0.3	28.1
	Fc. 39	-2712.2	500.0	0.3	-44.3
	ClsMax 39	-2712.2	500.0	0.3	-3.4
	ClsMed 39	-2712.2	500.0	0.3	-1.7
610	Ft. 40	-1318.0	-370.4	-0.1	42.5
	Fc. 40	-1318.0	-370.4	-0.1	-31.6
	ClsMax 40	-1318.0	-370.4	-0.1	-2.6
	ClsMed 40	-1318.0	-370.4	-0.1	-1.3

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

510	Ft. 41	-2724.0	484.2	0.3	24.9
	Fc. 41	-2724.0	484.2	0.3	-43.0
	ClSMax 41	-2724.0	484.2	0.3	-3.3
	ClSMed 41	-2724.0	484.2	0.3	-1.7
610	Ft. 41	-1036.5	-308.6	-0.1	37.8
	Fc. 41	-1036.5	-308.6	-0.1	-26.2
	ClSMax 41	-1036.5	-308.6	-0.1	-2.2
	ClSMed 41	-1036.5	-308.6	-0.1	-1.1

- Pilastro: 11/111 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
11	27	-142652.4	19445.5	3765.6	5.19	1.00	0.46
111	26	-140613.9	19429.2	2845.4	47.85	1.00	0.45

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	30957.9	73445.6	6925.1	73445.6	$\varnothing 12/10.0'$
0.51	2.57	30957.9	36722.8	6925.1	36722.8	$\varnothing 12/20.0'$
2.57	3.08	30957.9	73445.6	6925.1	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
11	Ft. 38	-147929.5	-727.7	-63.6	-733.0
	Fc. 36	-159428.7	-767.4	-65.2	-871.5
	ClSMax 36	-159428.7	-767.4	-65.2	-58.7
	ClSMed 36	-159428.7	-767.4	-65.2	-55.4
111	Ft. 38	-145898.3	1687.0	-89.7	-674.7
	Fc. 36	-157397.4	1793.6	-99.4	-912.2
	ClSMax 36	-157397.4	1793.6	-99.4	-62.1
	ClSMed 36	-157397.4	1793.6	-99.4	-54.7
Combinazioni Frequenti					
11	Ft. 40	-141800.4	-714.1	-61.9	-701.8
	Fc. 39	-145059.4	-727.3	-62.1	-794.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-145059.4	-727.3	-62.1	-53.5
	ClsMed 39	-145059.4	-727.3	-62.1	-50.4
111	Ft. 40	-139769.1	1650.9	-84.7	-644.8
	Fc. 39	-143028.2	1686.2	-87.5	-831.5
	ClsMax 39	-143028.2	1686.2	-87.5	-56.6
	ClsMed 39	-143028.2	1686.2	-87.5	-49.7

Combinazioni Quasi Permanenti

11	Ft. 41	-141226.4	-714.0	-61.6	-698.8
	Fc. 41	-141226.4	-714.0	-61.6	-773.8
	ClsMax 41	-141226.4	-714.0	-61.6	-52.1
	ClsMed 41	-141226.4	-714.0	-61.6	-49.1
111	Ft. 41	-139195.1	1650.7	-84.3	-641.8
	Fc. 41	-139195.1	1650.7	-84.3	-809.6
	ClsMax 41	-139195.1	1650.7	-84.3	-55.1
	ClsMed 41	-139195.1	1650.7	-84.3	-48.4

- Pilastro: 111/211 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
111	24	-112913.7	15058.9	5426.0	83.84	1.00	0.38
211	22	-111212.4	-19494.1	1223.1	27.82	1.00	0.42

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26090.2	73445.6	6215.5	73445.6	$\varnothing 12/10.0'$
0.79	3.28	26090.2	36722.8	6215.5	36722.8	$\varnothing 12/20.0'$
3.28	3.90	26090.2	73445.6	6215.5	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
111	Ft. 38	-120086.9	-1893.4	-33.7	-532.9
	Fc. 36	-129311.1	-2045.4	-36.4	-774.9
	ClsMax 36	-129311.1	-2045.4	-36.4	-53.1
	ClsMed 36	-129311.1	-2045.4	-36.4	-44.9
211	Ft. 38	-117543.2	2026.8	-125.4	-508.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-126767.3	2227.1	-138.1	-775.3
	ClsMax 36	-126767.3	2227.1	-138.1	-53.3
	ClsMed 36	-126767.3	2227.1	-138.1	-44.1

Combinazioni Frequenti

111	Ft. 40	-114714.7	-1841.8	-32.5	-507.4
	Fc. 39	-117215.0	-1892.2	-33.3	-704.3
	ClsMax 39	-117215.0	-1892.2	-33.3	-48.2
	ClsMed 39	-117215.0	-1892.2	-33.3	-40.7
211	Ft. 40	-112170.9	1958.6	-118.4	-484.4
	Fc. 39	-114671.3	2025.0	-121.9	-701.7
	ClsMax 39	-114671.3	2025.0	-121.9	-48.2
	ClsMed 39	-114671.3	2025.0	-121.9	-39.9

Combinazioni Quasi Permanenti

111	Ft. 41	-114140.3	-1841.5	-32.4	-504.5
	Fc. 41	-114140.3	-1841.5	-32.4	-685.7
	ClsMax 41	-114140.3	-1841.5	-32.4	-47.0
	ClsMed 41	-114140.3	-1841.5	-32.4	-39.7
211	Ft. 41	-111596.6	1958.3	-117.7	-481.4
	Fc. 41	-111596.6	1958.3	-117.7	-682.2
	ClsMax 41	-111596.6	1958.3	-117.7	-46.9
	ClsMed 41	-111596.6	1958.3	-117.7	-38.8

- Pilastro: 211/311 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \phi 24$ Af=36.19 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 1\phi 24 \times 2 H$ >

Staffe: $\phi 12/10.0'$ x 61.8+ $\phi 12/20.0'$ x 247.3+ $\phi 12/10.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
211	11	-87338.5	19785.2	-5789.5	16.08	1.00	0.41
311	23	-83668.5	-17807.2	-2886.5	15.70	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31375.9	73445.6	6524.1	73445.6	$\phi 12/10.0'$
0.79	3.26	31375.9	36722.8	6524.1	36722.8	$\phi 12/20.0'$
3.26	3.88	31375.9	73445.6	6524.1	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

211	Ft. 38	-91660.5	-1941.1	0.1	-365.6
	Fc. 36	-98542.1	-2161.2	-1.2	-581.9
	ClsMax 36	-98542.1	-2161.2	-1.2	-40.2
	ClsMed 36	-98542.1	-2161.2	-1.2	-32.4
311	Ft. 38	-89129.3	1968.4	-146.5	-345.4
	Fc. 36	-96010.9	2178.9	-159.0	-577.2
	ClsMax 36	-96010.9	2178.9	-159.0	-40.0
	ClsMed 36	-96010.9	2178.9	-159.0	-31.6

Combinazioni Frequenti

211	Ft. 40	-87065.8	-1865.7	0.2	-346.3
	Fc. 39	-88784.5	-1938.6	-0.3	-523.8
	ClsMax 39	-88784.5	-1938.6	-0.3	-36.2
	ClsMed 39	-88784.5	-1938.6	-0.3	-29.2
311	Ft. 40	-84534.6	1896.5	-138.4	-326.3
	Fc. 39	-86253.2	1966.2	-141.6	-518.9
	ClsMax 39	-86253.2	1966.2	-141.6	-36.0
	ClsMed 39	-86253.2	1966.2	-141.6	-28.3

Combinazioni Quasi Permanenti

211	Ft. 41	-86490.6	-1865.2	0.2	-343.5
	Fc. 41	-86490.6	-1865.2	0.2	-509.3
	ClsMax 41	-86490.6	-1865.2	0.2	-35.2
	ClsMed 41	-86490.6	-1865.2	0.2	-28.4
311	Ft. 41	-83959.4	1896.0	-137.5	-323.5
	Fc. 41	-83959.4	1896.0	-137.5	-504.3
	ClsMax 41	-83959.4	1896.0	-137.5	-34.9
	ClsMed 41	-83959.4	1896.0	-137.5	-27.6

- Pilastro: 311/411 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
311	20	-58335.2	-17807.2	3432.0	30.41	1.00	0.37
411	26	-56125.5	-19595.5	-2564.4	14.61	1.00	0.41

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	30133.3	73445.6	5558.9	73445.6	$\varnothing 12/10.0'$
0.79	3.26	30133.3	36722.8	5558.9	36722.8	$\varnothing 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	30133.3	73445.6	5558.9	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

311	Ft. 38	-63327.3	-1868.3	30.3	-227.8
	Fc. 36	-67892.5	-2060.4	32.9	-427.7
	ClsMax 36	-67892.5	-2060.4	32.9	-29.9
	ClsMed 36	-67892.5	-2060.4	32.9	-22.3
411	Ft. 38	-60796.1	1859.4	-130.6	-211.3
	Fc. 36	-65361.3	2054.2	-140.0	-419.7
	ClsMax 36	-65361.3	2054.2	-140.0	-29.4
	ClsMed 36	-65361.3	2054.2	-140.0	-21.5

Combinazioni Frequenti

311	Ft. 40	-59499.7	-1800.2	28.6	-212.0
	Fc. 39	-60445.0	-1863.2	29.3	-382.1
	ClsMax 39	-60445.0	-1863.2	29.3	-26.7
	ClsMed 39	-60445.0	-1863.2	29.3	-19.9
411	Ft. 40	-56968.4	1788.6	-122.0	-195.9
	Fc. 39	-57913.7	1852.1	-123.8	-373.3
	ClsMax 39	-57913.7	1852.1	-123.8	-26.2
	ClsMed 39	-57913.7	1852.1	-123.8	-19.0

Combinazioni Quasi Permanenti

311	Ft. 41	-58923.2	-1799.2	28.4	-209.2
	Fc. 41	-58923.2	-1799.2	28.4	-371.7
	ClsMax 41	-58923.2	-1799.2	28.4	-26.0
	ClsMed 41	-58923.2	-1799.2	28.4	-19.4
411	Ft. 41	-56392.0	1787.1	-120.7	-193.2
	Fc. 41	-56392.0	1787.1	-120.7	-362.8
	ClsMax 41	-56392.0	1787.1	-120.7	-25.4
	ClsMed 41	-56392.0	1787.1	-120.7	-18.5

- Pilastro: 411/511 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
411	6	-31786.8	19714.4	-1771.8	25.02	1.00	0.47
511	11	-29226.1	-15774.9	2902.6	9.19	1.00	0.38

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26077.8	73445.6	4114.8	73445.6	ø 12/10.0'
0.79	3.26	26077.8	36722.8	4114.8	36722.8	ø 12/20.0'
3.26	3.88	26077.8	73445.6	4114.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

411	Ft. 37	-35826.1	-2220.1	80.3	-74.4
	Fc. 36	-37272.1	-2222.0	80.6	-286.1
	ClsMax 36	-37272.1	-2222.0	80.6	-20.6
	ClsMed 36	-37272.1	-2222.0	80.6	-12.2
511	Ft. 37	-33294.9	2477.5	-200.0	-45.1
	Fc. 36	-34740.9	2475.3	-204.0	-290.3
	ClsMax 36	-34740.9	2475.3	-204.0	-21.1
	ClsMed 36	-34740.9	2475.3	-204.0	-11.4

Combinazioni Frequenti

411	Ft. 39	-32130.3	-1998.7	72.4	-66.3
	Fc. 39	-32130.3	-1998.7	72.4	-250.4
	ClsMax 39	-32130.3	-1998.7	72.4	-18.0
	ClsMed 39	-32130.3	-1998.7	72.4	-10.6
511	Ft. 39	-29599.1	2229.8	-179.4	-38.8
	Fc. 39	-29599.1	2229.8	-179.4	-253.0
	ClsMax 39	-29599.1	2229.8	-179.4	-18.4
	ClsMed 39	-29599.1	2229.8	-179.4	-9.7

Combinazioni Quasi Permanenti

411	Ft. 41	-31380.4	-1925.6	69.9	-66.0
	Fc. 41	-31380.4	-1925.6	69.9	-243.4
	ClsMax 41	-31380.4	-1925.6	69.9	-17.5
	ClsMed 41	-31380.4	-1925.6	69.9	-10.3
511	Ft. 41	-28849.1	2146.5	-173.8	-39.1
	Fc. 41	-28849.1	2146.5	-173.8	-245.3
	ClsMax 41	-28849.1	2146.5	-173.8	-17.9
	ClsMed 41	-28849.1	2146.5	-173.8	-9.5

- Pilastro: 511/611 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af} = 20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\phi 10/20.0' \times 240.6$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
511	34	-3886.9	-2224.0	1754.5	1.00	1.00	0.12
611	1	-6990.5	1689.4	-0.4	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1416.5	25501.9	769.3	25501.9	ø 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
511	Ft. 37	-5137.0	-1562.0	1.2	195.8
	Fc. 36	-6584.7	-1566.2	1.3	-135.7
	ClsMax 37	-5137.0	-1562.0	1.2	-11.0
	ClsMed 37	-5137.0	-1562.0	1.2	-5.5
611	Ft. 36	-4897.2	1196.2	-0.3	114.0
	Fc. 36	-4897.2	1196.2	-0.3	-103.3
	ClsMax 36	-4897.2	1196.2	-0.3	-8.4
	ClsMed 36	-4897.2	1196.2	-0.3	-4.2
Combinazioni Frequenti					
511	Ft. 39	-3753.8	-1408.8	1.0	213.2
	Fc. 39	-3753.8	-1408.8	1.0	-116.9
	ClsMax 39	-3753.8	-1408.8	1.0	-10.0
	ClsMed 39	-3753.8	-1408.8	1.0	-5.0
611	Ft. 40	-2666.9	675.8	-0.2	67.9
	Fc. 40	-2666.9	675.8	-0.2	-58.2
	ClsMax 40	-2666.9	675.8	-0.2	-4.7
	ClsMed 40	-2666.9	675.8	-0.2	-2.4
Combinazioni Quasi Permanenti					
511	Ft. 41	-3775.4	-1359.0	1.0	199.1
	Fc. 41	-3775.4	-1359.0	1.0	-113.3
	ClsMax 41	-3775.4	-1359.0	1.0	-9.7
	ClsMed 41	-3775.4	-1359.0	1.0	-4.8
611	Ft. 41	-2087.9	547.7	-0.2	57.7
	Fc. 41	-2087.9	547.7	-0.2	-47.0
	ClsMax 41	-2087.9	547.7	-0.2	-3.8
	ClsMed 41	-2087.9	547.7	-0.2	-1.9

- Pilastro: 12/112 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
12	24	-141968.6	19178.9	3960.9	5.07	1.47	0.46
112	24	-139937.4	19178.9	3960.9	29.44	1.00	0.46

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	30589.3	73445.6	6892.1	73445.6	$\varnothing 12/10.0'$
0.51	2.57	30589.3	36722.8	6892.1	36722.8	$\varnothing 12/20.0'$
2.57	3.08	30589.3	73445.6	6892.1	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
12	Ft. 38	-147564.6	-708.0	-78.2	-731.3
	Fc. 36	-159027.0	-742.3	-81.5	-869.0
	ClsMax 36	-159027.0	-742.3	-81.5	-58.5
	ClsMed 36	-159027.0	-742.3	-81.5	-55.3
112	Ft. 38	-145533.3	1666.8	-59.1	-675.3
	Fc. 36	-156995.7	1769.5	-65.2	-907.3
	ClsMax 36	-156995.7	1769.5	-65.2	-61.7
	ClsMed 36	-156995.7	1769.5	-65.2	-54.6
Combinazioni Frequenti					
12	Ft. 40	-141458.0	-696.1	-75.5	-700.2
	Fc. 39	-144707.3	-707.4	-76.2	-792.4
	ClsMax 39	-144707.3	-707.4	-76.2	-53.3
	ClsMed 39	-144707.3	-707.4	-76.2	-50.3
112	Ft. 40	-139426.7	1632.0	-56.0	-645.3
	Fc. 39	-142676.1	1666.0	-57.8	-827.3
	ClsMax 39	-142676.1	1666.0	-57.8	-56.3
	ClsMed 39	-142676.1	1666.0	-57.8	-49.6
Combinazioni Quasi Permanenti					
12	Ft. 41	-140886.5	-696.0	-75.1	-697.3
	Fc. 41	-140886.5	-696.0	-75.1	-771.8
	ClsMax 41	-140886.5	-696.0	-75.1	-52.0
	ClsMed 41	-140886.5	-696.0	-75.1	-49.0
112	Ft. 41	-138855.3	1631.8	-55.7	-642.3
	Fc. 41	-138855.3	1631.8	-55.7	-805.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-138855.3	1631.8	-55.7	-54.8
	ClsMed 41	-138855.3	1631.8	-55.7	-48.3

- Pilastro: 112/212 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ϕ 20 Af=25.13 [cm²] < 1 ϕ 20 x 4 V + 1 ϕ 20 x 2 B + 1 ϕ 20 x 2 H >

Staffe: ϕ 12/10.0' x 62.2+ ϕ 12/20.0' x 248.7+ ϕ 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
112	20	-114634.6	14853.8	5572.8	15.85	1.00	0.38
212	20	-112090.8	-21451.9	2315.5	35.72	1.00	0.46

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26157.8	73445.6	6169.9	73445.6	ϕ 12/10.0'
0.79	3.28	26157.8	36722.8	6169.9	36722.8	ϕ 12/20.0'
3.28	3.90	26157.8	73445.6	6169.9	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
112	Ft. 38	-119858.5	-1825.8	-91.5	-532.2
	Fc. 36	-129060.0	-1969.7	-100.0	-773.0
	ClsMax 36	-129060.0	-1969.7	-100.0	-52.9
	ClsMed 36	-129060.0	-1969.7	-100.0	-44.9
212	Ft. 38	-117314.8	1979.4	-45.4	-513.7
	Fc. 36	-126516.2	2173.4	-50.7	-767.2
	ClsMax 36	-126516.2	2173.4	-50.7	-52.6
	ClsMed 36	-126516.2	2173.4	-50.7	-44.0
Combinazioni Frequenti					
112	Ft. 40	-114505.2	-1777.2	-87.0	-506.8
	Fc. 39	-117000.7	-1824.9	-89.4	-702.6
	ClsMax 39	-117000.7	-1824.9	-89.4	-48.1
	ClsMed 39	-117000.7	-1824.9	-89.4	-40.7
212	Ft. 40	-111961.4	1913.7	-42.6	-489.1
	Fc. 39	-114457.0	1978.1	-44.1	-694.6
	ClsMax 39	-114457.0	1978.1	-44.1	-47.7
	ClsMed 39	-114457.0	1978.1	-44.1	-39.8
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

112	Ft. 41	-113933.6	-1777.0	-86.6	-503.9
	Fc. 41	-113933.6	-1777.0	-86.6	-684.2
	ClsMax 41	-113933.6	-1777.0	-86.6	-46.9
	ClsMed 41	-113933.6	-1777.0	-86.6	-39.6
212	Ft. 41	-111389.8	1913.4	-42.3	-486.2
	Fc. 41	-111389.8	1913.4	-42.3	-675.4
	ClsMax 41	-111389.8	1913.4	-42.3	-46.3
	ClsMed 41	-111389.8	1913.4	-42.3	-38.7

- Pilastro: 212/312 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
212	11	-87614.2	20292.0	-5833.8	6.48	1.00	0.42
312	8	-84361.4	17807.2	2708.4	2.67	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31401.3	73445.6	6212.3	73445.6	ø 12/10.0'
0.79	3.26	31401.3	36722.8	6212.3	36722.8	ø 12/20.0'
3.26	3.88	31401.3	73445.6	6212.3	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
212	Ft. 38	-91521.3	-1868.9	-122.0	-362.7
	Fc. 36	-98390.1	-2081.9	-134.0	-583.5
	ClsMax 36	-98390.1	-2081.9	-134.0	-40.3
	ClsMed 36	-98390.1	-2081.9	-134.0	-32.3
312	Ft. 38	-88990.0	1899.6	-2.4	-354.2
	Fc. 36	-95858.8	2102.9	-2.2	-566.1
	ClsMax 36	-95858.8	2102.9	-2.2	-39.1
	ClsMed 36	-95858.8	2102.9	-2.2	-31.5
Combinazioni Frequenti					
212	Ft. 40	-86944.5	-1796.1	-115.5	-343.6
	Fc. 39	-88662.3	-1866.7	-118.9	-525.3
	ClsMax 39	-88662.3	-1866.7	-118.9	-36.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-88662.3	-1866.7	-118.9	-29.1
312	Ft. 40	-84413.2	1830.6	-1.9	-334.7
	Fc. 39	-86131.0	1898.0	-1.8	-509.0
	ClsMax 39	-86131.0	1898.0	-1.8	-35.2
	ClsMed 39	-86131.0	1898.0	-1.8	-28.3

Combinazioni Quasi Permanenti

212	Ft. 41	-86372.7	-1795.7	-114.9	-340.9
	Fc. 41	-86372.7	-1795.7	-114.9	-510.7
	ClsMax 41	-86372.7	-1795.7	-114.9	-35.3
	ClsMed 41	-86372.7	-1795.7	-114.9	-28.4
312	Ft. 41	-83841.4	1830.3	-1.8	-331.9
	Fc. 41	-83841.4	1830.3	-1.8	-494.7
	ClsMax 41	-83841.4	1830.3	-1.8	-34.2
	ClsMed 41	-83841.4	1830.3	-1.8	-27.6

- Pilastro: 312/412 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
312	20	-57997.3	17807.2	3243.3	87.02	1.00	0.37
412	24	-56771.3	-21273.8	-3191.8	22.78	1.00	0.45

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	30159.1	73445.6	5271.9	73445.6	$\varnothing 12/10.0'$
0.79	3.26	30159.1	36722.8	5271.9	36722.8	$\varnothing 12/20.0'$
3.26	3.88	30159.1	73445.6	5271.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
312	Ft. 38	-63230.5	-1796.1	-116.0	-226.7
	Fc. 36	-67788.8	-1979.9	-126.0	-427.8
	ClsMax 36	-67788.8	-1979.9	-126.0	-29.9
	ClsMed 36	-67788.8	-1979.9	-126.0	-22.3
412	Ft. 38	-60699.2	1790.1	-4.0	-219.5
	Fc. 36	-65257.5	1977.6	-2.8	-409.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-65257.5	1977.6	-2.8	-28.6
	ClsMed 36	-65257.5	1977.6	-2.8	-21.4

Combinazioni Frequenti

312	Ft. 40	-59422.4	-1731.3	-109.9	-211.1
	Fc. 39	-60369.7	-1791.7	-112.5	-382.2
	ClsMax 39	-60369.7	-1791.7	-112.5	-26.7
	ClsMed 39	-60369.7	-1791.7	-112.5	-19.8
412	Ft. 40	-56891.2	1723.0	-2.2	-203.8
	Fc. 39	-57838.5	1784.4	-1.2	-364.5
	ClsMax 39	-57838.5	1784.4	-1.2	-25.5
	ClsMed 39	-57838.5	1784.4	-1.2	-19.0

Combinazioni Quasi Permanenti

312	Ft. 41	-58850.3	-1730.5	-109.2	-208.4
	Fc. 41	-58850.3	-1730.5	-109.2	-371.9
	ClsMax 41	-58850.3	-1730.5	-109.2	-26.0
	ClsMed 41	-58850.3	-1730.5	-109.2	-19.3
412	Ft. 41	-56319.1	1721.9	-1.6	-201.0
	Fc. 41	-56319.1	1721.9	-1.6	-354.2
	ClsMax 41	-56319.1	1721.9	-1.6	-24.7
	ClsMed 41	-56319.1	1721.9	-1.6	-18.5

- Pilastro: 412/512 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
412	4	-31612.6	21528.4	-1342.4	101.62	1.00	0.53
512	11	-29339.4	-16026.8	3258.6	3.84	1.00	0.39

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26206.3	73445.6	3812.7	73445.6	$\varnothing 12/10.0'$
0.79	3.26	26206.3	36722.8	3812.7	36722.8	$\varnothing 12/20.0'$
3.26	3.88	26206.3	73445.6	3812.7	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

412	Ft. 37	-35764.2	-2127.3	-158.9	-74.7
	Fc. 36	-37196.5	-2129.9	-162.6	-285.2
	ClsMax 36	-37196.5	-2129.9	-162.6	-20.5
	ClsMed 36	-37196.5	-2129.9	-162.6	-12.2
512	Ft. 37	-33232.9	2362.2	171.0	-51.2
	Fc. 36	-34665.2	2361.9	173.7	-283.6
	ClsMax 36	-34665.2	2361.9	173.7	-20.6
	ClsMed 36	-34665.2	2361.9	173.7	-11.4

Combinazioni Frequenti

412	Ft. 39	-32084.5	-1915.2	-143.6	-66.7
	Fc. 39	-32084.5	-1915.2	-143.6	-249.7
	ClsMax 39	-32084.5	-1915.2	-143.6	-18.0
	ClsMed 39	-32084.5	-1915.2	-143.6	-10.5
512	Ft. 39	-29553.3	2125.1	155.2	-44.4
	Fc. 39	-29553.3	2125.1	155.2	-247.0
	ClsMax 39	-29553.3	2125.1	155.2	-18.0
	ClsMed 39	-29553.3	2125.1	155.2	-9.7

Combinazioni Quasi Permanenti

412	Ft. 41	-31335.4	-1845.3	-139.8	-66.3
	Fc. 41	-31335.4	-1845.3	-139.8	-242.7
	ClsMax 41	-31335.4	-1845.3	-139.8	-17.5
	ClsMed 41	-31335.4	-1845.3	-139.8	-10.3
512	Ft. 41	-28804.1	2045.9	150.8	-44.4
	Fc. 41	-28804.1	2045.9	150.8	-239.6
	ClsMax 41	-28804.1	2045.9	150.8	-17.4
	ClsMed 41	-28804.1	2045.9	150.8	-9.5

- Pilastro: 512/612 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
512	27	-3609.6	-2990.7	1842.2	1.00	1.00	0.16
612	1	-6869.0	1652.2	-0.1	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1383.1	25501.9	759.3	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
512	Ft. 37	-5070.0	-1529.9	0.3	190.1
	Fc. 36	-6499.1	-1528.5	0.3	-132.4
	ClsMax 37	-5070.0	-1529.9	0.3	-10.8
	ClsMed 37	-5070.0	-1529.9	0.3	-5.4
612	Ft. 36	-4811.6	1169.9	-0.1	110.7
	Fc. 36	-4811.6	1169.9	-0.1	-101.1
	ClsMax 36	-4811.6	1169.9	-0.1	-8.2
	ClsMed 36	-4811.6	1169.9	-0.1	-4.1
Combinazioni Frequenti					
512	Ft. 39	-3706.2	-1383.1	0.3	208.4
	Fc. 39	-3706.2	-1383.1	0.3	-114.8
	ClsMax 39	-3706.2	-1383.1	0.3	-9.8
	ClsMed 39	-3706.2	-1383.1	0.3	-4.9
612	Ft. 40	-2612.0	658.2	-0.1	65.6
	Fc. 40	-2612.0	658.2	-0.1	-56.7
	ClsMax 40	-2612.0	658.2	-0.1	-4.6
	ClsMed 40	-2612.0	658.2	-0.1	-2.3
Combinazioni Quasi Permanenti					
512	Ft. 41	-3727.9	-1333.8	0.3	194.3
	Fc. 41	-3727.9	-1333.8	0.3	-111.2
	ClsMax 41	-3727.9	-1333.8	0.3	-9.5
	ClsMed 41	-3727.9	-1333.8	0.3	-4.7
612	Ft. 41	-2040.4	532.1	-0.1	55.6
	Fc. 41	-2040.4	532.1	-0.1	-45.7
	ClsMax 41	-2040.4	532.1	-0.1	-3.7
	ClsMed 41	-2040.4	532.1	-0.1	-1.9

- Pilastro: 13/113 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
13	25	-142412.4	20027.9	3834.2	3.59	1.40	0.47
113	25	-140381.2	20027.9	3834.2	71.79	1.00	0.47

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.00	0.51	30830.8	73445.6	6897.0	73445.6	ø 12/10.0'
0.51	2.57	30830.8	36722.8	6897.0	36722.8	ø 12/20.0'
2.57	3.08	30830.8	73445.6	6897.0	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
13	Ft. 38	-147565.3	-706.1	-79.1	-731.4
	Fc. 36	-159028.5	-737.5	-82.5	-868.8
	ClSMax 36	-159028.5	-737.5	-82.5	-58.5
	ClSMed 36	-159028.5	-737.5	-82.5	-55.3
113	Ft. 38	-145534.1	1684.1	-57.3	-674.6
	Fc. 36	-156997.3	1788.1	-63.2	-908.1
	ClSMax 36	-156997.3	1788.1	-63.2	-61.8
	ClSMed 36	-156997.3	1788.1	-63.2	-54.6
Combinazioni Frequenti					
13	Ft. 40	-141458.8	-695.0	-76.4	-700.2
	Fc. 39	-144708.5	-705.3	-77.1	-792.3
	ClSMax 39	-144708.5	-705.3	-77.1	-53.3
	ClSMed 39	-144708.5	-705.3	-77.1	-50.3
113	Ft. 40	-139427.6	1648.7	-54.3	-644.6
	Fc. 39	-142677.3	1683.2	-56.0	-828.0
	ClSMax 39	-142677.3	1683.2	-56.0	-56.4
	ClSMed 39	-142677.3	1683.2	-56.0	-49.6
Combinazioni Quasi Permanenti					
13	Ft. 41	-140887.4	-694.9	-76.0	-697.3
	Fc. 41	-140887.4	-694.9	-76.0	-771.8
	ClSMax 41	-140887.4	-694.9	-76.0	-52.0
	ClSMed 41	-140887.4	-694.9	-76.0	-49.0
113	Ft. 41	-138856.2	1648.5	-54.0	-641.6
	Fc. 41	-138856.2	1648.5	-54.0	-806.3
	ClSMax 41	-138856.2	1648.5	-54.0	-54.9
	ClSMed 41	-138856.2	1648.5	-54.0	-48.3

- Pilastro: 113/213 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
113	20	-114899.3	14666.3	5571.2	7.29	1.00	0.38

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

213	20	-112355.5	-22437.5	2314.7	14.16	1.00	0.49
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26205.2	73445.6	6101.1	73445.6	ø 12/10.0'
0.79	3.28	26205.2	36722.8	6101.1	36722.8	ø 12/20.0'
3.28	3.90	26205.2	73445.6	6101.1	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
113	Ft. 38	-119855.9	-1797.4	-92.2	-533.5
	Fc. 36	-129057.2	-1937.8	-100.8	-771.5
	ClsMax 36	-129057.2	-1937.8	-100.8	-52.8
	ClsMed 36	-129057.2	-1937.8	-100.8	-44.9
213	Ft. 38	-117312.2	1964.9	-46.2	-514.4
	Fc. 36	-126513.5	2155.6	-51.5	-766.4
	ClsMax 36	-126513.5	2155.6	-51.5	-52.6
	ClsMed 36	-126513.5	2155.6	-51.5	-44.0
Combinazioni Frequenti					
113	Ft. 40	-114502.9	-1749.9	-87.7	-508.1
	Fc. 39	-116998.5	-1796.5	-90.1	-701.3
	ClsMax 39	-116998.5	-1796.5	-90.1	-48.0
	ClsMed 39	-116998.5	-1796.5	-90.1	-40.7
213	Ft. 40	-111959.2	1900.2	-43.4	-489.7
	Fc. 39	-114454.8	1963.5	-44.9	-693.9
	ClsMax 39	-114454.8	1963.5	-44.9	-47.6
	ClsMed 39	-114454.8	1963.5	-44.9	-39.8
Combinazioni Quasi Permanenti					
113	Ft. 41	-113931.4	-1749.7	-87.3	-505.2
	Fc. 41	-113931.4	-1749.7	-87.3	-682.9
	ClsMax 41	-113931.4	-1749.7	-87.3	-46.8
	ClsMed 41	-113931.4	-1749.7	-87.3	-39.6
213	Ft. 41	-111387.7	1899.9	-43.1	-486.8
	Fc. 41	-111387.7	1899.9	-43.1	-674.7
	ClsMax 41	-111387.7	1899.9	-43.1	-46.3
	ClsMed 41	-111387.7	1899.9	-43.1	-38.7

- Pilastro: 213/313 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: \varnothing 12/10.0' x 61.8+ \varnothing 12/20.0' x 247.3+ \varnothing 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
213	9	-87103.3	22108.8	-4019.5	20.32	1.00	0.44
313	8	-84553.4	17807.2	2712.1	2.11	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31408.8	73445.6	6159.2	73445.6	\varnothing 12/10.0'
0.79	3.26	31408.8	36722.8	6159.2	36722.8	\varnothing 12/20.0'
3.26	3.88	31408.8	73445.6	6159.2	73445.6	\varnothing 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
213	Ft. 38	-91520.0	-1829.0	-121.1	-364.5
	Fc. 36	-98389.0	-2037.7	-133.0	-581.5
	ClsMax 36	-98389.0	-2037.7	-133.0	-40.2
	ClsMed 36	-98389.0	-2037.7	-133.0	-32.3
313	Ft. 38	-88988.8	1869.1	-1.9	-355.5
	Fc. 36	-95857.7	2068.9	-1.7	-564.6
	ClsMax 36	-95857.7	2068.9	-1.7	-39.0
	ClsMed 36	-95857.7	2068.9	-1.7	-31.5
Combinazioni Frequenti					
213	Ft. 40	-86943.4	-1757.6	-114.6	-345.4
	Fc. 39	-88661.3	-1826.7	-118.0	-523.5
	ClsMax 39	-88661.3	-1826.7	-118.0	-36.2
	ClsMed 39	-88661.3	-1826.7	-118.0	-29.1
313	Ft. 40	-84412.2	1801.1	-1.4	-336.0
	Fc. 39	-86130.1	1867.4	-1.3	-507.6
	ClsMax 39	-86130.1	1867.4	-1.3	-35.1
	ClsMed 39	-86130.1	1867.4	-1.3	-28.3
Combinazioni Quasi Permanenti					
213	Ft. 41	-86371.7	-1757.2	-114.0	-342.6
	Fc. 41	-86371.7	-1757.2	-114.0	-508.9
	ClsMax 41	-86371.7	-1757.2	-114.0	-35.1
	ClsMed 41	-86371.7	-1757.2	-114.0	-28.4
313	Ft. 41	-83840.4	1800.8	-1.3	-333.2
	Fc. 41	-83840.4	1800.8	-1.3	-493.4
	ClsMax 41	-83840.4	1800.8	-1.3	-34.1
	ClsMed 41	-83840.4	1800.8	-1.3	-27.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 313/413 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
313	20	-57678.0	17807.2	3239.4	18.59	1.00	0.37
413	24	-56944.2	-22166.4	-3179.2	11.23	1.00	0.48

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	30202.4	73445.6	5141.2	73445.6	$\varnothing 12/10.0'$
0.79	3.26	30202.4	36722.8	5141.2	36722.8	$\varnothing 12/20.0'$
3.26	3.88	30202.4	73445.6	5141.2	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
313	Ft. 38	-63229.2	-1767.0	-115.2	-228.0
	Fc. 36	-67787.5	-1947.2	-125.2	-426.3
	ClSMax 36	-67787.5	-1947.2	-125.2	-29.8
	ClSMed 36	-67787.5	-1947.2	-125.2	-22.3
413	Ft. 38	-60697.9	1763.4	-7.7	-220.5
	Fc. 36	-65256.2	1947.8	-6.5	-408.5
	ClSMax 36	-65256.2	1947.8	-6.5	-28.5
	ClSMed 36	-65256.2	1947.8	-6.5	-21.4
Combinazioni Frequenti					
313	Ft. 40	-59421.3	-1703.2	-109.1	-212.4
	Fc. 39	-60368.6	-1762.3	-111.7	-380.9
	ClSMax 39	-60368.6	-1762.3	-111.7	-26.6
	ClSMed 39	-60368.6	-1762.3	-111.7	-19.8
413	Ft. 40	-56890.1	1697.4	-5.7	-204.8
	Fc. 39	-57837.4	1757.7	-4.8	-363.4
	ClSMax 39	-57837.4	1757.7	-4.8	-25.4
	ClSMed 39	-57837.4	1757.7	-4.8	-19.0
Combinazioni Quasi Permanenti					
313	Ft. 41	-58849.2	-1702.3	-108.4	-209.6
	Fc. 41	-58849.2	-1702.3	-108.4	-370.6
	ClSMax 41	-58849.2	-1702.3	-108.4	-25.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-58849.2	-1702.3	-108.4	-19.3
413	Ft. 41	-56318.0	1696.3	-5.1	-202.0
	Fc. 41	-56318.0	1696.3	-5.1	-353.2
	ClsMax 41	-56318.0	1696.3	-5.1	-24.7
	ClsMed 41	-56318.0	1696.3	-5.1	-18.5

- Pilastro: 413/513 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
413	4	-31720.0	22553.5	-1350.3	21.81	1.00	0.56
513	11	-29538.5	-16273.0	3331.1	2.49	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26158.0	73445.6	3841.2	73445.6	$\varnothing 12/10.0'$
0.79	3.26	26158.0	36722.8	3841.2	36722.8	$\varnothing 12/20.0'$
3.26	3.88	26158.0	73445.6	3841.2	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
413	Ft. 37	-35763.8	-2082.2	-160.6	-76.6
	Fc. 36	-37196.1	-2085.3	-164.4	-283.3
	ClsMax 36	-37196.1	-2085.3	-164.4	-20.4
	ClsMed 36	-37196.1	-2085.3	-164.4	-12.2
513	Ft. 37	-33232.5	2297.4	181.6	-53.7
	Fc. 36	-34664.8	2297.6	184.4	-281.2
	ClsMax 36	-34664.8	2297.6	184.4	-20.4
	ClsMed 36	-34664.8	2297.6	184.4	-11.4
Combinazioni Frequenti					
413	Ft. 39	-32084.1	-1875.1	-145.3	-68.4
	Fc. 39	-32084.1	-1875.1	-145.3	-247.9
	ClsMax 39	-32084.1	-1875.1	-145.3	-17.8
	ClsMed 39	-32084.1	-1875.1	-145.3	-10.5
513	Ft. 39	-29552.9	2067.5	165.2	-46.5
	Fc. 39	-29552.9	2067.5	165.2	-244.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-29552.9	2067.5	165.2	-17.8
	ClsMed 39	-29552.9	2067.5	165.2	-9.7

Combinazioni Quasi Permanenti

413	Ft. 41	-31335.0	-1807.1	-141.4	-67.9
	Fc. 41	-31335.0	-1807.1	-141.4	-241.1
	ClsMax 41	-31335.0	-1807.1	-141.4	-17.3
	ClsMed 41	-31335.0	-1807.1	-141.4	-10.3
513	Ft. 41	-28803.8	1990.9	160.7	-46.4
	Fc. 41	-28803.8	1990.9	160.7	-237.6
	ClsMax 41	-28803.8	1990.9	160.7	-17.2
	ClsMed 41	-28803.8	1990.9	160.7	-9.5

- Pilastro: 513/613 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 \emptyset 18 Af=20.36 [cm²] < 1 \emptyset 18 x 4 V + 1 \emptyset 18 x 2 B + 1 \emptyset 18 x 2 H >

Staffe: \emptyset 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
513	27	-3566.2	-3576.8	1839.5	1.00	1.00	0.19
613	1	-6873.5	1650.0	-0.2	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1394.2	25501.9	758.1	25501.9	\emptyset 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

513	Ft. 37	-5073.1	-1552.7	0.8	195.9
	Fc. 36	-6502.3	-1551.3	0.8	-134.3
	ClsMax 37	-5073.1	-1552.7	0.8	-11.0
	ClsMed 37	-5073.1	-1552.7	0.8	-5.5
613	Ft. 36	-4814.8	1168.3	-0.2	110.2
	Fc. 36	-4814.8	1168.3	-0.2	-101.0
	ClsMax 36	-4814.8	1168.3	-0.2	-8.2
	ClsMed 36	-4814.8	1168.3	-0.2	-4.1

Combinazioni Frequenti

513	Ft. 39	-3708.8	-1403.2	0.7	213.6
	Fc. 39	-3708.8	-1403.2	0.7	-116.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-3708.8	-1403.2	0.7	-10.0
	ClsMed 39	-3708.8	-1403.2	0.7	-5.0
613	Ft. 40	-2614.7	656.8	-0.2	65.2
	Fc. 40	-2614.7	656.8	-0.2	-56.6
	ClsMax 40	-2614.7	656.8	-0.2	-4.6
	ClsMed 40	-2614.7	656.8	-0.2	-2.3

Combinazioni Quasi Permanenti

513	Ft. 41	-3730.5	-1352.9	0.7	199.3
	Fc. 41	-3730.5	-1352.9	0.7	-112.6
	ClsMax 41	-3730.5	-1352.9	0.7	-9.6
	ClsMed 41	-3730.5	-1352.9	0.7	-4.8
613	Ft. 41	-2043.0	530.6	-0.2	55.1
	Fc. 41	-2043.0	530.6	-0.2	-45.6
	ClsMax 41	-2043.0	530.6	-0.2	-3.7
	ClsMed 41	-2043.0	530.6	-0.2	-1.9

- Pilastro: 14/114 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
14	25	-142032.6	22248.8	3742.8	3.11	1.34	0.50
114	25	-140001.4	22248.8	3742.8	80.48	1.00	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31815.0	73445.6	6487.5	73445.6	$\varnothing 12/10.0'$
0.51	2.57	31815.0	36722.8	6487.5	36722.8	$\varnothing 12/20.0'$
2.57	3.08	31815.0	73445.6	6487.5	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
14	Ft. 38	-146585.1	-866.5	-67.0	-719.1
	Fc. 36	-157985.5	-932.1	-68.8	-872.1
	ClsMax 36	-157985.5	-932.1	-68.8	-58.8
	ClsMed 36	-157985.5	-932.1	-68.8	-54.9
114	Ft. 38	-144553.8	2041.9	-82.7	-650.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-155954.2	2225.1	-92.0	-925.2
	ClsMax 36	-155954.2	2225.1	-92.0	-63.2
	ClsMed 36	-155954.2	2225.1	-92.0	-54.2

Combinazioni Frequenti

14	Ft. 40	-140521.7	-843.4	-64.6	-688.7
	Fc. 39	-143756.0	-864.9	-64.7	-794.5
	ClsMax 39	-143756.0	-864.9	-64.7	-53.6
	ClsMed 39	-143756.0	-864.9	-64.7	-50.0
114	Ft. 40	-138490.5	1979.0	-79.1	-622.5
	Fc. 39	-141724.8	2039.6	-82.0	-841.5
	ClsMax 39	-141724.8	2039.6	-82.0	-57.5
	ClsMed 39	-141724.8	2039.6	-82.0	-49.3

Combinazioni Quasi Permanenti

14	Ft. 41	-139955.9	-843.1	-64.1	-685.8
	Fc. 41	-139955.9	-843.1	-64.1	-773.6
	ClsMax 41	-139955.9	-843.1	-64.1	-52.2
	ClsMed 41	-139955.9	-843.1	-64.1	-48.6
114	Ft. 41	-137924.6	1978.6	-78.9	-619.6
	Fc. 41	-137924.6	1978.6	-78.9	-818.6
	ClsMax 41	-137924.6	1978.6	-78.9	-56.0
	ClsMed 41	-137924.6	1978.6	-78.9	-47.9

- Pilastro: 114/214 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
114	20	-114184.0	15932.0	5609.4	5.57	1.00	0.40
214	20	-111640.3	-23380.4	2366.1	9.12	1.00	0.51

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26669.9	73445.6	5883.4	73445.6	$\phi 12/10.0'$
0.79	3.28	26669.9	36722.8	5883.4	36722.8	$\phi 12/20.0'$
3.28	3.90	26669.9	73445.6	5883.4	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

114	Ft. 38	-118732.4	-1982.5	-106.1	-518.0
	Fc. 36	-127813.6	-2167.5	-115.1	-776.8
	ClsMax 36	-127813.6	-2167.5	-115.1	-53.3
	ClsMed 36	-127813.6	-2167.5	-115.1	-44.4
214	Ft. 38	-116188.7	1954.6	14.9	-510.5
	Fc. 36	-125269.8	2141.7	14.8	-757.4
	ClsMax 36	-125269.8	2141.7	14.8	-51.9
	ClsMed 36	-125269.8	2141.7	14.8	-43.5

Combinazioni Frequenti

114	Ft. 40	-113441.9	-1919.4	-100.5	-493.8
	Fc. 39	-115903.1	-1980.7	-102.9	-705.1
	ClsMax 39	-115903.1	-1980.7	-102.9	-48.4
	ClsMed 39	-115903.1	-1980.7	-102.9	-40.3
214	Ft. 40	-110898.1	1890.9	14.8	-486.0
	Fc. 39	-113359.3	1953.0	14.7	-686.2
	ClsMax 39	-113359.3	1953.0	14.7	-47.1
	ClsMed 39	-113359.3	1953.0	14.7	-39.4

Combinazioni Quasi Permanenti

114	Ft. 41	-112876.0	-1919.0	-99.9	-490.9
	Fc. 41	-112876.0	-1919.0	-99.9	-686.2
	ClsMax 41	-112876.0	-1919.0	-99.9	-47.1
	ClsMed 41	-112876.0	-1919.0	-99.9	-39.2
214	Ft. 41	-110332.3	1890.6	14.8	-483.1
	Fc. 41	-110332.3	1890.6	14.8	-667.4
	ClsMax 41	-110332.3	1890.6	14.8	-45.8
	ClsMed 41	-110332.3	1890.6	14.8	-38.3

- Pilastro: 214/314 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
214	8	-83392.5	23043.0	-3948.7	11.92	1.00	0.46
314	8	-80861.3	17807.2	2819.3	1.74	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31426.8	73445.6	6306.2	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31426.8	36722.8	6306.2	36722.8	$\varnothing 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	31426.8	73445.6	6306.2	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

214	Ft. 38	-90700.4	-1675.4	-224.8	-362.7
	Fc. 36	-97490.3	-1851.5	-246.1	-573.8
	ClsMax 36	-97490.3	-1851.5	-246.1	-39.6
	ClsMed 36	-97490.3	-1851.5	-246.1	-32.0
314	Ft. 38	-88169.1	1809.5	99.5	-349.8
	Fc. 36	-94959.1	1997.1	108.5	-561.7
	ClsMax 36	-94959.1	1997.1	108.5	-38.8
	ClsMed 36	-94959.1	1997.1	108.5	-31.2

Combinazioni Frequenti

214	Ft. 40	-86170.8	-1614.7	-213.5	-343.5
	Fc. 39	-87867.6	-1672.9	-219.5	-517.2
	ClsMax 39	-87867.6	-1672.9	-219.5	-35.7
	ClsMed 39	-87867.6	-1672.9	-219.5	-28.9
314	Ft. 40	-83639.5	1745.3	94.8	-330.5
	Fc. 39	-85336.3	1807.4	97.4	-505.3
	ClsMax 39	-85336.3	1807.4	97.4	-34.9
	ClsMed 39	-85336.3	1807.4	97.4	-28.0

Combinazioni Quasi Permanenti

214	Ft. 41	-85604.2	-1614.2	-212.4	-340.8
	Fc. 41	-85604.2	-1614.2	-212.4	-503.2
	ClsMax 41	-85604.2	-1614.2	-212.4	-34.7
	ClsMed 41	-85604.2	-1614.2	-212.4	-28.1
314	Ft. 41	-83073.0	1744.9	94.4	-327.8
	Fc. 41	-83073.0	1744.9	94.4	-491.2
	ClsMax 41	-83073.0	1744.9	94.4	-33.9
	ClsMed 41	-83073.0	1744.9	94.4	-27.3

- Pilastro: 314/414 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1 \phi 24 \times 4 \text{ V} + 1 \phi 24 \times 2 \text{ B} + 1 \phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
314	7	-57475.8	-17807.2	-3391.8	2.96	1.00	0.37
414	24	-56611.4	-23058.6	-3101.0	7.66	1.00	0.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	30162.5	73445.6	5155.9	73445.6	ø 12/10.0'
0.79	3.26	30162.5	36722.8	5155.9	36722.8	ø 12/20.0'
3.26	3.88	30162.5	73445.6	5155.9	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

314	Ft. 38	-62647.3	-1766.5	-208.4	-221.1
	Fc. 36	-67149.0	-1947.3	-226.4	-427.6
	ClsMax 36	-67149.0	-1947.3	-226.4	-29.9
	ClsMed 36	-67149.0	-1947.3	-226.4	-22.1
414	Ft. 38	-60116.0	1742.0	79.3	-215.4
	Fc. 36	-64617.7	1922.0	88.0	-407.9
	ClsMax 36	-64617.7	1922.0	88.0	-28.5
	ClsMed 36	-64617.7	1922.0	88.0	-21.2

Combinazioni Frequenti

314	Ft. 40	-58876.7	-1701.8	-197.4	-205.8
	Fc. 39	-59809.8	-1760.9	-202.1	-382.1
	ClsMax 39	-59809.8	-1760.9	-202.1	-26.7
	ClsMed 39	-59809.8	-1760.9	-202.1	-19.7
414	Ft. 40	-56345.5	1676.8	76.8	-199.8
	Fc. 39	-57278.5	1735.6	79.8	-363.0
	ClsMax 39	-57278.5	1735.6	79.8	-25.4
	ClsMed 39	-57278.5	1735.6	79.8	-18.8

Combinazioni Quasi Permanenti

314	Ft. 41	-58309.2	-1700.7	-196.1	-203.1
	Fc. 41	-58309.2	-1700.7	-196.1	-371.7
	ClsMax 41	-58309.2	-1700.7	-196.1	-26.0
	ClsMed 41	-58309.2	-1700.7	-196.1	-19.2
414	Ft. 41	-55778.0	1675.6	76.9	-197.1
	Fc. 41	-55778.0	1675.6	76.9	-352.8
	ClsMax 41	-55778.0	1675.6	76.9	-24.7
	ClsMed 41	-55778.0	1675.6	76.9	-18.3

- Pilastro: 414/514 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
414	4	-29975.0	23583.3	-1507.8	12.60	1.00	0.60
514	11	-29477.2	-16540.0	3598.1	1.86	1.00	0.41

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26053.3	73445.6	4018.8	73445.6	ø 12/10.0'
0.79	3.26	26053.3	36722.8	4018.8	36722.8	ø 12/20.0'
3.26	3.88	26053.3	73445.6	4018.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

414	Ft. 37	-35438.6	-2017.1	-328.5	-70.5
	Fc. 36	-36861.3	-2020.7	-335.0	-286.4
	ClsMax 36	-36861.3	-2020.7	-335.0	-20.6
	ClsMed 36	-36861.3	-2020.7	-335.0	-12.1
514	Ft. 37	-32907.4	2216.5	435.2	-44.4
	Fc. 36	-34330.1	2216.8	442.4	-287.4
	ClsMax 36	-34330.1	2216.8	442.4	-20.9
	ClsMed 36	-34330.1	2216.8	442.4	-11.3

Combinazioni Frequenti

414	Ft. 39	-31797.0	-1821.2	-297.1	-62.6
	Fc. 39	-31797.0	-1821.2	-297.1	-250.9
	ClsMax 39	-31797.0	-1821.2	-297.1	-18.1
	ClsMed 39	-31797.0	-1821.2	-297.1	-10.4
514	Ft. 39	-29265.7	1999.8	394.4	-37.9
	Fc. 39	-29265.7	1999.8	394.4	-250.7
	ClsMax 39	-29265.7	1999.8	394.4	-18.3
	ClsMed 39	-29265.7	1999.8	394.4	-9.6

Combinazioni Quasi Permanenti

414	Ft. 41	-31057.3	-1757.0	-288.8	-62.2
	Fc. 41	-31057.3	-1757.0	-288.8	-244.0
	ClsMax 41	-31057.3	-1757.0	-288.8	-17.6
	ClsMed 41	-31057.3	-1757.0	-288.8	-10.2
514	Ft. 41	-28526.1	1927.7	383.3	-37.9
	Fc. 41	-28526.1	1927.7	383.3	-243.3
	ClsMax 41	-28526.1	1927.7	383.3	-17.7
	ClsMed 41	-28526.1	1927.7	383.3	-9.4

- Pilastro: 514/614 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4$ V + $1\phi 18 \times 2$ B + $1\phi 18 \times 2$ H >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
514	27	-3510.2	-4209.0	1828.8	1.00	1.00	0.22
614	14	-1538.5	1242.5	-0.5	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1549.9	25501.9	753.6	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
514	Ft. 37	-5059.9	-1593.8	0.5	207.0
	Fc. 36	-6482.4	-1594.6	0.5	-137.7
	ClsMax 37	-5059.9	-1593.8	0.5	-11.3
	ClsMed 37	-5059.9	-1593.8	0.5	-5.6
614	Ft. 36	-4794.9	1166.3	-0.1	110.4
	Fc. 36	-4794.9	1166.3	-0.1	-100.8
	ClsMax 36	-4794.9	1166.3	-0.1	-8.1
	ClsMed 36	-4794.9	1166.3	-0.1	-4.1
Combinazioni Frequenti					
514	Ft. 39	-3702.1	-1438.9	0.5	223.5
	Fc. 39	-3702.1	-1438.9	0.5	-118.9
	ClsMax 39	-3702.1	-1438.9	0.5	-10.2
	ClsMed 39	-3702.1	-1438.9	0.5	-5.1
614	Ft. 40	-2605.3	657.1	-0.1	65.6
	Fc. 40	-2605.3	657.1	-0.1	-56.6
	ClsMax 40	-2605.3	657.1	-0.1	-4.6
	ClsMed 40	-2605.3	657.1	-0.1	-2.3
Combinazioni Quasi Permanenti					
514	Ft. 41	-3723.8	-1387.5	0.5	208.8
	Fc. 41	-3723.8	-1387.5	0.5	-115.2
	ClsMax 41	-3723.8	-1387.5	0.5	-9.9
	ClsMed 41	-3723.8	-1387.5	0.5	-4.9
614	Ft. 41	-2036.3	531.3	-0.1	55.6
	Fc. 41	-2036.3	531.3	-0.1	-45.6
	ClsMax 41	-2036.3	531.3	-0.1	-3.7
	ClsMed 41	-2036.3	531.3	-0.1	-1.9

- Pilastro: 15/115 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
15	4	-83940.7	-14888.9	-3945.0	1.00	1.00	0.35
115	20	-76606.5	-13108.3	4522.5	12.97	1.00	0.32

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	32264.4	73445.6	10133.1	73445.6	$\varnothing 12/10.0'$
0.51	2.57	32264.4	36722.8	10133.1	36722.8	$\varnothing 12/20.0'$
2.57	3.08	32264.4	73445.6	10133.1	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
15	Ft. 38	-86077.3	-428.9	-194.4	-418.6
	Fc. 36	-91828.3	-447.8	-202.2	-510.2
	ClsMax 36	-91828.3	-447.8	-202.2	-34.4
	ClsMed 36	-91828.3	-447.8	-202.2	-31.9
115	Ft. 38	-84046.0	1144.5	184.7	-373.9
	Fc. 36	-89797.0	1236.9	188.0	-537.1
	ClsMax 36	-89797.0	1236.9	188.0	-36.8
	ClsMed 36	-89797.0	1236.9	188.0	-31.2
Combinazioni Frequenti					
15	Ft. 40	-83020.3	-421.6	-190.0	-403.3
	Fc. 39	-84652.3	-427.6	-192.1	-471.3
	ClsMax 39	-84652.3	-427.6	-192.1	-31.8
	ClsMed 39	-84652.3	-427.6	-192.1	-29.4
115	Ft. 40	-80989.0	1112.6	184.2	-359.5
	Fc. 39	-82621.1	1143.1	185.4	-495.0
	ClsMax 39	-82621.1	1143.1	185.4	-33.9
	ClsMed 39	-82621.1	1143.1	185.4	-28.7
Combinazioni Quasi Permanenti					
15	Ft. 41	-82735.3	-421.3	-189.5	-401.8
	Fc. 41	-82735.3	-421.3	-189.5	-460.9
	ClsMax 41	-82735.3	-421.3	-189.5	-31.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-82735.3	-421.3	-189.5	-28.8
115	Ft. 41	-80704.1	1112.3	184.3	-358.1
	Fc. 41	-80704.1	1112.3	184.3	-483.5
	ClsMax 41	-80704.1	1112.3	184.3	-33.1
	ClsMed 41	-80704.1	1112.3	184.3	-28.1

- Pilastro: 115/215 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
115	4	-68303.0	-13815.9	-3934.5	1.00	1.00	0.33
215	20	-60627.6	-20015.7	3111.3	4.53	1.00	0.51

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27289.0	73445.6	8153.2	73445.6	$\varnothing 12/10.0'$
0.79	3.28	27289.0	36722.8	8153.2	36722.8	$\varnothing 12/20.0'$
3.28	3.90	27289.0	73445.6	8153.2	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
115	Ft. 38	-70049.7	-921.7	-341.9	-304.1
	Fc. 36	-74637.8	-995.4	-358.0	-454.6
	ClsMax 36	-74637.8	-995.4	-358.0	-31.2
	ClsMed 36	-74637.8	-995.4	-358.0	-25.9
215	Ft. 38	-67506.0	981.1	158.8	-296.8
	Fc. 36	-72094.1	1060.5	157.3	-434.8
	ClsMax 36	-72094.1	1060.5	157.3	-29.8
	ClsMed 36	-72094.1	1060.5	157.3	-25.1
Combinazioni Frequenti					
115	Ft. 40	-67381.5	-896.7	-334.1	-291.8
	Fc. 39	-68626.1	-921.2	-338.9	-418.7
	ClsMax 39	-68626.1	-921.2	-338.9	-28.8
	ClsMed 39	-68626.1	-921.2	-338.9	-23.9
215	Ft. 40	-64837.7	954.5	159.5	-284.2
	Fc. 39	-66082.3	980.9	159.0	-399.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-66082.3	980.9	159.0	-27.4
	ClsMed 39	-66082.3	980.9	159.0	-23.0

Combinazioni Quasi Permanenti

115	Ft. 41	-67096.7	-896.6	-333.5	-290.3
	Fc. 41	-67096.7	-896.6	-333.5	-409.3
	ClsMax 41	-67096.7	-896.6	-333.5	-28.1
	ClsMed 41	-67096.7	-896.6	-333.5	-23.3
215	Ft. 41	-64553.0	954.5	159.6	-282.7
	Fc. 41	-64553.0	954.5	159.6	-390.4
	ClsMax 41	-64553.0	954.5	159.6	-26.8
	ClsMed 41	-64553.0	954.5	159.6	-22.4

- Pilastro: 215/315 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
215	8	-52044.8	19530.8	-3296.5	5.50	1.00	0.42
315	8	-49513.6	13948.2	2210.1	1.26	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	30721.2	73445.6	6578.3	73445.6	$\varnothing 12/10.0'$
0.79	3.26	30721.2	36722.8	6578.3	36722.8	$\varnothing 12/20.0'$
3.26	3.88	30721.2	73445.6	6578.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
215	Ft. 38	-53638.3	-711.7	-321.8	-218.5
	Fc. 36	-57074.9	-778.3	-336.7	-330.9
	ClsMax 36	-57074.9	-778.3	-336.7	-22.8
	ClsMed 36	-57074.9	-778.3	-336.7	-18.8
315	Ft. 38	-51107.1	822.4	238.1	-204.8
	Fc. 36	-54543.6	898.1	244.3	-319.6
	ClsMax 36	-54543.6	898.1	244.3	-22.1
	ClsMed 36	-54543.6	898.1	244.3	-17.9
Combinazioni Frequenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

215	Ft. 40	-51355.1	-688.7	-312.9	-208.6
	Fc. 39	-52216.2	-710.6	-317.0	-303.1
	ClsMax 39	-52216.2	-710.6	-317.0	-20.9
	ClsMed 39	-52216.2	-710.6	-317.0	-17.2
315	Ft. 40	-48823.8	796.9	234.8	-194.8
	Fc. 39	-49684.9	822.0	236.5	-292.0
	ClsMax 39	-49684.9	822.0	236.5	-20.2
	ClsMed 39	-49684.9	822.0	236.5	-16.3

Combinazioni Quasi Permanenti

215	Ft. 41	-51070.7	-688.4	-312.0	-207.3
	Fc. 41	-51070.7	-688.4	-312.0	-296.2
	ClsMax 41	-51070.7	-688.4	-312.0	-20.4
	ClsMed 41	-51070.7	-688.4	-312.0	-16.8
315	Ft. 41	-48539.4	796.8	234.5	-193.4
	Fc. 41	-48539.4	796.8	234.5	-285.1
	ClsMax 41	-48539.4	796.8	234.5	-19.7
	ClsMed 41	-48539.4	796.8	234.5	-16.0

- Pilastro: 315/415 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
315	23	-34333.9	13948.2	-2767.5	1.67	1.00	0.31
415	24	-30202.5	-19590.6	-1507.9	4.04	1.00	0.47

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28731.3	73445.6	4348.3	73445.6	$\varnothing 12/10.0'$
0.79	3.26	28731.3	36722.8	4348.3	36722.8	$\varnothing 12/20.0'$
3.26	3.88	28731.3	73445.6	4348.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
315	Ft. 38	-37169.0	-781.4	-345.8	-133.1
	Fc. 36	-39450.2	-850.2	-362.8	-248.4
	ClsMax 36	-39450.2	-850.2	-362.8	-17.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 36	-39450.2	-850.2	-362.8	-13.0
415	Ft. 38	-34637.8	792.2	173.8	-127.8
	Fc. 36	-36918.9	864.5	179.9	-228.4
	ClsMax 36	-36918.9	864.5	179.9	-15.9
	ClsMed 36	-36918.9	864.5	179.9	-12.1

Combinazioni Frequenti

315	Ft. 40	-35273.1	-756.4	-335.7	-125.3
	Fc. 39	-35749.5	-778.8	-340.3	-226.0
	ClsMax 39	-35749.5	-778.8	-340.3	-15.8
	ClsMed 39	-35749.5	-778.8	-340.3	-11.7
415	Ft. 40	-32741.8	766.9	172.8	-119.6
	Fc. 39	-33218.3	790.7	175.2	-206.7
	ClsMax 39	-33218.3	790.7	175.2	-14.4
	ClsMed 39	-33218.3	790.7	175.2	-10.9

Combinazioni Quasi Permanenti

315	Ft. 41	-34989.2	-755.8	-334.6	-124.0
	Fc. 41	-34989.2	-755.8	-334.6	-220.9
	ClsMax 41	-34989.2	-755.8	-334.6	-15.4
	ClsMed 41	-34989.2	-755.8	-334.6	-11.5
415	Ft. 41	-32457.9	766.6	173.1	-118.2
	Fc. 41	-32457.9	766.6	173.1	-201.8
	ClsMax 41	-32457.9	766.6	173.1	-14.1
	ClsMed 41	-32457.9	766.6	173.1	-10.7

- Pilastro: 415/515 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4$ V + $1\varnothing 24 \times 2$ B + $1\varnothing 24 \times 2$ H >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
415	4	-19254.3	20228.1	786.9	5.57	1.00	0.55
515	12	-15074.1	17238.0	-6.6	1.00	1.00	0.48

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	24236.0	73445.6	3166.1	73445.6	$\varnothing 12/10.0'$
0.79	3.26	24236.0	36722.8	3166.1	36722.8	$\varnothing 12/20.0'$
3.26	3.88	24236.0	73445.6	3166.1	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
415	Ft. 37	-21107.8	-826.5	-476.1	-46.2
	Fc. 36	-21816.2	-829.7	-481.9	-165.8
	ClsMax 36	-21816.2	-829.7	-481.9	-11.9
	ClsMed 36	-21816.2	-829.7	-481.9	-7.2
515	Ft. 37	-18576.6	841.0	685.8	-23.7
	Fc. 36	-19285.0	843.6	692.2	-163.3
	ClsMax 36	-19285.0	843.6	692.2	-11.9
	ClsMed 36	-19285.0	843.6	692.2	-6.3
Combinazioni Frequenti					
415	Ft. 39	-19273.9	-756.5	-449.6	-41.4
	Fc. 39	-19273.9	-756.5	-449.6	-148.6
	ClsMax 39	-19273.9	-756.5	-449.6	-10.7
	ClsMed 39	-19273.9	-756.5	-449.6	-6.3
515	Ft. 39	-16742.6	770.0	650.4	-19.4
	Fc. 39	-16742.6	770.0	650.4	-145.7
	ClsMax 39	-16742.6	770.0	650.4	-10.6
	ClsMed 39	-16742.6	770.0	650.4	-5.5
Combinazioni Quasi Permanenti					
415	Ft. 41	-18898.7	-734.2	-442.7	-40.9
	Fc. 41	-18898.7	-734.2	-442.7	-145.5
	ClsMax 41	-18898.7	-734.2	-442.7	-10.5
	ClsMed 41	-18898.7	-734.2	-442.7	-6.2
515	Ft. 41	-16367.4	747.2	640.7	-19.0
	Fc. 41	-16367.4	747.2	640.7	-142.4
	ClsMax 41	-16367.4	747.2	640.7	-10.4
	ClsMed 41	-16367.4	747.2	640.7	-5.4

- Pilastro: 515/615 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0'$ x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
515	35	-3158.2	-4930.3	1026.5	1.00	1.00	0.25
615	15	-464.9	1073.2	-0.5	1.00	1.00	0.06

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	2.58	1636.7	25501.9	479.2	25501.9	ø 10/20.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

515	Ft. 37	-3420.0	-918.3	0.4	99.7
	Fc. 36	-4123.5	-914.6	0.4	-79.6
	ClSMax 37	-3420.0	-918.3	0.4	-6.4
	ClSMed 37	-3420.0	-918.3	0.4	-3.2
615	Ft. 36	-2436.0	575.4	-0.1	52.1
	Fc. 38	-2467.5	575.2	-0.1	-49.9
	ClSMax 36	-2436.0	575.4	-0.1	-4.0
	ClSMed 36	-2436.0	575.4	-0.1	-2.0

Combinazioni Frequenti

515	Ft. 39	-2747.9	-837.3	0.5	105.2
	Fc. 39	-2747.9	-837.3	0.5	-70.9
	ClSMax 39	-2747.9	-837.3	0.5	-5.9
	ClSMed 39	-2747.9	-837.3	0.5	-3.0
615	Ft. 40	-1352.3	327.3	-0.1	30.8
	Fc. 40	-1352.3	327.3	-0.1	-28.3
	ClSMax 40	-1352.3	327.3	-0.1	-2.3
	ClSMed 40	-1352.3	327.3	-0.1	-1.1

Combinazioni Quasi Permanenti

515	Ft. 41	-2758.4	-809.0	0.4	97.5
	Fc. 41	-2758.4	-809.0	0.4	-68.8
	ClSMax 41	-2758.4	-809.0	0.4	-5.7
	ClSMed 41	-2758.4	-809.0	0.4	-2.9
615	Ft. 41	-1070.9	265.3	-0.1	25.8
	Fc. 41	-1070.9	265.3	-0.1	-22.9
	ClSMax 41	-1070.9	265.3	-0.1	-1.9
	ClSMed 41	-1070.9	265.3	-0.1	-0.9

- Pilastro: 16/116 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af} = 18.85 \text{ [cm}^2\text{]} < 1 \phi 20 \times 4 \text{ V} + 1 \phi 20 \times 2 \text{ B} + 0 \phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
16	11	-76051.1	-6553.6	-11977.4	3.44	9.00	0.64
116	11	-74832.4	6553.6	-11977.4	2.23	6.22	0.64

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	8384.3	27721.3	13545.7	48963.7	ø 12/15.0'
0.51	2.57	8384.3	12320.6	13545.7	21761.7	ø 8/15.0'
2.57	3.08	8384.3	27721.3	13545.7	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
16	Ft. 38	-84030.3	-1267.2	-69.1	-561.2
	Fc. 36	-88478.0	-1387.5	-71.6	-903.8
	ClsMax 36	-88478.0	-1387.5	-71.6	-64.5
	ClsMed 36	-88478.0	-1387.5	-71.6	-49.6
116	Ft. 38	-82811.5	2612.3	-5.8	-406.9
	Fc. 36	-87259.3	2862.1	-14.2	-1052.4
	ClsMax 36	-87259.3	2862.1	-14.2	-78.7
	ClsMed 36	-87259.3	2862.1	-14.2	-48.9
Combinazioni Frequenti					
16	Ft. 40	-81383.2	-1226.8	-68.0	-543.5
	Fc. 39	-82574.7	-1266.9	-68.8	-840.6
	ClsMax 39	-82574.7	-1266.9	-68.8	-59.9
	ClsMed 39	-82574.7	-1266.9	-68.8	-46.3
116	Ft. 40	-80164.4	2528.5	-1.0	-394.3
	Fc. 39	-81355.9	2611.6	-3.3	-974.1
	ClsMax 39	-81355.9	2611.6	-3.3	-72.7
	ClsMed 39	-81355.9	2611.6	-3.3	-45.6
Combinazioni Quasi Permanenti					
16	Ft. 41	-81092.1	-1226.8	-68.0	-541.0
	Fc. 41	-81092.1	-1226.8	-68.0	-823.6
	ClsMax 41	-81092.1	-1226.8	-68.0	-58.6
	ClsMed 41	-81092.1	-1226.8	-68.0	-45.5
116	Ft. 41	-79873.3	2528.4	-0.5	-391.9
	Fc. 41	-79873.3	2528.4	-0.5	-952.2
	ClsMax 41	-79873.3	2528.4	-0.5	-71.0
	ClsMed 41	-79873.3	2528.4	-0.5	-44.8

- Pilastro: 116/216 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af} = 18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/20.0' \times 248.7 + \phi 12/15.0' \times 62.2$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
116	11	-61242.2	-5233.3	-7984.5	1.46	1.55	0.46
216	35	-58330.0	8403.0	7913.0	5.14	22.55	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7556.2	27721.3	8988.2	48963.7	ø 12/15.0'
0.79	3.28	7556.2	9240.4	8988.2	16321.2	ø 8/20.0'
3.28	3.90	7556.2	27721.3	8988.2	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
116	Ft. 37	-71036.6	-3309.4	-80.4	-224.7
	Fc. 36	-71765.6	-3309.9	-79.6	-976.8
	ClsMax 36	-71765.6	-3309.9	-79.6	-75.0
	ClsMed 36	-71765.6	-3309.9	-79.6	-40.3
216	Ft. 37	-69510.4	3244.3	-76.4	-219.4
	Fc. 36	-70239.3	3245.0	-78.8	-956.7
	ClsMax 36	-70239.3	3245.0	-78.8	-73.5
	ClsMed 36	-70239.3	3245.0	-78.8	-39.4
Combinazioni Frequenti					
116	Ft. 39	-66745.0	-3018.7	-80.1	-220.8
	Fc. 39	-66745.0	-3018.7	-80.1	-902.4
	ClsMax 39	-66745.0	-3018.7	-80.1	-69.2
	ClsMed 39	-66745.0	-3018.7	-80.1	-37.4
216	Ft. 39	-65218.7	2958.5	-64.3	-215.9
	Fc. 39	-65218.7	2958.5	-64.3	-881.6
	ClsMax 39	-65218.7	2958.5	-64.3	-67.6
	ClsMed 39	-65218.7	2958.5	-64.3	-36.6
Combinazioni Quasi Permanenti					
116	Ft. 41	-65557.4	-2921.9	-79.8	-221.6
	Fc. 41	-65557.4	-2921.9	-79.8	-881.6
	ClsMax 41	-65557.4	-2921.9	-79.8	-67.5
	ClsMed 41	-65557.4	-2921.9	-79.8	-36.8
216	Ft. 41	-64031.1	2863.5	-61.1	-216.7
	Fc. 41	-64031.1	2863.5	-61.1	-860.8
	ClsMax 41	-64031.1	2863.5	-61.1	-66.0
	ClsMed 41	-64031.1	2863.5	-61.1	-35.9

- Pilastro: 216/316 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 24 Af=27.14 [cm^2] < 1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
216	11	-46599.5	-8444.5	-8022.6	2.51	1.00	0.55
316	32	-43943.3	8423.7	9314.8	4.37	1.82	0.59

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8949.4	27721.3	9152.9	48963.7	$\phi 12/15.0'$
0.79	3.26	8949.4	12320.6	9152.9	21761.7	$\phi 8/15.0'$
3.26	3.88	8949.4	27721.3	9152.9	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	$\sigma [kg/cm^2]$
Combinazioni Rare					
216	Ft. 37	-54169.2	-3161.6	19.9	-107.3
	Fc. 36	-54900.7	-3162.8	21.9	-750.1
	ClsMax 36	-54900.7	-3162.8	21.9	-59.1
	ClsMed 36	-54900.7	-3162.8	21.9	-29.5
316	Ft. 37	-52650.5	3186.5	-130.6	-83.0
	Fc. 36	-53382.0	3188.0	-134.1	-749.4
	ClsMax 36	-53382.0	3188.0	-134.1	-59.3
	ClsMed 36	-53382.0	3188.0	-134.1	-29.2
Combinazioni Frequenti					
216	Ft. 39	-50755.8	-2878.8	16.8	-109.7
	Fc. 39	-50755.8	-2878.8	16.8	-688.6
	ClsMax 39	-50755.8	-2878.8	16.8	-54.2
	ClsMed 39	-50755.8	-2878.8	16.8	-27.0
316	Ft. 39	-49237.0	2899.3	-117.6	-87.3
	Fc. 39	-49237.0	2899.3	-117.6	-686.4
	ClsMax 39	-49237.0	2899.3	-117.6	-54.2
	ClsMed 39	-49237.0	2899.3	-117.6	-26.7
Combinazioni Quasi Permanenti					
216	Ft. 41	-49861.8	-2785.0	16.4	-112.2
	Fc. 41	-49861.8	-2785.0	16.4	-672.1
	ClsMax 41	-49861.8	-2785.0	16.4	-52.8
	ClsMed 41	-49861.8	-2785.0	16.4	-26.3
316	Ft. 41	-48343.0	2804.0	-114.5	-90.5
	Fc. 41	-48343.0	2804.0	-114.5	-669.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-48343.0	2804.0	-114.5	-52.8
	ClsMed 41	-48343.0	2804.0	-114.5	-26.1

- Pilastro: 316/416 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/20.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
316	32	-31489.6	-8423.7	-9314.8	4.32	1.55	0.63
416	32	-29970.8	8423.7	9314.8	4.36	1.60	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8172.6	27721.3	9037.2	48963.7	ϕ 12/15.0'
0.79	3.26	8172.6	9240.4	9037.2	16321.2	ϕ 8/20.0'
3.26	3.88	8172.6	27721.3	9037.2	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
316	Ft. 37	-37444.6	-3186.0	92.4	86.0
	Fc. 36	-38180.0	-3187.1	95.4	-639.2
	ClsMax 36	-38180.0	-3187.1	95.4	-52.7
	ClsMed 36	-38180.0	-3187.1	95.4	-26.0
416	Ft. 37	-35925.8	3190.0	-187.4	118.1
	Fc. 36	-36661.3	3190.4	-192.3	-638.2
	ClsMax 36	-36661.3	3190.4	-192.3	-53.0
	ClsMed 36	-36661.3	3190.4	-192.3	-25.8
Combinazioni Frequenti					
316	Ft. 39	-34906.2	-2895.6	85.4	65.7
	Fc. 39	-34906.2	-2895.6	85.4	-582.0
	ClsMax 39	-34906.2	-2895.6	85.4	-48.0
	ClsMed 39	-34906.2	-2895.6	85.4	-23.7
416	Ft. 39	-33387.4	2898.2	-172.4	96.0
	Fc. 39	-33387.4	2898.2	-172.4	-580.1
	ClsMax 39	-33387.4	2898.2	-172.4	-48.1
	ClsMed 39	-33387.4	2898.2	-172.4	-23.5
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

316	Ft. 41	-34305.2	-2799.2	84.0	55.9
	Fc. 41	-34305.2	-2799.2	84.0	-566.4
	ClsMax 41	-34305.2	-2799.2	84.0	-46.6
	ClsMed 41	-34305.2	-2799.2	84.0	-23.0
416	Ft. 41	-32786.4	2801.1	-169.0	85.3
	Fc. 41	-32786.4	2801.1	-169.0	-564.2
	ClsMax 41	-32786.4	2801.1	-169.0	-46.7
	ClsMed 41	-32786.4	2801.1	-169.0	-22.8

- Pilastro: 416/516 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
416	35	-17527.6	-8423.7	-9314.8	4.07	3.54	0.67
516	11	-16208.6	4284.6	6914.1	2.39	1.00	0.38

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8130.8	27721.3	9652.3	48963.7	$\varnothing 12/15.0'$
0.79	3.26	8130.8	9240.4	9652.3	16321.2	$\varnothing 8/20.0'$
3.26	3.88	8130.8	27721.3	9652.3	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
416	Ft. 37	-20807.0	-3204.0	94.2	428.1
	Fc. 36	-21547.4	-3210.0	97.1	-536.6
	ClsMax 36	-21547.4	-3210.0	97.1	-49.2
	ClsMed 36	-21547.4	-3210.0	97.1	-24.2
516	Ft. 37	-19288.3	3229.3	-70.1	473.9
	Fc. 36	-20028.6	3241.3	-74.2	-527.4
	ClsMax 36	-20028.6	3241.3	-74.2	-49.1
	ClsMed 36	-20028.6	3241.3	-74.2	-24.2
Combinazioni Frequenti					
416	Ft. 39	-19140.0	-2910.3	87.0	382.7
	Fc. 39	-19140.0	-2910.3	87.0	-483.7
	ClsMax 39	-19140.0	-2910.3	87.0	-44.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-19140.0	-2910.3	87.0	-21.9
516	Ft. 39	-17621.3	2933.8	-62.4	427.7
	Fc. 39	-17621.3	2933.8	-62.4	-473.3
	ClsMax 39	-17621.3	2933.8	-62.4	-44.3
	ClsMed 39	-17621.3	2933.8	-62.4	-21.9

Combinazioni Quasi Permanenti

416	Ft. 41	-18831.1	-2814.4	85.5	361.9
	Fc. 41	-18831.1	-2814.4	85.5	-470.1
	ClsMax 41	-18831.1	-2814.4	85.5	-43.1
	ClsMed 41	-18831.1	-2814.4	85.5	-21.2
516	Ft. 41	-17312.4	2839.3	-61.2	407.0
	Fc. 41	-17312.4	2839.3	-61.2	-460.0
	ClsMax 41	-17312.4	2839.3	-61.2	-43.0
	ClsMed 41	-17312.4	2839.3	-61.2	-21.2

- Pilastro: 516/616 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
516	20	-2536.6	-3256.4	4572.6	1.00	1.00	0.33
616	20	-2049.1	1079.5	-4720.6	1.00	1.00	0.23

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5221.8	9240.4	7144.4	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
516	Ft. 37	-3660.0	-3008.0	341.7	930.3
	Fc. 36	-4410.8	-2985.4	348.2	-406.0
	ClsMax 37	-3660.0	-3008.0	341.7	-45.0
	ClsMed 37	-3660.0	-3008.0	341.7	-20.7
616	Ft. 36	-3923.3	1938.7	-354.7	563.9
	Fc. 36	-3923.3	1938.7	-354.7	-290.2
	ClsMax 36	-3923.3	1938.7	-354.7	-30.9
	ClsMed 36	-3923.3	1938.7	-354.7	-13.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Frequenti

516	Ft. 39	-2857.7	-2725.3	315.6	859.9
	Fc. 39	-2857.7	-2725.3	315.6	-359.1
	ClsMax 39	-2857.7	-2725.3	315.6	-40.7
	ClsMed 39	-2857.7	-2725.3	315.6	-18.7
616	Ft. 40	-2653.4	1099.9	-329.7	323.2
	Fc. 40	-2653.4	1099.9	-329.7	-184.6
	ClsMax 40	-2653.4	1099.9	-329.7	-19.0
	ClsMed 40	-2653.4	1099.9	-329.7	-7.9

Combinazioni Quasi Permanenti

516	Ft. 41	-2840.6	-2623.6	309.0	825.3
	Fc. 41	-2840.6	-2623.6	309.0	-347.3
	ClsMax 41	-2840.6	-2623.6	309.0	-39.3
	ClsMed 41	-2840.6	-2623.6	309.0	-18.0
616	Ft. 41	-2353.1	892.9	-327.6	264.0
	Fc. 41	-2353.1	892.9	-327.6	-158.9
	ClsMax 41	-2353.1	892.9	-327.6	-16.0
	ClsMed 41	-2353.1	892.9	-327.6	-6.4

- Pilastro: 17/117 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/15.0' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
17	20	-78127.9	-6553.6	11849.9	47.96	9.80	0.63
117	20	-76909.1	6553.6	11849.9	3.43	6.47	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	8342.1	27721.3	13587.5	48963.7	$\varnothing 12/15.0'$
0.51	2.57	8342.1	12320.6	13587.5	21761.7	$\varnothing 8/15.0'$
2.57	3.08	8342.1	27721.3	13587.5	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
17	Ft. 38	-84522.7	-1293.8	-63.4	-562.8
	Fc. 36	-89043.3	-1415.8	-69.3	-911.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-89043.3	-1415.8	-69.3	-65.0
	ClsMed 36	-89043.3	-1415.8	-69.3	-49.9
117	Ft. 38	-83303.9	2671.0	-17.6	-403.6
	Fc. 36	-87824.6	2925.6	-19.0	-1064.6
	ClsMax 36	-87824.6	2925.6	-19.0	-79.7
	ClsMed 36	-87824.6	2925.6	-19.0	-49.3

Combinazioni Frequenti

17	Ft. 40	-81807.8	-1252.9	-60.4	-544.8
	Fc. 39	-83012.7	-1293.5	-62.1	-846.7
	ClsMax 39	-83012.7	-1293.5	-62.1	-60.4
	ClsMed 39	-83012.7	-1293.5	-62.1	-46.6
117	Ft. 40	-80589.1	2585.6	-17.0	-390.3
	Fc. 39	-81793.9	2670.4	-17.4	-985.4
	ClsMax 39	-81793.9	2670.4	-17.4	-73.6
	ClsMed 39	-81793.9	2670.4	-17.4	-45.9

Combinazioni Quasi Permanenti

17	Ft. 41	-81505.8	-1252.9	-60.2	-542.2
	Fc. 41	-81505.8	-1252.9	-60.2	-829.3
	ClsMax 41	-81505.8	-1252.9	-60.2	-59.1
	ClsMed 41	-81505.8	-1252.9	-60.2	-45.7
117	Ft. 41	-80287.1	2585.5	-16.9	-387.8
	Fc. 41	-80287.1	2585.5	-16.9	-963.3
	ClsMax 41	-80287.1	2585.5	-16.9	-71.9
	ClsMed 41	-80287.1	2585.5	-16.9	-45.0

- Pilastro: 117/217 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/20.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
117	20	-63465.1	-5233.3	7938.8	2.80	1.60	0.46
217	35	-57803.0	8403.0	7913.0	8.80	14.41	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7564.2	27721.3	8971.1	48963.7	$\phi 12/15.0'$
0.79	3.28	7564.2	9240.4	8971.1	16321.2	$\phi 8/20.0'$
3.28	3.90	7564.2	27721.3	8971.1	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
117	Ft. 37	-71794.1	-3367.1	-144.3	-219.6
	Fc. 36	-72548.8	-3367.5	-145.5	-995.0
	ClsMax 36	-72548.8	-3367.5	-145.5	-76.5
	ClsMed 36	-72548.8	-3367.5	-145.5	-40.7
217	Ft. 37	-70267.9	3298.3	62.9	-220.9
	Fc. 36	-71022.5	3298.8	63.3	-968.0
	ClsMax 36	-71022.5	3298.8	63.3	-74.4
	ClsMed 36	-71022.5	3298.8	63.3	-39.8
Combinazioni Frequenti					
117	Ft. 39	-67402.0	-3072.2	-130.2	-216.5
	Fc. 39	-67402.0	-3072.2	-130.2	-917.8
	ClsMax 39	-67402.0	-3072.2	-130.2	-70.4
	ClsMed 39	-67402.0	-3072.2	-130.2	-37.8
217	Ft. 39	-65875.7	3008.7	56.9	-216.5
	Fc. 39	-65875.7	3008.7	56.9	-892.1
	ClsMax 39	-65875.7	3008.7	56.9	-68.5
	ClsMed 39	-65875.7	3008.7	56.9	-37.0
Combinazioni Quasi Permanenti					
117	Ft. 41	-66189.5	-2974.0	-125.8	-217.5
	Fc. 41	-66189.5	-2974.0	-125.8	-896.3
	ClsMax 41	-66189.5	-2974.0	-125.8	-68.7
	ClsMed 41	-66189.5	-2974.0	-125.8	-37.1
217	Ft. 41	-64663.3	2912.3	55.0	-217.1
	Fc. 41	-64663.3	2912.3	55.0	-871.1
	ClsMax 41	-64663.3	2912.3	55.0	-66.8
	ClsMed 41	-64663.3	2912.3	55.0	-36.3

- Pilastro: 217/317 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
217	35	-45396.5	-8444.5	-7952.1	31.98	2.10	0.55
317	35	-43877.7	8423.7	9314.8	22.60	3.39	0.59

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	8970.4	27721.3	9175.4	48963.7	ø 12/15.0'
0.79	3.26	8970.4	12320.6	9175.4	21761.7	ø 8/15.0'
3.26	3.88	8970.4	27721.3	9175.4	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
217	Ft. 37	-54954.9	-3202.6	-229.3	-93.8
	Fc. 36	-55708.9	-3203.7	-231.3	-775.9
	ClsMax 36	-55708.9	-3203.7	-231.3	-61.1
	ClsMed 36	-55708.9	-3203.7	-231.3	-29.9
317	Ft. 37	-53436.1	3229.1	158.9	-82.8
	Fc. 36	-54190.1	3230.4	160.0	-761.9
	ClsMax 36	-54190.1	3230.4	160.0	-60.2
	ClsMed 36	-54190.1	3230.4	160.0	-29.6
Combinazioni Frequenti					
217	Ft. 39	-51451.5	-2916.8	-207.5	-97.3
	Fc. 39	-51451.5	-2916.8	-207.5	-711.8
	ClsMax 39	-51451.5	-2916.8	-207.5	-56.0
	ClsMed 39	-51451.5	-2916.8	-207.5	-27.4
317	Ft. 39	-49932.8	2938.6	144.1	-86.8
	Fc. 39	-49932.8	2938.6	144.1	-697.8
	ClsMax 39	-49932.8	2938.6	144.1	-55.1
	ClsMed 39	-49932.8	2938.6	144.1	-27.1
Combinazioni Quasi Permanenti					
217	Ft. 41	-50535.1	-2821.8	-200.9	-100.3
	Fc. 41	-50535.1	-2821.8	-200.9	-694.5
	ClsMax 41	-50535.1	-2821.8	-200.9	-54.6
	ClsMed 41	-50535.1	-2821.8	-200.9	-26.8
317	Ft. 41	-49016.3	2842.2	139.5	-90.1
	Fc. 41	-49016.3	2842.2	139.5	-680.4
	ClsMax 41	-49016.3	2842.2	139.5	-53.7
	ClsMed 41	-49016.3	2842.2	139.5	-26.4

- Pilastro: 317/417 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
317	35	-31651.4	-8423.7	-9314.8	18.30	2.68	0.63

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

417	35	-30132.7	8423.7	9314.8	21.63	2.86	0.63
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8213.6	27721.3	9082.6	48963.7	ø 12/15.0'
0.79	3.26	8213.6	12320.6	9082.6	21761.7	ø 8/15.0'
3.26	3.88	8213.6	27721.3	9082.6	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
317	Ft. 37	-38128.5	-3225.1	-264.7	98.9
	Fc. 36	-38881.4	-3225.9	-267.5	-663.2
	ClsMax 36	-38881.4	-3225.9	-267.5	-54.6
	ClsMed 36	-38881.4	-3225.9	-267.5	-26.4
417	Ft. 37	-36609.7	3226.6	201.3	116.3
	Fc. 36	-37362.7	3226.4	202.8	-648.0
	ClsMax 36	-37362.7	3226.4	202.8	-53.7
	ClsMed 36	-37362.7	3226.4	202.8	-26.1
Combinazioni Frequenti					
317	Ft. 39	-35519.1	-2931.9	-239.3	77.4
	Fc. 39	-35519.1	-2931.9	-239.3	-603.5
	ClsMax 39	-35519.1	-2931.9	-239.3	-49.7
	ClsMed 39	-35519.1	-2931.9	-239.3	-24.0
417	Ft. 39	-34000.4	2932.3	181.8	94.5
	Fc. 39	-34000.4	2932.3	181.8	-589.0
	ClsMax 39	-34000.4	2932.3	181.8	-48.8
	ClsMed 39	-34000.4	2932.3	181.8	-23.8
Combinazioni Quasi Permanenti					
317	Ft. 41	-34900.3	-2834.4	-231.7	67.0
	Fc. 41	-34900.3	-2834.4	-231.7	-587.1
	ClsMax 41	-34900.3	-2834.4	-231.7	-48.2
	ClsMed 41	-34900.3	-2834.4	-231.7	-23.3
417	Ft. 41	-33381.6	2834.1	175.7	83.6
	Fc. 41	-33381.6	2834.1	175.7	-572.6
	ClsMax 41	-33381.6	2834.1	175.7	-47.3
	ClsMed 41	-33381.6	2834.1	175.7	-23.1

- Pilastro: 417/517 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: \varnothing 12/15.0' x 61.8+ \varnothing 8/15.0' x 247.3+ \varnothing 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
417	27	-17813.3	-8423.7	9314.8	2.26	2.98	0.67
517	11	-18405.5	4284.6	8154.3	3.69	1.00	0.41

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8291.7	27721.3	9995.9	48963.7	\varnothing 12/15.0'
0.79	3.26	8291.7	12320.6	9995.9	21761.7	\varnothing 8/15.0'
3.26	3.88	8291.7	27721.3	9995.9	48963.7	\varnothing 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
417	Ft. 37	-21293.7	-3246.5	-343.0	455.8
	Fc. 36	-22044.4	-3252.9	-347.8	-571.9
	ClsMax 36	-22044.4	-3252.9	-347.8	-52.0
	ClsMed 36	-22044.4	-3252.9	-347.8	-24.5
517	Ft. 37	-19775.0	3280.2	386.9	512.5
	Fc. 36	-20525.7	3293.9	391.2	-571.8
	ClsMax 36	-20525.7	3293.9	391.2	-52.8
	ClsMed 36	-20525.7	3293.9	391.2	-24.7
Combinazioni Frequenti					
417	Ft. 39	-19581.4	-2949.2	-311.5	407.8
	Fc. 39	-19581.4	-2949.2	-311.5	-515.5
	ClsMax 39	-19581.4	-2949.2	-311.5	-47.1
	ClsMed 39	-19581.4	-2949.2	-311.5	-22.2
517	Ft. 39	-18062.6	2979.6	353.7	463.0
	Fc. 39	-18062.6	2979.6	353.7	-514.0
	ClsMax 39	-18062.6	2979.6	353.7	-47.7
	ClsMed 39	-18062.6	2979.6	353.7	-22.3
Combinazioni Quasi Permanenti					
417	Ft. 41	-19260.8	-2852.2	-302.6	386.0
	Fc. 41	-19260.8	-2852.2	-302.6	-500.8
	ClsMax 41	-19260.8	-2852.2	-302.6	-45.6
	ClsMed 41	-19260.8	-2852.2	-302.6	-21.5
517	Ft. 41	-17742.1	2884.0	344.1	441.2
	Fc. 41	-17742.1	2884.0	344.1	-499.4
	ClsMax 41	-17742.1	2884.0	344.1	-46.2
	ClsMed 41	-17742.1	2884.0	344.1	-21.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 517/617 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
517	15	-3253.2	-3707.4	2597.5	1.00	1.00	0.30
617	3	-5746.5	2792.2	165.4	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5267.4	9240.4	4995.6	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
517	Ft. 37	-3945.9	-3011.8	-44.4	880.2
	Fc. 36	-4699.2	-2984.1	-47.0	-368.2
	ClsMax 37	-3945.9	-3011.8	-44.4	-41.9
	ClsMed 37	-3945.9	-3011.8	-44.4	-20.7
617	Ft. 36	-4211.7	1981.6	133.6	538.1
	Fc. 36	-4211.7	1981.6	133.6	-268.6
	ClsMax 36	-4211.7	1981.6	133.6	-29.2
	ClsMed 36	-4211.7	1981.6	133.6	-13.9
Combinazioni Frequenti					
517	Ft. 39	-3126.6	-2733.2	-31.1	813.2
	Fc. 39	-3126.6	-2733.2	-31.1	-323.7
	ClsMax 39	-3126.6	-2733.2	-31.1	-37.8
	ClsMed 39	-3126.6	-2733.2	-31.1	-18.7
617	Ft. 40	-2918.5	1123.2	113.0	292.1
	Fc. 40	-2918.5	1123.2	113.0	-161.9
	ClsMax 40	-2918.5	1123.2	113.0	-17.1
	ClsMed 40	-2918.5	1123.2	113.0	-8.0
Combinazioni Quasi Permanenti					
517	Ft. 41	-3104.7	-2631.0	-27.5	779.2
	Fc. 41	-3104.7	-2631.0	-27.5	-312.3
	ClsMax 41	-3104.7	-2631.0	-27.5	-36.4
	ClsMed 41	-3104.7	-2631.0	-27.5	-18.0
617	Ft. 41	-2617.2	910.7	112.0	231.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 41	-2617.2	910.7	112.0	-136.0
	ClsMax 41	-2617.2	910.7	112.0	-14.1
	ClsMed 41	-2617.2	910.7	112.0	-6.5

- Pilastro: 18/118 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ϕ 20 Af=18.85 [cm²] < 1 ϕ 20 x 4 V + 1 ϕ 20 x 2 B + 0 ϕ 20 x 2 H >

Staffe: ϕ 12/15.0' x 51.3+ ϕ 8/15.0' x 205.3+ ϕ 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
18	20	-76833.4	6553.6	11850.9	21.75	9.82	0.63
118	20	-75614.6	6553.6	11850.9	3.99	6.45	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	8308.1	27721.3	13603.7	48963.7	ϕ 12/15.0'
0.51	2.57	8308.1	12320.6	13603.7	21761.7	ϕ 8/15.0'
2.57	3.08	8308.1	27721.3	13603.7	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
18	Ft. 38	-84425.5	-1291.7	-65.8	-562.1
	Fc. 36	-88936.0	-1412.6	-71.7	-910.5
	ClsMax 36	-88936.0	-1412.6	-71.7	-65.0
	ClsMed 36	-88936.0	-1412.6	-71.7	-49.9
118	Ft. 38	-83206.8	2671.2	-12.7	-403.2
	Fc. 36	-87717.2	2925.1	-14.0	-1063.2
	ClsMax 36	-87717.2	2925.1	-14.0	-79.6
	ClsMed 36	-87717.2	2925.1	-14.0	-49.2
Combinazioni Frequenti					
18	Ft. 40	-81715.0	-1251.1	-62.7	-544.0
	Fc. 39	-82916.7	-1291.4	-64.4	-845.8
	ClsMax 39	-82916.7	-1291.4	-64.4	-60.3
	ClsMed 39	-82916.7	-1291.4	-64.4	-46.5
118	Ft. 40	-80496.2	2586.0	-12.1	-389.8
	Fc. 39	-81698.0	2670.5	-12.5	-984.3
	ClsMax 39	-81698.0	2670.5	-12.5	-73.6
	ClsMed 39	-81698.0	2670.5	-12.5	-45.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

18	Ft. 41	-81413.2	-1251.1	-62.5	-541.5
	Fc. 41	-81413.2	-1251.1	-62.5	-828.5
	ClsMax 41	-81413.2	-1251.1	-62.5	-59.0
	ClsMed 41	-81413.2	-1251.1	-62.5	-45.7
118	Ft. 41	-80194.5	2585.9	-12.1	-387.3
	Fc. 41	-80194.5	2585.9	-12.1	-962.2
	ClsMax 41	-80194.5	2585.9	-12.1	-71.8
	ClsMed 41	-80194.5	2585.9	-12.1	-45.0

- Pilastro: 118/218 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4$ V + $1\phi 20 \times 2$ B + $0\phi 20 \times 2$ H >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/20.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
118	4	-75168.5	-6170.4	-7563.6	1.00	2.48	0.49
218	35	-55116.6	8784.8	7913.0	37.73	14.33	0.66

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7825.7	27721.3	12310.6	48963.7	$\phi 12/15.0'$
0.79	3.28	7825.7	9240.4	12310.6	16321.2	$\phi 8/20.0'$
3.28	3.90	7825.7	27721.3	12310.6	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
118	Ft. 37	-71689.8	-3355.0	-147.1	-219.9
	Fc. 36	-72443.9	-3355.4	-148.4	-993.0
	ClsMax 36	-72443.9	-3355.4	-148.4	-76.3
	ClsMed 36	-72443.9	-3355.4	-148.4	-40.6
218	Ft. 37	-70163.5	3289.6	62.3	-221.0
	Fc. 36	-70917.6	3290.1	62.8	-966.2
	ClsMax 36	-70917.6	3290.1	62.8	-74.2
	ClsMed 36	-70917.6	3290.1	62.8	-39.8
Combinazioni Frequenti					
118	Ft. 39	-67307.2	-3061.7	-132.9	-216.6
	Fc. 39	-67307.2	-3061.7	-132.9	-916.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-67307.2	-3061.7	-132.9	-70.3
	ClsMed 39	-67307.2	-3061.7	-132.9	-37.8
218	Ft. 39	-65780.9	3001.3	56.3	-216.5
	Fc. 39	-65780.9	3001.3	56.3	-890.4
	ClsMax 39	-65780.9	3001.3	56.3	-68.3
	ClsMed 39	-65780.9	3001.3	56.3	-36.9

Combinazioni Quasi Permanenti

118	Ft. 41	-66097.7	-2964.1	-128.6	-217.6
	Fc. 41	-66097.7	-2964.1	-128.6	-894.7
	ClsMax 41	-66097.7	-2964.1	-128.6	-68.6
	ClsMed 41	-66097.7	-2964.1	-128.6	-37.1
218	Ft. 41	-64571.4	2905.4	54.4	-217.1
	Fc. 41	-64571.4	2905.4	54.4	-869.5
	ClsMax 41	-64571.4	2905.4	54.4	-66.6
	ClsMed 41	-64571.4	2905.4	54.4	-36.2

- Pilastro: 218/318 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
218	33	-46136.1	-8444.5	-7952.1	12.17	1.06	0.55
318	33	-44617.4	8423.7	9314.8	10.22	1.65	0.59

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8998.0	27721.3	14489.2	48963.7	$\phi 12/15.0'$
0.79	3.26	8998.0	12320.6	14489.2	21761.7	$\phi 8/15.0'$
3.26	3.88	8998.0	27721.3	14489.2	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
218	Ft. 37	-54867.7	-3187.2	-228.2	-94.8
	Fc. 36	-55621.2	-3188.2	-230.3	-773.6
	ClsMax 36	-55621.2	-3188.2	-230.3	-60.9
	ClsMed 36	-55621.2	-3188.2	-230.3	-29.8
318	Ft. 37	-53349.0	3214.5	160.7	-83.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-54102.5	3215.8	162.0	-759.9
	ClsMax 36	-54102.5	3215.8	162.0	-60.1
	ClsMed 36	-54102.5	3215.8	162.0	-29.5

Combinazioni Frequenti

218	Ft. 39	-51372.0	-2902.8	-206.2	-98.2
	Fc. 39	-51372.0	-2902.8	-206.2	-709.6
	ClsMax 39	-51372.0	-2902.8	-206.2	-55.8
	ClsMed 39	-51372.0	-2902.8	-206.2	-27.3
318	Ft. 39	-49853.3	2925.5	145.5	-87.5
	Fc. 39	-49853.3	2925.5	145.5	-695.9
	ClsMax 39	-49853.3	2925.5	145.5	-54.9
	ClsMed 39	-49853.3	2925.5	145.5	-27.0

Combinazioni Quasi Permanenti

218	Ft. 41	-50457.9	-2808.4	-199.6	-101.2
	Fc. 41	-50457.9	-2808.4	-199.6	-692.4
	ClsMax 41	-50457.9	-2808.4	-199.6	-54.4
	ClsMed 41	-50457.9	-2808.4	-199.6	-26.7
318	Ft. 41	-48939.2	2829.7	140.8	-90.7
	Fc. 41	-48939.2	2829.7	140.8	-678.6
	ClsMax 41	-48939.2	2829.7	140.8	-53.5
	ClsMed 41	-48939.2	2829.7	140.8	-26.3

- Pilastro: 318/418 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
318	23	-31050.9	-8470.2	9314.8	144.85	2.46	0.63
418	33	-30546.0	8423.7	9314.8	10.13	1.48	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8263.1	27721.3	13836.7	48963.7	$\phi 12/15.0'$
0.79	3.26	8263.1	12320.6	13836.7	21761.7	$\phi 8/15.0'$
3.26	3.88	8263.1	27721.3	13836.7	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

318	Ft. 37	-38066.3	-3209.3	-257.9	96.1
	Fc. 36	-38818.9	-3210.2	-260.9	-660.3
	ClsMax 36	-38818.9	-3210.2	-260.9	-54.4
	ClsMed 36	-38818.9	-3210.2	-260.9	-26.3
418	Ft. 37	-36547.6	3211.3	182.6	112.5
	Fc. 36	-37300.1	3211.2	184.0	-644.1
	ClsMax 36	-37300.1	3211.2	184.0	-53.4
	ClsMed 36	-37300.1	3211.2	184.0	-26.0

Combinazioni Frequenti

318	Ft. 39	-35462.4	-2917.8	-232.5	75.0
	Fc. 39	-35462.4	-2917.8	-232.5	-600.9
	ClsMax 39	-35462.4	-2917.8	-232.5	-49.4
	ClsMed 39	-35462.4	-2917.8	-232.5	-23.9
418	Ft. 39	-33943.6	2918.7	163.7	91.0
	Fc. 39	-33943.6	2918.7	163.7	-585.4
	ClsMax 39	-33943.6	2918.7	163.7	-48.5
	ClsMed 39	-33943.6	2918.7	163.7	-23.7

Combinazioni Quasi Permanenti

318	Ft. 41	-34845.2	-2821.0	-225.0	64.7
	Fc. 41	-34845.2	-2821.0	-225.0	-584.6
	ClsMax 41	-34845.2	-2821.0	-225.0	-48.0
	ClsMed 41	-34845.2	-2821.0	-225.0	-23.2
418	Ft. 41	-33326.5	2821.1	158.0	80.3
	Fc. 41	-33326.5	2821.1	158.0	-569.1
	ClsMax 41	-33326.5	2821.1	158.0	-47.0
	ClsMed 41	-33326.5	2821.1	158.0	-23.0

- Pilastro: 418/518 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8 + $\phi 8/15.0'$ x 247.3 + $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
418	35	-17159.5	-8712.5	-9314.8	7.21	2.70	0.69
518	14	-19723.6	5660.3	-7159.8	1.00	1.00	0.45

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8424.2	27721.3	10265.9	48963.7	$\phi 12/15.0'$
0.79	3.26	8424.2	12320.6	10265.9	21761.7	$\phi 8/15.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	8424.2	27721.3	10265.9	48963.7	ø 12/15.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

418	Ft. 37	-21261.7	-3229.6	-376.8	455.4
	Fc. 36	-22012.1	-3236.2	-382.2	-573.3
	ClsMax 36	-22012.1	-3236.2	-382.2	-52.1
	ClsMed 36	-22012.1	-3236.2	-382.2	-24.4
518	Ft. 37	-19742.9	3261.1	488.5	519.3
	Fc. 36	-20493.3	3274.9	494.4	-580.6
	ClsMax 36	-20493.3	3274.9	494.4	-53.4
	ClsMed 36	-20493.3	3274.9	494.4	-24.6

Combinazioni Frequenti

418	Ft. 39	-19552.2	-2934.3	-342.8	407.6
	Fc. 39	-19552.2	-2934.3	-342.8	-516.9
	ClsMax 39	-19552.2	-2934.3	-342.8	-47.1
	ClsMed 39	-19552.2	-2934.3	-342.8	-22.1
518	Ft. 39	-18033.4	2962.8	448.7	469.7
	Fc. 39	-18033.4	2962.8	448.7	-522.2
	ClsMax 39	-18033.4	2962.8	448.7	-48.3
	ClsMed 39	-18033.4	2962.8	448.7	-22.2

Combinazioni Quasi Permanenti

418	Ft. 41	-19232.5	-2838.0	-333.2	385.9
	Fc. 41	-19232.5	-2838.0	-333.2	-502.1
	ClsMax 41	-19232.5	-2838.0	-333.2	-45.7
	ClsMed 41	-19232.5	-2838.0	-333.2	-21.4
518	Ft. 41	-17713.7	2867.9	437.3	447.9
	Fc. 41	-17713.7	2867.9	437.3	-507.5
	ClsMax 41	-17713.7	2867.9	437.3	-46.8
	ClsMed 41	-17713.7	2867.9	437.3	-21.5

- Pilastro: 518/618 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af} = 27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6 \text{ Ast/s} = 0.100531 < 0.08 \text{ fcd bst/fyd } 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
518	15	-3345.3	-4144.1	1918.6	1.00	1.00	0.32
618	3	-5731.2	2793.1	97.3	1.00	1.00	0.18

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5270.0	9240.4	4017.2	16321.2	ø 8/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
518	Ft. 37	-3934.8	-3013.2	154.7	896.3
	Fc. 36	-4687.9	-2986.0	154.6	-382.8
	ClsMax 37	-3934.8	-3013.2	154.7	-43.1
	ClsMed 37	-3934.8	-3013.2	154.7	-20.7
618	Ft. 36	-4200.4	1982.1	83.8	531.9
	Fc. 36	-4200.4	1982.1	83.8	-262.0
	ClsMax 36	-4200.4	1982.1	83.8	-28.7
	ClsMed 36	-4200.4	1982.1	83.8	-13.9
Combinazioni Frequenti					
518	Ft. 39	-3116.4	-2734.1	156.3	831.3
	Fc. 39	-3116.4	-2734.1	156.3	-340.9
	ClsMax 39	-3116.4	-2734.1	156.3	-39.2
	ClsMed 39	-3116.4	-2734.1	156.3	-18.7
618	Ft. 40	-2908.4	1123.3	66.1	286.2
	Fc. 40	-2908.4	1123.3	66.1	-155.8
	ClsMax 40	-2908.4	1123.3	66.1	-16.6
	ClsMed 40	-2908.4	1123.3	66.1	-7.9
Combinazioni Quasi Permanenti					
518	Ft. 41	-3094.6	-2632.0	156.8	797.8
	Fc. 41	-3094.6	-2632.0	156.8	-330.0
	ClsMax 41	-3094.6	-2632.0	156.8	-37.8
	ClsMed 41	-3094.6	-2632.0	156.8	-18.0
618	Ft. 41	-2607.1	910.6	65.3	225.3
	Fc. 41	-2607.1	910.6	65.3	-130.0
	ClsMax 41	-2607.1	910.6	65.3	-13.6
	ClsMed 41	-2607.1	910.6	65.3	-6.5

- Pilastro: 19/119 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4$ V + $1\phi 20 \times 2$ B + $0\phi 20 \times 2$ H >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
19	26	-66345.5	8282.9	10552.6	4.04	14.08	0.69
119	26	-65126.8	8282.9	10552.6	13.59	9.22	0.69

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	8970.6	27721.3	12642.9	48963.7	Ø 12/15.0'
0.51	2.57	8970.6	12320.6	12642.9	21761.7	Ø 8/15.0'
2.57	3.08	8970.6	27721.3	12642.9	48963.7	Ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
19	Ft. 38	-82658.9	-1258.5	-94.5	-548.6
	Fc. 36	-87042.6	-1374.1	-102.6	-892.7
	ClSMax 36	-87042.6	-1374.1	-102.6	-63.7
	ClSMed 36	-87042.6	-1374.1	-102.6	-48.8
119	Ft. 38	-81440.2	2608.0	47.6	-392.5
	Fc. 36	-85823.8	2852.8	50.9	-1042.2
	ClSMax 36	-85823.8	2852.8	50.9	-78.0
	ClSMed 36	-85823.8	2852.8	50.9	-48.1
Combinazioni Frequenti					
19	Ft. 40	-80035.2	-1219.6	-90.1	-531.2
	Fc. 39	-81205.8	-1258.0	-92.4	-829.9
	ClSMax 39	-81205.8	-1258.0	-92.4	-59.2
	ClSMed 39	-81205.8	-1258.0	-92.4	-45.6
119	Ft. 40	-78816.4	2525.8	45.4	-379.7
	Fc. 39	-79987.0	2607.3	46.3	-965.5
	ClSMax 39	-79987.0	2607.3	46.3	-72.2
	ClSMed 39	-79987.0	2607.3	46.3	-44.9
Combinazioni Quasi Permanenti					
19	Ft. 41	-79744.5	-1219.5	-89.7	-528.8
	Fc. 41	-79744.5	-1219.5	-89.7	-813.2
	ClSMax 41	-79744.5	-1219.5	-89.7	-57.9
	ClSMed 41	-79744.5	-1219.5	-89.7	-44.7
119	Ft. 41	-78525.8	2525.7	45.1	-377.3
	Fc. 41	-78525.8	2525.7	45.1	-944.1
	ClSMax 41	-78525.8	2525.7	45.1	-70.5
	ClSMed 41	-78525.8	2525.7	45.1	-44.0

- Pilastro: 119/219 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4$ V + $1\varnothing 20 \times 2$ B + $0\varnothing 20 \times 2$ H >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/20.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
119	4	-75982.1	-6979.0	-7537.5	1.00	2.38	0.52
219	33	-55613.9	8403.0	7913.0	7.36	5.01	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8024.4	27721.3	12443.9	48963.7	$\varnothing 12/15.0'$
0.79	3.28	8024.4	9240.4	12443.9	16321.2	$\varnothing 8/20.0'$
3.28	3.90	8024.4	27721.3	12443.9	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
119	Ft. 37	-69989.6	-3272.1	-269.9	-205.1
	Fc. 36	-70717.0	-3272.6	-272.6	-979.1
	ClsMax 36	-70717.0	-3272.6	-272.6	-75.3
	ClsMed 36	-70717.0	-3272.6	-272.6	-39.7
219	Ft. 37	-68463.3	3226.1	233.5	-200.2
	Fc. 36	-69190.7	3226.8	235.8	-958.3
	ClsMax 36	-69190.7	3226.8	235.8	-73.7
	ClsMed 36	-69190.7	3226.8	235.8	-38.8
Combinazioni Frequenti					
119	Ft. 39	-65743.6	-2988.2	-246.2	-202.7
	Fc. 39	-65743.6	-2988.2	-246.2	-903.7
	ClsMax 39	-65743.6	-2988.2	-246.2	-69.4
	ClsMed 39	-65743.6	-2988.2	-246.2	-36.9
219	Ft. 39	-64217.3	2944.3	214.6	-197.2
	Fc. 39	-64217.3	2944.3	214.6	-883.5
	ClsMax 39	-64217.3	2944.3	214.6	-67.9
	ClsMed 39	-64217.3	2944.3	214.6	-36.0
Combinazioni Quasi Permanenti					
119	Ft. 41	-64570.7	-2893.7	-239.1	-203.8
	Fc. 41	-64570.7	-2893.7	-239.1	-882.8
	ClsMax 41	-64570.7	-2893.7	-239.1	-67.7
	ClsMed 41	-64570.7	-2893.7	-239.1	-36.2
219	Ft. 41	-63044.4	2850.5	209.1	-198.1
	Fc. 41	-63044.4	2850.5	209.1	-862.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-63044.4	2850.5	209.1	-66.2
	ClsMed 41	-63044.4	2850.5	209.1	-35.4

- Pilastro: 219/319 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/15.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
219	11	-52288.0	-8444.5	-8431.6	1.91	1.00	0.56
319	33	-41931.7	8423.7	9314.8	36.72	1.58	0.60

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9008.9	27721.3	14429.4	48963.7	ϕ 12/15.0'
0.79	3.26	9008.9	12320.6	14429.4	21761.7	ϕ 8/15.0'
3.26	3.88	9008.9	27721.3	14429.4	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
219	Ft. 37	-53433.9	-3126.8	-470.1	-70.9
	Fc. 36	-54163.0	-3128.0	-475.0	-774.3
	ClsMax 36	-54163.0	-3128.0	-475.0	-61.1
	ClsMed 36	-54163.0	-3128.0	-475.0	-29.2
319	Ft. 37	-51915.1	3149.3	428.4	-57.9
	Fc. 36	-52644.2	3150.8	432.9	-762.3
	ClsMax 36	-52644.2	3150.8	432.9	-60.4
	ClsMed 36	-52644.2	3150.8	432.9	-28.9
Combinazioni Frequenti					
219	Ft. 39	-50054.7	-2847.6	-430.4	-76.3
	Fc. 39	-50054.7	-2847.6	-430.4	-710.4
	ClsMax 39	-50054.7	-2847.6	-430.4	-56.0
	ClsMed 39	-50054.7	-2847.6	-430.4	-26.9
319	Ft. 39	-48535.9	2866.8	393.5	-63.9
	Fc. 39	-48535.9	2866.8	393.5	-698.3
	ClsMax 39	-48535.9	2866.8	393.5	-55.2
	ClsMed 39	-48535.9	2866.8	393.5	-26.4
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

219	Ft. 41	-49171.3	-2755.0	-418.8	-79.9
	Fc. 41	-49171.3	-2755.0	-418.8	-693.1
	ClsMax 41	-49171.3	-2755.0	-418.8	-54.5
	ClsMed 41	-49171.3	-2755.0	-418.8	-26.2
319	Ft. 41	-47652.6	2773.1	383.4	-67.7
	Fc. 41	-47652.6	2773.1	383.4	-680.9
	ClsMax 41	-47652.6	2773.1	383.4	-53.8
	ClsMed 41	-47652.6	2773.1	383.4	-25.8

- Pilastro: 319/419 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
319	33	-28197.9	-8423.7	-9314.8	29.22	1.35	0.64
419	33	-26679.1	8748.3	9314.8	35.86	1.41	0.66

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8278.1	27721.3	14025.4	48963.7	$\varnothing 12/15.0'$
0.79	3.26	8278.1	12320.6	14025.4	21761.7	$\varnothing 8/15.0'$
3.26	3.88	8278.1	27721.3	14025.4	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
319	Ft. 37	-37002.1	-3141.2	-566.5	126.4
	Fc. 36	-37733.9	-3142.4	-573.4	-672.1
	ClsMax 36	-37733.9	-3142.4	-573.4	-55.4
	ClsMed 36	-37733.9	-3142.4	-573.4	-25.7
419	Ft. 37	-35483.3	3147.6	508.7	145.9
	Fc. 36	-36215.1	3147.9	514.6	-658.5
	ClsMax 36	-36215.1	3147.9	514.6	-54.6
	ClsMed 36	-36215.1	3147.9	514.6	-25.5
Combinazioni Frequenti					
319	Ft. 39	-34485.4	-2857.0	-518.1	102.9
	Fc. 39	-34485.4	-2857.0	-518.1	-611.9
	ClsMax 39	-34485.4	-2857.0	-518.1	-50.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-34485.4	-2857.0	-518.1	-23.4
419	Ft. 39	-32966.7	2861.6	465.3	121.8
	Fc. 39	-32966.7	2861.6	465.3	-598.7
	ClsMax 39	-32966.7	2861.6	465.3	-49.6
	ClsMed 39	-32966.7	2861.6	465.3	-23.2

Combinazioni Quasi Permanenti

319	Ft. 41	-33890.5	-2762.6	-504.3	92.0
	Fc. 41	-33890.5	-2762.6	-504.3	-595.3
	ClsMax 41	-33890.5	-2762.6	-504.3	-48.9
	ClsMed 41	-33890.5	-2762.6	-504.3	-22.8
419	Ft. 41	-32371.7	2766.4	452.8	110.3
	Fc. 41	-32371.7	2766.4	452.8	-582.1
	ClsMax 41	-32371.7	2766.4	452.8	-48.1
	ClsMed 41	-32371.7	2766.4	452.8	-22.5

- Pilastro: 419/519 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
419	35	-15978.4	-9239.3	-9314.8	12.94	2.43	0.72
519	14	-19749.4	6345.1	-6932.9	1.00	1.00	0.48

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8498.7	27721.3	14065.5	48963.7	$\varnothing 12/15.0'$
0.79	3.26	8498.7	9240.4	14065.5	16321.2	$\varnothing 8/20.0'$
3.26	3.88	8498.7	27721.3	14065.5	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
419	Ft. 37	-20629.9	-3160.7	-754.0	495.3
	Fc. 36	-21364.7	-3167.3	-764.9	-601.7
	ClsMax 36	-21364.7	-3167.3	-764.9	-54.4
	ClsMed 36	-21364.7	-3167.3	-764.9	-24.0
519	Ft. 37	-19111.1	3182.4	902.5	562.6
	Fc. 36	-19846.0	3195.7	914.4	-612.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-19846.0	3195.7	914.4	-56.0
	ClsMed 36	-19846.0	3195.7	914.4	-24.1

Combinazioni Frequenti

419	Ft. 39	-18973.9	-2872.7	-692.5	445.0
	Fc. 39	-18973.9	-2872.7	-692.5	-543.3
	ClsMax 39	-18973.9	-2872.7	-692.5	-49.3
	ClsMed 39	-18973.9	-2872.7	-692.5	-21.7
519	Ft. 39	-17455.1	2892.8	833.5	510.6
	Fc. 39	-17455.1	2892.8	833.5	-552.3
	ClsMax 39	-17455.1	2892.8	833.5	-50.7
	ClsMed 39	-17455.1	2892.8	833.5	-21.8

Combinazioni Quasi Permanenti

419	Ft. 41	-18666.8	-2778.9	-675.6	422.7
	Fc. 41	-18666.8	-2778.9	-675.6	-528.0
	ClsMax 41	-18666.8	-2778.9	-675.6	-47.8
	ClsMed 41	-18666.8	-2778.9	-675.6	-21.1
519	Ft. 41	-17148.0	2800.6	814.5	488.2
	Fc. 41	-17148.0	2800.6	814.5	-537.0
	ClsMax 41	-17148.0	2800.6	814.5	-49.2
	ClsMed 41	-17148.0	2800.6	814.5	-21.1

- Pilastro: 519/619 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
519	15	-3273.7	-4600.4	1166.2	1.00	1.00	0.36
619	1	-5566.0	2750.9	482.9	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5223.9	9240.4	3658.0	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
519	Ft. 37	-3757.4	-3002.9	-134.7	896.2
	Fc. 36	-4501.1	-2978.3	-141.0	-378.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 37	-3757.4	-3002.9	-134.7	-42.7
	ClsMed 37	-3757.4	-3002.9	-134.7	-20.6
619	Ft. 36	-4013.6	1946.5	346.0	562.2
	Fc. 36	-4013.6	1946.5	346.0	-290.7
	ClsMax 36	-4013.6	1946.5	346.0	-30.9
	ClsMed 36	-4013.6	1946.5	346.0	-13.7

Combinazioni Frequenti

519	Ft. 39	-2957.3	-2723.2	-106.2	826.2
	Fc. 39	-2957.3	-2723.2	-106.2	-331.3
	ClsMax 39	-2957.3	-2723.2	-106.2	-38.4
	ClsMed 39	-2957.3	-2723.2	-106.2	-18.6
619	Ft. 40	-2748.4	1105.5	300.3	317.6
	Fc. 40	-2748.4	1105.5	300.3	-182.3
	ClsMax 40	-2748.4	1105.5	300.3	-18.7
	ClsMed 40	-2748.4	1105.5	300.3	-7.9

Combinazioni Quasi Permanenti

519	Ft. 41	-2938.4	-2621.8	-98.7	791.7
	Fc. 41	-2938.4	-2621.8	-98.7	-319.4
	ClsMax 41	-2938.4	-2621.8	-98.7	-37.0
	ClsMed 41	-2938.4	-2621.8	-98.7	-17.9
619	Ft. 41	-2450.9	897.6	297.6	257.9
	Fc. 41	-2450.9	897.6	297.6	-156.4
	ClsMax 41	-2450.9	897.6	297.6	-15.8
	ClsMed 41	-2450.9	897.6	297.6	-6.5

- Pilastro: 20/120 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 53.0 + \phi 8/12.5' \times 202.0 + \phi 12/15.0' \times 53.0$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
20	33	-44185.6	7136.4	-6102.7	11.21	4.64	0.53
120	33	-42966.9	7136.4	-6102.7	10.04	4.82	0.53

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.53	10460.4	27721.3	12891.7	48963.7	$\phi 12/15.0'$
0.53	2.55	10460.4	14784.7	12891.7	26114.0	$\phi 8/12.5'$
2.55	3.08	10460.4	27721.3	12891.7	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
20	Ft. 38	-49117.3	-694.4	-404.3	-304.4
	Fc. 36	-51439.2	-750.4	-411.9	-548.5
	ClsMax 36	-51439.2	-750.4	-411.9	-39.2
	ClsMed 36	-51439.2	-750.4	-411.9	-28.9
120	Ft. 38	-47898.6	1464.6	697.7	-185.7
	Fc. 36	-50220.4	1589.7	700.0	-653.9
	ClsMax 36	-50220.4	1589.7	700.0	-49.1
	ClsMed 36	-50220.4	1589.7	700.0	-28.2
Combinazioni Frequenti					
20	Ft. 40	-47699.9	-675.5	-400.2	-294.9
	Fc. 39	-48313.0	-694.1	-402.4	-515.2
	ClsMax 39	-48313.0	-694.1	-402.4	-36.8
	ClsMed 39	-48313.0	-694.1	-402.4	-27.1
120	Ft. 40	-46481.2	1422.6	696.2	-178.5
	Fc. 39	-47094.2	1464.3	696.8	-613.5
	ClsMax 39	-47094.2	1464.3	696.8	-46.0
	ClsMed 39	-47094.2	1464.3	696.8	-26.4
Combinazioni Quasi Permanenti					
20	Ft. 41	-47539.0	-675.4	-399.9	-293.6
	Fc. 41	-47539.0	-675.4	-399.9	-506.4
	ClsMax 41	-47539.0	-675.4	-399.9	-36.2
	ClsMed 41	-47539.0	-675.4	-399.9	-26.7
120	Ft. 41	-46320.3	1422.6	696.0	-177.2
	Fc. 41	-46320.3	1422.6	696.0	-602.3
	ClsMax 41	-46320.3	1422.6	696.0	-45.1
	ClsMed 41	-46320.3	1422.6	696.0	-26.0

- Pilastro: 120/220 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
120	4	-58844.0	-6542.5	-4641.3	1.00	1.48	0.43
220	14	-40112.8	8324.6	6993.6	2.27	17.03	0.65

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	9115.3	27721.3	9073.2	48963.7	ø 12/15.0'
0.79	3.28	9115.3	12320.6	9073.2	21761.7	ø 8/15.0'
3.28	3.90	9115.3	27721.3	9073.2	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
120	Ft. 37	-41833.0	-1769.8	-1004.1	-76.6
	Fc. 36	-42233.7	-1769.9	-1006.4	-630.9
	ClsMax 36	-42233.7	-1769.9	-1006.4	-48.4
	ClsMed 36	-42233.7	-1769.9	-1006.4	-23.7
220	Ft. 37	-40306.8	1753.0	916.4	-72.5
	Fc. 36	-40707.4	1753.2	918.2	-609.3
	ClsMax 36	-40707.4	1753.2	918.2	-46.8
	ClsMed 36	-40707.4	1753.2	918.2	-22.9
Combinazioni Frequenti					
120	Ft. 39	-39548.0	-1629.3	-983.5	-74.6
	Fc. 39	-39548.0	-1629.3	-983.5	-590.9
	ClsMax 39	-39548.0	-1629.3	-983.5	-45.3
	ClsMed 39	-39548.0	-1629.3	-983.5	-22.2
220	Ft. 39	-38021.7	1613.0	902.4	-69.9
	Fc. 39	-38021.7	1613.0	902.4	-569.9
	ClsMax 39	-38021.7	1613.0	902.4	-43.8
	ClsMed 39	-38021.7	1613.0	902.4	-21.4
Combinazioni Quasi Permanenti					
120	Ft. 41	-38919.8	-1582.5	-977.3	-75.0
	Fc. 41	-38919.8	-1582.5	-977.3	-580.0
	ClsMax 41	-38919.8	-1582.5	-977.3	-44.4
	ClsMed 41	-38919.8	-1582.5	-977.3	-21.8
220	Ft. 41	-37393.6	1566.4	898.3	-70.1
	Fc. 41	-37393.6	1566.4	898.3	-559.1
	ClsMax 41	-37393.6	1566.4	898.3	-42.9
	ClsMed 41	-37393.6	1566.4	898.3	-21.0

- Pilastro: 220/320 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
220	11	-41196.5	-8365.8	-6380.6	2.42	1.00	0.51

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

320	11	-39677.8	8345.2	5601.6	2.38	1.28	0.50
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	11005.8	27721.3	10022.3	48963.7	ø 12/15.0'
0.79	3.26	11005.8	12320.6	10022.3	21761.7	ø 8/15.0'
3.26	3.88	11005.8	27721.3	10022.3	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
220	Ft. 37	-32149.4	-1660.5	-1112.8	-2.3
	Fc. 36	-32546.7	-1660.9	-1117.0	-504.8
	ClSMax 36	-32546.7	-1660.9	-1117.0	-39.6
	ClSMed 36	-32546.7	-1660.9	-1117.0	-17.7
320	Ft. 37	-30630.7	1678.8	1076.6	11.1
	Fc. 36	-31027.9	1679.3	1080.4	-493.2
	ClSMax 36	-31027.9	1679.3	1080.4	-38.9
	ClSMed 36	-31027.9	1679.3	1080.4	-17.2
Combinazioni Frequenti					
220	Ft. 39	-30319.3	-1524.1	-1080.0	-4.7
	Fc. 39	-30319.3	-1524.1	-1080.0	-470.8
	ClSMax 39	-30319.3	-1524.1	-1080.0	-36.9
	ClSMed 39	-30319.3	-1524.1	-1080.0	-16.5
320	Ft. 39	-28800.6	1540.4	1049.0	8.7
	Fc. 39	-28800.6	1540.4	1049.0	-459.3
	ClSMax 39	-28800.6	1540.4	1049.0	-36.2
	ClSMed 39	-28800.6	1540.4	1049.0	-15.9
Combinazioni Quasi Permanenti					
220	Ft. 41	-29841.7	-1478.7	-1070.5	-6.5
	Fc. 41	-29841.7	-1478.7	-1070.5	-461.6
	ClSMax 41	-29841.7	-1478.7	-1070.5	-36.2
	ClSMed 41	-29841.7	-1478.7	-1070.5	-16.2
320	Ft. 41	-28323.0	1494.4	1041.1	6.8
	Fc. 41	-28323.0	1494.4	1041.1	-450.1
	ClSMax 41	-28323.0	1494.4	1041.1	-35.5
	ClSMed 41	-28323.0	1494.4	1041.1	-15.6

- Pilastro: 320/420 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
320	11	-27992.8	-8345.2	-5601.6	2.51	1.16	0.53
420	7	-26545.0	9690.9	5601.6	2.44	1.32	0.62

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9976.2	27721.3	9316.6	48963.7	$\varnothing 12/15.0'$
0.79	3.26	9976.2	12320.6	9316.6	21761.7	$\varnothing 8/15.0'$
3.26	3.88	9976.2	27721.3	9316.6	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
320	Ft. 37	-22381.1	-1661.8	-1189.5	115.3
	Fc. 36	-22773.0	-1662.2	-1195.3	-449.2
	ClSMax 36	-22773.0	-1662.2	-1195.3	-36.6
	ClSMed 36	-22773.0	-1662.2	-1195.3	-14.7
420	Ft. 37	-20862.4	1665.9	1099.4	129.2
	Fc. 36	-21254.2	1665.6	1103.7	-433.7
	ClSMax 36	-21254.2	1665.6	1103.7	-35.6
	ClSMed 36	-21254.2	1665.6	1103.7	-14.3
Combinazioni Frequenti					
320	Ft. 39	-21015.7	-1524.1	-1150.8	105.2
	Fc. 39	-21015.7	-1524.1	-1150.8	-417.5
	ClSMax 39	-21015.7	-1524.1	-1150.8	-34.0
	ClSMed 39	-21015.7	-1524.1	-1150.8	-13.6
420	Ft. 39	-19496.9	1527.3	1068.0	119.3
	Fc. 39	-19496.9	1527.3	1068.0	-402.8
	ClSMax 39	-19496.9	1527.3	1068.0	-33.0
	ClSMed 39	-19496.9	1527.3	1068.0	-13.2
Combinazioni Quasi Permanenti					
320	Ft. 41	-20691.2	-1478.4	-1139.9	100.3
	Fc. 41	-20691.2	-1478.4	-1139.9	-408.7
	ClSMax 41	-20691.2	-1478.4	-1139.9	-33.2
	ClSMed 41	-20691.2	-1478.4	-1139.9	-13.3
420	Ft. 41	-19172.4	1481.0	1058.9	114.2
	Fc. 41	-19172.4	1481.0	1058.9	-394.0
	ClSMax 41	-19172.4	1481.0	1058.9	-32.3
	ClSMed 41	-19172.4	1481.0	1058.9	-12.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 420/520 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/15.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
420	27	-7050.3	-10253.8	3713.3	3.08	5.55	0.79
520	14	-10501.9	5974.1	-4209.1	1.00	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9190.5	27721.3	11409.5	48963.7	ϕ 12/15.0'
0.79	3.26	9190.5	12320.6	11409.5	21761.7	ϕ 8/15.0'
3.26	3.88	9190.5	27721.3	11409.5	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
420	Ft. 37	-12508.9	-1669.0	-1377.7	345.7
	Fc. 36	-12892.3	-1672.8	-1387.3	-428.5
	ClSMax 36	-12892.3	-1672.8	-1387.3	-37.5
	ClSMed 36	-12892.3	-1672.8	-1387.3	-13.7
520	Ft. 37	-10990.2	1682.7	1593.4	426.5
	Fc. 36	-11373.6	1690.6	1604.8	-448.9
	ClSMax 36	-11373.6	1690.6	1604.8	-39.8
	ClSMed 36	-11373.6	1690.6	1604.8	-14.1
Combinazioni Frequenti					
420	Ft. 39	-11617.4	-1529.5	-1326.0	321.7
	Fc. 39	-11617.4	-1529.5	-1326.0	-397.2
	ClSMax 39	-11617.4	-1529.5	-1326.0	-34.8
	ClSMed 39	-11617.4	-1529.5	-1326.0	-12.6
520	Ft. 39	-10098.6	1541.8	1530.0	400.8
	Fc. 39	-10098.6	1541.8	1530.0	-415.6
	ClSMax 39	-10098.6	1541.8	1530.0	-37.0
	ClSMed 39	-10098.6	1541.8	1530.0	-12.9
Combinazioni Quasi Permanenti					
420	Ft. 41	-11448.0	-1484.3	-1312.0	311.1
	Fc. 41	-11448.0	-1484.3	-1312.0	-388.7
	ClSMax 41	-11448.0	-1484.3	-1312.0	-34.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-11448.0	-1484.3	-1312.0	-12.3
520	Ft. 41	-9929.2	1497.4	1512.7	389.8
	Fc. 41	-9929.2	1497.4	1512.7	-406.9
	ClsMax 41	-9929.2	1497.4	1512.7	-36.1
	ClsMed 41	-9929.2	1497.4	1512.7	-12.6

- Pilastro: 520/620 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
520	15	-2112.3	-3516.8	-2249.1	1.00	1.00	0.29
620	1	-3195.3	1463.3	748.8	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3620.6	9240.4	1627.8	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
520	Ft. 37	-2416.1	-1609.6	-937.1	593.9
	Fc. 36	-2793.1	-1594.3	-941.1	-317.7
	ClsMax 37	-2416.1	-1609.6	-937.1	-32.3
	ClsMed 37	-2416.1	-1609.6	-937.1	-11.7
620	Ft. 36	-2305.6	1037.4	550.5	347.1
	Fc. 36	-2305.6	1037.4	550.5	-202.5
	ClsMax 36	-2305.6	1037.4	550.5	-20.3
	ClsMed 36	-2305.6	1037.4	550.5	-7.6
Combinazioni Frequenti					
520	Ft. 39	-1997.2	-1474.7	-921.8	562.3
	Fc. 39	-1997.2	-1474.7	-921.8	-296.1
	ClsMax 39	-1997.2	-1474.7	-921.8	-30.2
	ClsMed 39	-1997.2	-1474.7	-921.8	-10.8
620	Ft. 40	-1646.6	599.6	512.8	220.2
	Fc. 40	-1646.6	599.6	512.8	-142.5
	ClsMax 40	-1646.6	599.6	512.8	-13.7
	ClsMed 40	-1646.6	599.6	512.8	-4.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

520	Ft. 41	-1983.2	-1424.7	-918.1	545.6
	Fc. 41	-1983.2	-1424.7	-918.1	-289.9
	ClsMax 41	-1983.2	-1424.7	-918.1	-29.5
	ClsMed 41	-1983.2	-1424.7	-918.1	-10.5
620	Ft. 41	-1495.7	490.4	510.5	190.1
	Fc. 41	-1495.7	490.4	510.5	-128.0
	ClsMax 41	-1495.7	490.4	510.5	-12.1
	ClsMed 41	-1495.7	490.4	510.5	-4.1

- Pilastro: 21/121 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4$ V + $1\varnothing 20 \times 2$ B + $1\varnothing 20 \times 2$ H >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
21	27	-43741.1	17263.6	14650.0	1.00	1.00	0.71
121	27	-41709.8	-13326.2	-9029.4	1.00	1.00	0.46

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	28123.0	73445.6	20637.9	73445.6	$\varnothing 12/10.0'$
0.51	2.57	28123.0	36722.8	20637.9	36722.8	$\varnothing 12/20.0'$
2.57	3.08	28123.0	73445.6	20637.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
21	Ft. 38	-39772.8	-158.9	1739.9	-115.5
	Fc. 37	-43538.2	-161.3	1935.9	-328.4
	ClsMax 37	-43538.2	-161.3	1935.9	-23.3
	ClsMed 36	-43570.1	-159.6	1933.9	-15.1
121	Ft. 37	-41507.0	608.1	-4228.0	24.2
	Fc. 37	-41507.0	608.1	-4228.0	-453.9
	ClsMax 37	-41507.0	608.1	-4228.0	-33.6
	ClsMed 36	-41538.8	603.9	-4227.0	-15.6
Combinazioni Frequenti					
21	Ft. 40	-38456.1	-161.5	1678.4	-111.5
	Fc. 39	-39709.1	-162.4	1743.9	-299.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-39709.1	-162.4	1743.9	-21.2
	ClsMed 39	-39709.1	-162.4	1743.9	-13.8
121	Ft. 39	-37677.9	565.4	-3826.5	21.9
	Fc. 39	-37677.9	565.4	-3826.5	-412.1
	ClsMax 39	-37677.9	565.4	-3826.5	-30.5
	ClsMed 39	-37677.9	565.4	-3826.5	-14.1

Combinazioni Quasi Permanenti

21	Ft. 41	-38443.4	-162.2	1679.2	-111.4
	Fc. 41	-38443.4	-162.2	1679.2	-289.5
	ClsMax 41	-38443.4	-162.2	1679.2	-20.5
	ClsMed 41	-38443.4	-162.2	1679.2	-13.4
121	Ft. 41	-36412.1	549.7	-3692.4	21.0
	Fc. 41	-36412.1	549.7	-3692.4	-398.1
	ClsMax 41	-36412.1	549.7	-3692.4	-29.4
	ClsMed 41	-36412.1	549.7	-3692.4	-13.6

- Pilastro: 22/122 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 0ø20 x 2 H >

Staffe: ø 12/15.0' x 55.0+ø 8/12.5' x 198.0+ø 12/15.0' x 55.0

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
22	17	-23955.1	-9248.2	4113.1	7.52	3.73	0.78
122	17	-22736.4	-9248.2	-4113.1	30.62	3.11	0.79

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.55	12316.0	27721.3	10244.0	48963.7	ø 12/15.0'
0.55	2.53	12316.0	14784.7	10244.0	26114.0	ø 8/12.5'
2.53	3.08	12316.0	27721.3	10244.0	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
22	Ft. 38	-47288.2	676.1	369.4	-293.8
	Fc. 36	-49511.4	735.2	376.0	-527.7
	ClsMax 36	-49511.4	735.2	376.0	-37.8
	ClsMed 36	-49511.4	735.2	376.0	-27.8
122	Ft. 38	-46069.4	-1389.8	-635.9	-183.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-48292.7	-1510.6	-640.0	-624.2
	ClsMax 36	-48292.7	-1510.6	-640.0	-46.8
	ClsMed 36	-48292.7	-1510.6	-640.0	-27.1

Combinazioni Frequenti

22	Ft. 40	-45942.8	656.3	365.8	-285.0
	Fc. 39	-46532.9	676.0	367.6	-495.4
	ClsMax 39	-46532.9	676.0	367.6	-35.4
	ClsMed 39	-46532.9	676.0	367.6	-26.1
122	Ft. 40	-44724.1	-1349.4	-633.6	-176.8
	Fc. 39	-45314.1	-1389.6	-634.7	-585.3
	ClsMax 39	-45314.1	-1389.6	-634.7	-43.8
	ClsMed 39	-45314.1	-1389.6	-634.7	-25.4

Combinazioni Quasi Permanenti

22	Ft. 41	-45791.8	656.3	365.4	-283.7
	Fc. 41	-45791.8	656.3	365.4	-486.8
	ClsMax 41	-45791.8	656.3	365.4	-34.8
	ClsMed 41	-45791.8	656.3	365.4	-25.7
122	Ft. 41	-44573.0	-1349.4	-633.3	-175.5
	Fc. 41	-44573.0	-1349.4	-633.3	-574.5
	ClsMax 41	-44573.0	-1349.4	-633.3	-43.0
	ClsMed 41	-44573.0	-1349.4	-633.3	-25.0

- Pilastro: 122/222 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
122	30	-57240.4	7573.4	3311.9	1.00	7.47	0.45
222	25	-41315.0	-10195.2	-3689.6	2.98	1.74	0.71

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9856.3	27721.3	6643.0	48963.7	$\phi 12/15.0'$
0.79	3.28	9856.3	12320.6	6643.0	21761.7	$\phi 8/15.0'$
3.28	3.90	9856.3	27721.3	6643.0	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

122	Ft. 37	-40319.8	1775.1	878.5	-73.2
	Fc. 36	-40695.9	1775.1	880.7	-608.6
	ClsMax 36	-40695.9	1775.1	880.7	-46.8
	ClsMed 36	-40695.9	1775.1	880.7	-22.9
222	Ft. 37	-38793.6	-1732.2	-844.2	-67.7
	Fc. 36	-39169.6	-1732.4	-846.2	-588.4
	ClsMax 36	-39169.6	-1732.4	-846.2	-45.3
	ClsMed 36	-39169.6	-1732.4	-846.2	-22.0

Combinazioni Frequenti

122	Ft. 39	-38137.2	1631.6	862.3	-72.0
	Fc. 39	-38137.2	1631.6	862.3	-569.7
	ClsMax 39	-38137.2	1631.6	862.3	-43.8
	ClsMed 39	-38137.2	1631.6	862.3	-21.4
222	Ft. 39	-36611.0	-1591.3	-829.3	-66.2
	Fc. 39	-36611.0	-1591.3	-829.3	-549.8
	ClsMax 39	-36611.0	-1591.3	-829.3	-42.3
	ClsMed 39	-36611.0	-1591.3	-829.3	-20.6

Combinazioni Quasi Permanenti

122	Ft. 41	-37535.0	1583.9	857.5	-72.6
	Fc. 41	-37535.0	1583.9	857.5	-559.0
	ClsMax 41	-37535.0	1583.9	857.5	-42.9
	ClsMed 41	-37535.0	1583.9	857.5	-21.1
222	Ft. 41	-36008.8	-1544.3	-825.0	-66.7
	Fc. 41	-36008.8	-1544.3	-825.0	-539.2
	ClsMax 41	-36008.8	-1544.3	-825.0	-41.4
	ClsMed 41	-36008.8	-1544.3	-825.0	-20.2

- Pilastro: 222/322 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8 + $\phi 8/15.0'$ x 247.3 + $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
222	25	-33319.7	10245.5	3707.8	3.26	1.05	0.59
322	25	-31800.9	-10220.4	-3698.7	3.19	1.29	0.60

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	11143.6	27721.3	5775.8	48963.7	$\phi 12/15.0'$
0.79	3.26	11143.6	12320.6	5775.8	21761.7	$\phi 8/15.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	11143.6	27721.3	5775.8	48963.7	ø 12/15.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

222	Ft. 37	-30990.7	1715.1	972.3	3.4
	Fc. 36	-31363.3	1715.3	976.3	-491.4
	ClsMax 36	-31363.3	1715.3	976.3	-38.8
	ClsMed 36	-31363.3	1715.3	976.3	-17.3
322	Ft. 37	-29472.0	-1721.1	-980.6	19.6
	Fc. 36	-29844.6	-1721.4	-984.6	-482.2
	ClsMax 36	-29844.6	-1721.4	-984.6	-38.2
	ClsMed 36	-29844.6	-1721.4	-984.6	-16.8

Combinazioni Frequenti

222	Ft. 39	-29244.2	1573.8	945.8	0.1
	Fc. 39	-29244.2	1573.8	945.8	-458.1
	ClsMax 39	-29244.2	1573.8	945.8	-36.1
	ClsMed 39	-29244.2	1573.8	945.8	-16.1
322	Ft. 39	-27725.4	-1578.6	-954.8	15.9
	Fc. 39	-27725.4	-1578.6	-954.8	-448.7
	ClsMax 39	-27725.4	-1578.6	-954.8	-35.6
	ClsMed 39	-27725.4	-1578.6	-954.8	-15.5

Combinazioni Quasi Permanenti

222	Ft. 41	-28786.2	1526.7	938.3	-2.0
	Fc. 41	-28786.2	1526.7	938.3	-449.0
	ClsMax 41	-28786.2	1526.7	938.3	-35.4
	ClsMed 41	-28786.2	1526.7	938.3	-15.8
322	Ft. 41	-27267.4	-1531.2	-947.5	13.6
	Fc. 41	-27267.4	-1531.2	-947.5	-439.5
	ClsMax 41	-27267.4	-1531.2	-947.5	-34.8
	ClsMed 41	-27267.4	-1531.2	-947.5	-15.2

- Pilastro: 322/422 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
322	7	-16471.5	10438.0	-2123.4	793.45	1.61	0.72
422	6	-15208.1	-10220.4	2123.4	73.00	2.20	0.71

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9837.6	27721.3	5354.8	48963.7	ø 12/15.0'
0.79	3.26	9837.6	12320.6	5354.8	21761.7	ø 8/15.0'
3.26	3.88	9837.6	27721.3	5354.8	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

322	Ft. 37	-21555.4	1723.6	1036.9	123.2
	Fc. 36	-21922.6	1723.6	1042.2	-439.5
	ClSMax 36	-21922.6	1723.6	1042.2	-36.0
	ClSMed 36	-21922.6	1723.6	1042.2	-14.7
422	Ft. 37	-20036.6	-1722.5	-976.6	141.1
	Fc. 36	-20403.9	-1721.9	-981.0	-426.1
	ClSMax 36	-20403.9	-1721.9	-981.0	-35.2
	ClSMed 36	-20403.9	-1721.9	-981.0	-14.4

Combinazioni Frequenti

322	Ft. 39	-20255.3	1579.8	1005.6	111.2
	Fc. 39	-20255.3	1579.8	1005.6	-408.1
	ClSMax 39	-20255.3	1579.8	1005.6	-33.4
	ClSMed 39	-20255.3	1579.8	1005.6	-13.6
422	Ft. 39	-18736.5	-1578.4	-949.4	129.0
	Fc. 39	-18736.5	-1578.4	-949.4	-395.3
	ClSMax 39	-18736.5	-1578.4	-949.4	-32.7
	ClSMed 39	-18736.5	-1578.4	-949.4	-13.3

Combinazioni Quasi Permanenti

322	Ft. 41	-19944.3	1531.9	996.9	105.7
	Fc. 41	-19944.3	1531.9	996.9	-399.3
	ClSMax 41	-19944.3	1531.9	996.9	-32.7
	ClSMed 41	-19944.3	1531.9	996.9	-13.2
422	Ft. 41	-18425.5	-1530.1	-941.7	123.0
	Fc. 41	-18425.5	-1530.1	-941.7	-386.4
	ClSMax 41	-18425.5	-1530.1	-941.7	-31.9
	ClSMed 41	-18425.5	-1530.1	-941.7	-12.9

- Pilastro: 422/522 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1φ24 x 4 V + 1φ24 x 2 B + 0φ12 x 2 H >

Staffe: ø 12/15.0' x 61.8+ø 8/15.0' x 247.3+ø 12/15.0' x 61.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
422	10	-9361.0	10468.4	-2123.4	130.12	1.66	0.78
522	30	-13767.2	-7087.1	-1881.3	1.00	2.54	0.47

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8954.8	27721.3	8918.6	48963.7	ø 12/15.0'
0.79	3.26	8954.8	12320.6	8918.6	21761.7	ø 8/15.0'
3.26	3.88	8954.8	27721.3	8918.6	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

422	Ft. 37	-12003.9	1746.6	1240.7	363.9
	Fc. 36	-12362.8	1749.7	1250.0	-422.8
	ClSMax 36	-12362.8	1749.7	1250.0	-37.4
	ClSMed 36	-12362.8	1749.7	1250.0	-14.0
522	Ft. 37	-10485.1	-1767.5	-1501.0	454.2
	Fc. 36	-10844.1	-1774.4	-1513.9	-448.7
	ClSMax 36	-10844.1	-1774.4	-1513.9	-40.3
	ClSMed 36	-10844.1	-1774.4	-1513.9	-14.4

Combinazioni Frequenti

422	Ft. 39	-11160.2	1599.6	1195.7	336.9
	Fc. 39	-11160.2	1599.6	1195.7	-391.6
	ClSMax 39	-11160.2	1599.6	1195.7	-34.7
	ClSMed 39	-11160.2	1599.6	1195.7	-12.8
522	Ft. 39	-9641.5	-1618.3	-1440.8	424.8
	Fc. 39	-9641.5	-1618.3	-1440.8	-414.8
	ClSMax 39	-9641.5	-1618.3	-1440.8	-37.3
	ClSMed 39	-9641.5	-1618.3	-1440.8	-13.2

Combinazioni Quasi Permanenti

422	Ft. 41	-10998.7	1551.7	1183.7	325.3
	Fc. 41	-10998.7	1551.7	1183.7	-383.1
	ClSMax 41	-10998.7	1551.7	1183.7	-33.9
	ClSMed 41	-10998.7	1551.7	1183.7	-12.5
522	Ft. 41	-9479.9	-1570.9	-1425.1	412.6
	Fc. 41	-9479.9	-1570.9	-1425.1	-406.0
	ClSMax 41	-9479.9	-1570.9	-1425.1	-36.5
	ClSMed 41	-9479.9	-1570.9	-1425.1	-12.9

- Pilastro: 522/622 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 24 Af=27.14 [cm^2] < 1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H >$

Staffe: $\phi 8/20.0' \times 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
522	30	-2787.3	3706.4	992.8	1.00	1.00	0.29
622	1	-3027.7	-1409.8	-634.1	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3818.3	9240.4	1439.1	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
522	Ft. 37	-2319.2	1581.0	679.8	548.0
	Fc. 36	-2672.6	1566.3	679.9	-280.8
	ClsMax 37	-2319.2	1581.0	679.8	-29.2
	ClsMed 37	-2319.2	1581.0	679.8	-11.2
622	Ft. 36	-2185.1	-1000.2	-466.1	326.2
	Fc. 36	-2185.1	-1000.2	-466.1	-186.9
	ClsMax 36	-2185.1	-1000.2	-466.1	-18.9
	ClsMed 36	-2185.1	-1000.2	-466.1	-7.2
Combinazioni Frequenti					
522	Ft. 39	-1925.0	1449.1	676.5	517.8
	Fc. 39	-1925.0	1449.1	676.5	-261.5
	ClsMax 39	-1925.0	1449.1	676.5	-27.3
	ClsMed 39	-1925.0	1449.1	676.5	-10.3
622	Ft. 40	-1565.3	-586.0	-435.7	206.1
	Fc. 40	-1565.3	-586.0	-435.7	-131.2
	ClsMax 40	-1565.3	-586.0	-435.7	-12.8
	ClsMed 40	-1565.3	-586.0	-435.7	-4.5
Combinazioni Quasi Permanenti					
522	Ft. 41	-1911.5	1400.2	675.4	501.8
	Fc. 41	-1911.5	1400.2	675.4	-255.9
	ClsMax 41	-1911.5	1400.2	675.4	-26.6
	ClsMed 41	-1911.5	1400.2	675.4	-10.0
622	Ft. 41	-1424.0	-483.4	-433.7	177.3
	Fc. 41	-1424.0	-483.4	-433.7	-117.8
	ClsMax 41	-1424.0	-483.4	-433.7	-11.3
	ClsMed 41	-1424.0	-483.4	-433.7	-3.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 23/123 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $10 \varnothing 20$ Af=31.42 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/12.5' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
23	17	-56799.5	-14071.4	5898.7	25.51	6.53	0.72
123	17	-55580.8	-14071.4	-5898.7	9.83	11.05	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	14433.8	27721.3	9253.8	48963.7	$\varnothing 12/15.0'$
0.51	2.57	14433.8	14784.7	9253.8	26114.0	$\varnothing 8/12.5'$
2.57	3.08	14433.8	27721.3	9253.8	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
23	Ft. 38	-78541.1	1205.2	104.1	-469.3
	Fc. 36	-82696.1	1319.2	111.6	-769.6
	ClsMax 36	-82696.1	1319.2	111.6	-55.0
	ClsMed 36	-82696.1	1319.2	111.6	-42.0
123	Ft. 38	-77322.3	-2465.7	-79.2	-334.5
	Fc. 36	-81477.4	-2698.2	-85.1	-897.7
	ClsMax 36	-81477.4	-2698.2	-85.1	-67.2
	ClsMed 36	-81477.4	-2698.2	-85.1	-41.3
Combinazioni Frequenti					
23	Ft. 40	-76067.0	1166.9	100.0	-454.6
	Fc. 39	-77179.8	1204.9	102.1	-715.5
	ClsMax 39	-77179.8	1204.9	102.1	-51.0
	ClsMed 39	-77179.8	1204.9	102.1	-39.2
123	Ft. 40	-74848.3	-2387.7	-75.8	-323.8
	Fc. 39	-75961.0	-2465.1	-77.5	-831.7
	ClsMax 39	-75961.0	-2465.1	-77.5	-62.2
	ClsMed 39	-75961.0	-2465.1	-77.5	-38.5
Combinazioni Quasi Permanenti					
23	Ft. 41	-75794.8	1166.9	99.6	-452.5
	Fc. 41	-75794.8	1166.9	99.6	-701.0
	ClsMax 41	-75794.8	1166.9	99.6	-50.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-75794.8	1166.9	99.6	-38.5
123	Ft. 41	-74576.0	-2387.6	-75.5	-321.7
	Fc. 41	-74576.0	-2387.6	-75.5	-813.2
	ClsMax 41	-74576.0	-2387.6	-75.5	-60.7
	ClsMed 41	-74576.0	-2387.6	-75.5	-37.8

- Pilastro: 123/223 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/15.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
123	14	-52176.8	9971.9	4710.3	248.93	1.63	0.65
223	15	-50212.2	-11872.1	-5291.4	27.50	2.47	0.83

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9749.7	27721.3	8594.3	48963.7	$\varnothing 12/15.0'$
0.79	3.28	9749.7	12320.6	8594.3	21761.7	$\varnothing 8/15.0'$
3.28	3.90	9749.7	27721.3	8594.3	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
123	Ft. 37	-66539.8	3174.6	247.4	-188.6
	Fc. 36	-67221.2	3175.0	250.0	-937.1
	ClsMax 36	-67221.2	3175.0	250.0	-72.2
	ClsMed 36	-67221.2	3175.0	250.0	-37.7
223	Ft. 37	-65013.6	-3105.7	-253.1	-183.0
	Fc. 36	-65695.0	-3106.4	-255.8	-917.1
	ClsMax 36	-65695.0	-3106.4	-255.8	-70.6
	ClsMed 36	-65695.0	-3106.4	-255.8	-36.9
Combinazioni Frequenti					
123	Ft. 39	-62520.2	2898.2	227.5	-187.0
	Fc. 39	-62520.2	2898.2	227.5	-865.1
	ClsMax 39	-62520.2	2898.2	227.5	-66.5
	ClsMed 39	-62520.2	2898.2	227.5	-35.1
223	Ft. 39	-60994.0	-2833.1	-233.6	-180.9
	Fc. 39	-60994.0	-2833.1	-233.6	-845.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-60994.0	-2833.1	-233.6	-65.0
	ClsMed 39	-60994.0	-2833.1	-233.6	-34.2

Combinazioni Quasi Permanenti

123	Ft. 41	-61407.5	2806.2	221.7	-188.3
	Fc. 41	-61407.5	2806.2	221.7	-845.1
	ClsMax 41	-61407.5	2806.2	221.7	-64.9
	ClsMed 41	-61407.5	2806.2	221.7	-34.4
223	Ft. 41	-59881.2	-2742.4	-227.9	-182.0
	Fc. 41	-59881.2	-2742.4	-227.9	-825.7
	ClsMax 41	-59881.2	-2742.4	-227.9	-63.4
	ClsMed 41	-59881.2	-2742.4	-227.9	-33.6

- Pilastro: 223/323 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
223	11	-42714.0	11257.5	-5317.5	26.18	1.41	0.64
323	11	-41195.2	-11229.9	5304.5	24.96	1.67	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	11041.8	27721.3	9831.0	48963.7	$\varnothing 12/15.0'$
0.79	3.26	11041.8	12320.6	9831.0	21761.7	$\varnothing 8/15.0'$
3.26	3.88	11041.8	27721.3	9831.0	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

223	Ft. 37	-50806.2	3073.8	410.8	-58.3
	Fc. 36	-51489.3	3074.7	415.7	-744.3
	ClsMax 36	-51489.3	3074.7	415.7	-58.9
	ClsMed 36	-51489.3	3074.7	415.7	-28.2
323	Ft. 37	-49287.4	-3086.0	-413.1	-42.5
	Fc. 36	-49970.6	-3087.3	-418.0	-734.7
	ClsMax 36	-49970.6	-3087.3	-418.0	-58.3
	ClsMed 36	-49970.6	-3087.3	-418.0	-27.9

Combinazioni Frequenti

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

223	Ft. 39	-47607.6	2800.3	378.3	-64.6
	Fc. 39	-47607.6	2800.3	378.3	-683.1
	ClsMax 39	-47607.6	2800.3	378.3	-54.0
	ClsMed 39	-47607.6	2800.3	378.3	-25.9
323	Ft. 39	-46088.9	-2810.1	-380.9	-49.6
	Fc. 39	-46088.9	-2810.1	-380.9	-673.2
	ClsMax 39	-46088.9	-2810.1	-380.9	-53.4
	ClsMed 39	-46088.9	-2810.1	-380.9	-25.6

Combinazioni Quasi Permanenti

223	Ft. 41	-46769.1	2709.5	369.1	-68.4
	Fc. 41	-46769.1	2709.5	369.1	-666.5
	ClsMax 41	-46769.1	2709.5	369.1	-52.6
	ClsMed 41	-46769.1	2709.5	369.1	-25.2
323	Ft. 41	-45250.4	-2718.6	-371.9	-53.8
	Fc. 41	-45250.4	-2718.6	-371.9	-656.4
	ClsMax 41	-45250.4	-2718.6	-371.9	-52.0
	ClsMed 41	-45250.4	-2718.6	-371.9	-24.9

- Pilastro: 323/423 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
323	11	-29745.5	11229.9	-5304.5	13.11	1.45	0.70
423	11	-28226.8	-11229.9	5304.5	15.45	1.55	0.71

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10199.8	27721.3	9511.6	48963.7	$\phi 12/15.0'$
0.79	3.26	10199.8	12320.6	9511.6	21761.7	$\phi 8/15.0'$
3.26	3.88	10199.8	27721.3	9511.6	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
323	Ft. 37	-35168.0	3096.3	489.1	138.3
	Fc. 36	-35853.8	3097.1	495.7	-648.3
	ClsMax 36	-35853.8	3097.1	495.7	-53.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 36	-35853.8	3097.1	495.7	-25.1
423	Ft. 37	-33649.2	-3097.8	-455.7	160.2
	Fc. 36	-34335.1	-3097.8	-461.8	-636.3
	ClsMax 36	-34335.1	-3097.8	-461.8	-53.1
	ClsMed 36	-34335.1	-3097.8	-461.8	-24.9

Combinazioni Frequenti

323	Ft. 39	-32788.1	2817.0	449.3	113.9
	Fc. 39	-32788.1	2817.0	449.3	-590.6
	ClsMax 39	-32788.1	2817.0	449.3	-48.9
	ClsMed 39	-32788.1	2817.0	449.3	-22.9
423	Ft. 39	-31269.3	-2817.2	-418.2	135.0
	Fc. 39	-31269.3	-2817.2	-418.2	-578.8
	ClsMax 39	-31269.3	-2817.2	-418.2	-48.3
	ClsMed 39	-31269.3	-2817.2	-418.2	-22.7

Combinazioni Quasi Permanenti

323	Ft. 41	-32223.4	2724.2	438.3	102.7
	Fc. 41	-32223.4	2724.2	438.3	-574.6
	ClsMax 41	-32223.4	2724.2	438.3	-47.5
	ClsMed 41	-32223.4	2724.2	438.3	-22.2
423	Ft. 41	-30704.7	-2723.7	-407.7	123.2
	Fc. 41	-30704.7	-2723.7	-407.7	-562.7
	ClsMax 41	-30704.7	-2723.7	-407.7	-46.8
	ClsMed 41	-30704.7	-2723.7	-407.7	-22.0

- Pilastro: 423/523 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
423	15	-15577.7	11681.5	5304.5	141.89	1.36	0.84
523	30	-19728.9	-7617.9	2704.6	1.00	19.96	0.47

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9248.9	27721.3	11041.3	48963.7	$\phi 12/15.0'$
0.79	3.26	9248.9	12320.6	11041.3	21761.7	$\phi 8/15.0'$
3.26	3.88	9248.9	27721.3	11041.3	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
423	Ft. 37	-19579.9	3128.6	690.6	506.8
	Fc. 36	-20268.8	3134.4	701.5	-584.5
	ClsMax 36	-20268.8	3134.4	701.5	-53.3
	ClsMed 36	-20268.8	3134.4	701.5	-23.7
523	Ft. 37	-18061.2	-3154.9	-893.0	583.1
	Fc. 36	-18750.1	-3167.0	-906.7	-601.9
	ClsMax 36	-18750.1	-3167.0	-906.7	-55.4
	ClsMed 36	-18750.1	-3167.0	-906.7	-23.8
Combinazioni Frequenti					
423	Ft. 39	-18018.2	2844.5	637.1	455.9
	Fc. 39	-18018.2	2844.5	637.1	-528.2
	ClsMax 39	-18018.2	2844.5	637.1	-48.3
	ClsMed 39	-18018.2	2844.5	637.1	-21.4
523	Ft. 39	-16499.5	-2868.9	-828.2	530.1
	Fc. 39	-16499.5	-2868.9	-828.2	-543.2
	ClsMax 39	-16499.5	-2868.9	-828.2	-50.2
	ClsMed 39	-16499.5	-2868.9	-828.2	-21.5
Combinazioni Quasi Permanenti					
423	Ft. 41	-17727.3	2751.8	622.8	433.6
	Fc. 41	-17727.3	2751.8	622.8	-513.5
	ClsMax 41	-17727.3	2751.8	622.8	-46.8
	ClsMed 41	-17727.3	2751.8	622.8	-20.8
523	Ft. 41	-16208.6	-2777.5	-811.2	507.5
	Fc. 41	-16208.6	-2777.5	-811.2	-528.3
	ClsMax 41	-16208.6	-2777.5	-811.2	-48.7
	ClsMed 41	-16208.6	-2777.5	-811.2	-20.9

- Pilastro: 523/623 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$ Ast/s=0.100531 < $0.08 fcd bst/fyd 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
523	30	-3560.9	5019.0	23.5	1.00	1.00	0.39
623	1	-5222.5	-2616.2	-302.9	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	1.18	5130.3	9240.4	1457.5	16321.2	ø 8/20.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

523	Ft. 37	-3557.4	2890.2	-99.8	860.5
	Fc. 36	-4254.7	2866.9	-98.6	-358.4
	ClsMax 37	-3557.4	2890.2	-99.8	-40.8
	ClsMed 37	-3557.4	2890.2	-99.8	-19.8
623	Ft. 36	-3767.2	-1851.9	-217.2	521.1
	Fc. 36	-3767.2	-1851.9	-217.2	-261.6
	ClsMax 36	-3767.2	-1851.9	-217.2	-28.2
	ClsMed 36	-3767.2	-1851.9	-217.2	-13.0

Combinazioni Frequenti

523	Ft. 39	-2805.7	2622.0	-110.1	798.0
	Fc. 39	-2805.7	2622.0	-110.1	-319.6
	ClsMax 39	-2805.7	2622.0	-110.1	-37.1
	ClsMed 39	-2805.7	2622.0	-110.1	-17.9
623	Ft. 40	-2579.1	-1059.1	-185.4	291.9
	Fc. 40	-2579.1	-1059.1	-185.4	-161.2
	ClsMax 40	-2579.1	-1059.1	-185.4	-16.9
	ClsMed 40	-2579.1	-1059.1	-185.4	-7.5

Combinazioni Quasi Permanenti

523	Ft. 41	-2787.6	2524.9	-113.2	766.4
	Fc. 41	-2787.6	2524.9	-113.2	-309.6
	ClsMax 41	-2787.6	2524.9	-113.2	-35.8
	ClsMed 41	-2787.6	2524.9	-113.2	-17.3
623	Ft. 41	-2300.1	-863.8	-183.5	235.8
	Fc. 41	-2300.1	-863.8	-183.5	-137.2
	ClsMax 41	-2300.1	-863.8	-183.5	-14.1
	ClsMed 41	-2300.1	-863.8	-183.5	-6.2

- Pilastro: 24/124 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af} = 18.85 \text{ [cm}^2\text{]} < 1 \phi 20 \times 4 \text{ V} + 1 \phi 20 \times 2 \text{ B} + 0 \phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
24	17	-61927.4	-13560.3	5898.7	45.89	7.04	0.91
124	17	-60708.6	-13560.3	-5898.7	8.00	14.90	0.92

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11843.6	27721.3	5594.3	48963.7	∅ 12/15.0'
0.51	2.57	11843.6	14784.7	5594.3	26114.0	∅ 8/12.5'
2.57	3.08	11843.6	27721.3	5594.3	48963.7	∅ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

24	Ft. 38	-81400.0	1284.2	33.6	-540.0
	Fc. 36	-85860.2	1406.3	35.2	-881.0
	ClsMax 36	-85860.2	1406.3	35.2	-62.9
	ClsMed 36	-85860.2	1406.3	35.2	-48.2
124	Ft. 38	-80181.2	-2625.7	68.8	-378.3
	Fc. 36	-84641.5	-2874.8	75.1	-1036.6
	ClsMax 36	-84641.5	-2874.8	75.1	-77.7
	ClsMed 36	-84641.5	-2874.8	75.1	-47.5

Combinazioni Frequenti

24	Ft. 40	-78747.1	1243.2	32.6	-522.3
	Fc. 39	-79942.4	1283.8	33.0	-817.5
	ClsMax 39	-79942.4	1283.8	33.0	-58.3
	ClsMed 39	-79942.4	1283.8	33.0	-44.8
124	Ft. 40	-77528.4	-2542.1	65.6	-365.5
	Fc. 39	-78723.6	-2625.0	67.5	-958.5
	ClsMax 39	-78723.6	-2625.0	67.5	-71.8
	ClsMed 39	-78723.6	-2625.0	67.5	-44.2

Combinazioni Quasi Permanenti

24	Ft. 41	-78455.6	1243.1	32.5	-519.8
	Fc. 41	-78455.6	1243.1	32.5	-800.4
	ClsMax 41	-78455.6	1243.1	32.5	-57.1
	ClsMed 41	-78455.6	1243.1	32.5	-44.0
124	Ft. 41	-77236.9	-2542.0	65.4	-363.1
	Fc. 41	-77236.9	-2542.0	65.4	-936.7
	ClsMax 41	-77236.9	-2542.0	65.4	-70.1
	ClsMed 41	-77236.9	-2542.0	65.4	-43.3

- Pilastro: 124/224 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ∅ 20 Af=18.85 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 0∅20 x 2 H >

Staffe: ∅ 12/15.0' x 62.2+∅ 8/15.0' x 248.7+∅ 12/15.0' x 62.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
124	15	-54950.5	9971.9	4710.3	21.34	1.72	0.64
224	19	-51778.8	-11882.5	-5291.4	26.47	2.97	0.82

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9748.7	27721.3	8247.0	48963.7	ø 12/15.0'
0.79	3.28	9748.7	12320.6	8247.0	21761.7	ø 8/15.0'
3.28	3.90	9748.7	27721.3	8247.0	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

124	Ft. 37	-68940.5	3385.5	-36.7	-202.1
	Fc. 36	-69670.3	3386.0	-36.9	-964.2
	ClsMax 36	-69670.3	3386.0	-36.9	-74.4
	ClsMed 36	-69670.3	3386.0	-36.9	-39.1
224	Ft. 37	-67414.2	-3316.2	129.4	-189.6
	Fc. 36	-68144.1	-3316.9	130.6	-951.1
	ClsMax 36	-68144.1	-3316.9	130.6	-73.4
	ClsMed 36	-68144.1	-3316.9	130.6	-38.2

Combinazioni Frequenti

124	Ft. 39	-64631.4	3089.3	-33.6	-198.9
	Fc. 39	-64631.4	3089.3	-33.6	-888.7
	ClsMax 39	-64631.4	3089.3	-33.6	-68.5
	ClsMed 39	-64631.4	3089.3	-33.6	-36.3
224	Ft. 39	-63105.1	-3023.9	119.3	-186.5
	Fc. 39	-63105.1	-3023.9	119.3	-875.4
	ClsMax 39	-63105.1	-3023.9	119.3	-67.5
	ClsMed 39	-63105.1	-3023.9	119.3	-35.4

Combinazioni Quasi Permanenti

124	Ft. 41	-63438.3	2990.8	-32.7	-199.8
	Fc. 41	-63438.3	2990.8	-32.7	-867.7
	ClsMax 41	-63438.3	2990.8	-32.7	-66.8
	ClsMed 41	-63438.3	2990.8	-32.7	-35.6
224	Ft. 41	-61912.1	-2926.7	116.3	-187.5
	Fc. 41	-61912.1	-2926.7	116.3	-854.4
	ClsMax 41	-61912.1	-2926.7	116.3	-65.8
	ClsMed 41	-61912.1	-2926.7	116.3	-34.7

- Pilastro: 224/324 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
224	11	-44706.9	11257.5	-5317.5	12.54	1.21	0.64
324	11	-43188.2	-11229.9	5304.5	12.24	1.38	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	11035.1	27721.3	9879.0	48963.7	$\varnothing 12/15.0'$
0.79	3.26	11035.1	12320.6	9879.0	21761.7	$\varnothing 8/15.0'$
3.26	3.88	11035.1	27721.3	9879.0	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
224	Ft. 37	-52519.1	3287.1	-119.0	-70.5
	Fc. 36	-53251.5	3288.2	-119.9	-758.0
	ClsMax 36	-53251.5	3288.2	-119.9	-60.1
	ClsMed 36	-53251.5	3288.2	-119.9	-29.7
324	Ft. 37	-51000.3	-3303.7	172.5	-49.7
	Fc. 36	-51732.7	-3305.2	174.3	-752.8
	ClsMax 36	-51732.7	-3305.2	174.3	-59.9
	ClsMed 36	-51732.7	-3305.2	174.3	-29.4
Combinazioni Frequenti					
224	Ft. 39	-49091.2	2993.9	-111.5	-75.4
	Fc. 39	-49091.2	2993.9	-111.5	-694.9
	ClsMax 39	-49091.2	2993.9	-111.5	-55.1
	ClsMed 39	-49091.2	2993.9	-111.5	-27.2
324	Ft. 39	-47572.5	-3007.7	160.4	-56.0
	Fc. 39	-47572.5	-3007.7	160.4	-688.8
	ClsMax 39	-47572.5	-3007.7	160.4	-54.8
	ClsMed 39	-47572.5	-3007.7	160.4	-26.9
Combinazioni Quasi Permanenti					
224	Ft. 41	-48192.8	2896.5	-109.2	-79.1
	Fc. 41	-48192.8	2896.5	-109.2	-677.6
	ClsMax 41	-48192.8	2896.5	-109.2	-53.6
	ClsMed 41	-48192.8	2896.5	-109.2	-26.5
324	Ft. 41	-46674.0	-2909.5	157.0	-60.1
	Fc. 41	-46674.0	-2909.5	157.0	-671.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-46674.0	-2909.5	157.0	-53.3
	ClsMed 41	-46674.0	-2909.5	157.0	-26.2

- Pilastro: 324/424 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/15.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
324	14	-29162.0	11356.2	5304.5	141.03	1.79	0.72
424	11	-29392.5	-11229.9	5304.5	9.66	1.25	0.71

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10185.8	27721.3	9543.1	48963.7	ϕ 12/15.0'
0.79	3.26	10185.8	12320.6	9543.1	21761.7	ϕ 8/15.0'
3.26	3.88	10185.8	27721.3	9543.1	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
324	Ft. 37	-36210.5	3316.8	-187.5	140.4
	Fc. 36	-36947.3	3317.8	-189.5	-655.4
	ClsMax 36	-36947.3	3317.8	-189.5	-54.7
	ClsMed 36	-36947.3	3317.8	-189.5	-26.7
424	Ft. 37	-34691.8	-3317.7	261.8	173.1
	Fc. 36	-35428.6	-3317.9	265.5	-652.8
	ClsMax 36	-35428.6	-3317.9	265.5	-54.8
	ClsMed 36	-35428.6	-3317.9	265.5	-26.4
Combinazioni Frequenti					
324	Ft. 39	-33658.9	3017.3	-175.2	116.6
	Fc. 39	-33658.9	3017.3	-175.2	-596.6
	ClsMax 39	-33658.9	3017.3	-175.2	-49.7
	ClsMed 39	-33658.9	3017.3	-175.2	-24.2
424	Ft. 39	-32140.2	-3017.0	243.3	147.7
	Fc. 39	-32140.2	-3017.0	243.3	-593.3
	ClsMax 39	-32140.2	-3017.0	243.3	-49.8
	ClsMed 39	-32140.2	-3017.0	243.3	-24.0
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

324	Ft. 41	-33054.0	2917.8	-171.8	105.1
	Fc. 41	-33054.0	2917.8	-171.8	-580.3
	ClsMax 41	-33054.0	2917.8	-171.8	-48.3
	ClsMed 41	-33054.0	2917.8	-171.8	-23.5
424	Ft. 41	-31535.2	-2916.8	238.3	135.3
	Fc. 41	-31535.2	-2916.8	238.3	-576.7
	ClsMax 41	-31535.2	-2916.8	238.3	-48.3
	ClsMed 41	-31535.2	-2916.8	238.3	-23.3

- Pilastro: 424/524 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
424	5	-15819.9	11701.7	-5304.5	73.10	1.49	0.84
524	30	-19483.5	-7197.6	2698.0	1.00	2.91	0.44

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9268.3	27721.3	10721.8	48963.7	$\varnothing 12/15.0'$
0.79	3.26	9268.3	12320.6	10721.8	21761.7	$\varnothing 8/15.0'$
3.26	3.88	9268.3	27721.3	10721.8	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
424	Ft. 37	-19957.9	3357.9	-109.2	499.6
	Fc. 36	-20700.4	3364.5	-110.3	-550.5
	ClsMax 36	-20700.4	3364.5	-110.3	-51.3
	ClsMed 36	-20700.4	3364.5	-110.3	-25.1
524	Ft. 37	-18439.2	-3395.5	-46.7	546.7
	Fc. 36	-19181.7	-3409.1	-47.4	-537.9
	ClsMax 36	-19181.7	-3409.1	-47.4	-51.0
	ClsMed 36	-19181.7	-3409.1	-47.4	-25.3
Combinazioni Frequenti					
424	Ft. 39	-18280.4	3052.6	-103.5	450.9
	Fc. 39	-18280.4	3052.6	-103.5	-496.4
	ClsMax 39	-18280.4	3052.6	-103.5	-46.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-18280.4	3052.6	-103.5	-22.8
524	Ft. 39	-16761.6	-3086.9	-40.2	496.8
	Fc. 39	-16761.6	-3086.9	-40.2	-482.3
	ClsMax 39	-16761.6	-3086.9	-40.2	-46.1
	ClsMed 39	-16761.6	-3086.9	-40.2	-22.9

Combinazioni Quasi Permanenti

424	Ft. 41	-17968.7	2953.1	-102.0	428.6
	Fc. 41	-17968.7	2953.1	-102.0	-482.4
	ClsMax 41	-17968.7	2953.1	-102.0	-45.0
	ClsMed 41	-17968.7	2953.1	-102.0	-22.1
524	Ft. 41	-16449.9	-2988.6	-38.3	474.6
	Fc. 41	-16449.9	-2988.6	-38.3	-468.5
	ClsMax 41	-16449.9	-2988.6	-38.3	-44.6
	ClsMed 41	-16449.9	-2988.6	-38.3	-22.1

- Pilastro: 524/624 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$ Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
524	30	-3483.7	4973.9	-1345.7	1.00	1.00	0.39
624	1	-5789.5	-2873.9	351.8	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5453.6	9240.4	2618.1	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
524	Ft. 37	-3898.8	3130.3	-1243.6	1094.8
	Fc. 36	-4658.3	3103.2	-1263.0	-540.5
	ClsMax 37	-3898.8	3130.3	-1243.6	-56.5
	ClsMed 37	-3898.8	3130.3	-1243.6	-22.1
624	Ft. 36	-4170.8	-2032.9	244.3	571.7
	Fc. 36	-4170.8	-2032.9	244.3	-288.2
	ClsMax 36	-4170.8	-2032.9	244.3	-31.0
	ClsMed 36	-4170.8	-2032.9	244.3	-14.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Frequenti

524	Ft. 39	-3077.8	2841.8	-1171.7	1017.3
	Fc. 39	-3077.8	2841.8	-1171.7	-487.2
	ClsMax 39	-3077.8	2841.8	-1171.7	-51.7
	ClsMed 39	-3077.8	2841.8	-1171.7	-20.0
624	Ft. 40	-2873.6	-1162.6	221.6	321.5
	Fc. 40	-2873.6	-1162.6	221.6	-179.6
	ClsMax 40	-2873.6	-1162.6	221.6	-18.7
	ClsMed 40	-2873.6	-1162.6	221.6	-8.2

Combinazioni Quasi Permanenti

524	Ft. 41	-3057.3	2736.6	-1154.2	980.2
	Fc. 41	-3057.3	2736.6	-1154.2	-473.3
	ClsMax 41	-3057.3	2736.6	-1154.2	-50.1
	ClsMed 41	-3057.3	2736.6	-1154.2	-19.3
624	Ft. 41	-2569.8	-947.9	220.0	259.8
	Fc. 41	-2569.8	-947.9	220.0	-153.3
	ClsMax 41	-2569.8	-947.9	220.0	-15.7
	ClsMed 41	-2569.8	-947.9	220.0	-6.8

- Pilastro: 25/125 / L 3.15[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 52.6 + \varnothing 8/15.0' \times 210.3 + \varnothing 12/15.0' \times 52.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
25	7	-30435.8	2565.8	-6429.7	1.00	1.52	0.31
125	32	-32323.0	-1755.0	6429.7	1.00	4.75	0.27

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.53	5095.3	27721.3	18370.1	48963.7	$\varnothing 12/15.0'$
0.53	2.63	5095.3	12320.6	18370.1	21761.7	$\varnothing 8/15.0'$
2.63	3.15	5095.3	27721.3	18370.1	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
25	Ft. 38	-47417.7	355.3	-21.2	-357.9
	Fc. 36	-49668.7	389.0	-5.0	-461.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-49668.7	389.0	-5.0	-31.9
	ClsMed 36	-49668.7	389.0	-5.0	-27.9
125	Ft. 38	-46199.0	-735.0	183.8	-292.8
	Fc. 36	-48450.0	-804.1	159.7	-509.3
	ClsMax 36	-48450.0	-804.1	159.7	-36.5
	ClsMed 36	-48450.0	-804.1	159.7	-27.2

Combinazioni Frequenti

25	Ft. 40	-45986.6	343.9	-27.2	-346.7
	Fc. 39	-46566.7	355.1	-22.0	-432.9
	ClsMax 39	-46566.7	355.1	-22.0	-29.9
	ClsMed 39	-46566.7	355.1	-22.0	-26.1
125	Ft. 40	-44767.8	-711.5	191.2	-282.8
	Fc. 39	-45348.0	-734.5	182.9	-477.4
	ClsMax 39	-45348.0	-734.5	182.9	-34.2
	ClsMed 39	-45348.0	-734.5	182.9	-25.4

Combinazioni Quasi Permanenti

25	Ft. 41	-45816.4	343.9	-27.4	-345.2
	Fc. 41	-45816.4	343.9	-27.4	-425.8
	ClsMax 41	-45816.4	343.9	-27.4	-29.4
	ClsMed 41	-45816.4	343.9	-27.4	-25.7
125	Ft. 41	-44597.6	-711.4	191.0	-281.3
	Fc. 41	-44597.6	-711.4	191.0	-469.1
	ClsMax 41	-44597.6	-711.4	191.0	-33.6
	ClsMed 41	-44597.6	-711.4	191.0	-25.0

- Pilastro: 125/225 / L 3.81[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 63.4 + \phi 8/15.0' \times 253.7 + \phi 12/15.0' \times 63.4$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
125	30	-49000.5	2672.8	-5134.3	1.00	7.90	0.27
225	29	-42502.0	-1601.2	5767.7	1.00	3.72	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.10	0.73	4385.4	27721.3	16451.8	48963.7	$\phi 12/15.0'$
0.73	3.27	4385.4	12320.6	16451.8	21761.7	$\phi 8/15.0'$
3.27	3.90	4385.4	27721.3	16451.8	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
125	Ft. 38	-40363.5	843.6	-86.3	-239.3
	Fc. 36	-42325.9	923.5	-46.5	-462.1
	ClsMax 36	-42325.9	923.5	-46.5	-33.6
	ClsMed 36	-42325.9	923.5	-46.5	-23.7
225	Ft. 38	-38837.3	-803.0	82.3	-231.3
	Fc. 36	-40799.7	-879.4	42.1	-444.0
	ClsMax 36	-40799.7	-879.4	42.1	-32.3
	ClsMed 36	-40799.7	-879.4	42.1	-22.9
Combinazioni Frequenti					
125	Ft. 40	-39037.8	816.4	-100.2	-230.1
	Fc. 39	-39524.0	842.9	-87.1	-432.8
	ClsMax 39	-39524.0	842.9	-87.1	-31.5
	ClsMed 39	-39524.0	842.9	-87.1	-22.2
225	Ft. 40	-37511.6	-776.7	95.3	-222.0
	Fc. 39	-37997.8	-802.0	81.8	-415.0
	ClsMax 39	-37997.8	-802.0	81.8	-30.1
	ClsMed 39	-37997.8	-802.0	81.8	-21.3
Combinazioni Quasi Permanenti					
125	Ft. 41	-38869.9	816.3	-100.4	-228.7
	Fc. 41	-38869.9	816.3	-100.4	-425.4
	ClsMax 41	-38869.9	816.3	-100.4	-30.9
	ClsMed 41	-38869.9	816.3	-100.4	-21.8
225	Ft. 41	-37343.7	-776.5	95.2	-220.7
	Fc. 41	-37343.7	-776.5	95.2	-407.8
	ClsMax 41	-37343.7	-776.5	95.2	-29.6
	ClsMed 41	-37343.7	-776.5	95.2	-20.9

- Pilastro: 225/325 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
225	30	-37592.6	2581.0	-5796.2	1.00	8.69	0.25
325	30	-36073.8	-2403.1	5782.0	1.00	11.24	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	6112.1	27721.3	19796.5	48963.7	ø 12/15.0'
0.79	3.26	6112.1	12320.6	19796.5	21761.7	ø 8/15.0'
3.26	3.88	6112.1	27721.3	19796.5	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
225	Ft. 37	-32546.3	871.0	80.5	-163.0
	Fc. 36	-32949.3	871.9	81.8	-352.3
	ClsMax 36	-32949.3	871.9	81.8	-26.1
	ClsMed 36	-32949.3	871.9	81.8	-17.3
325	Ft. 37	-31027.6	-897.9	-47.4	-150.8
	Fc. 36	-31430.5	-899.2	-48.8	-340.7
	ClsMax 36	-31430.5	-899.2	-48.8	-25.3
	ClsMed 36	-31430.5	-899.2	-48.8	-16.5
Combinazioni Frequenti					
225	Ft. 39	-30607.6	794.0	28.9	-159.2
	Fc. 39	-30607.6	794.0	28.9	-322.3
	ClsMax 39	-30607.6	794.0	28.9	-23.8
	ClsMed 39	-30607.6	794.0	28.9	-16.0
325	Ft. 40	-28738.2	-792.8	17.8	-145.4
	Fc. 39	-29088.9	-818.3	2.3	-310.8
	ClsMax 39	-29088.9	-818.3	2.3	-23.1
	ClsMed 39	-29088.9	-818.3	2.3	-15.3
Combinazioni Quasi Permanenti					
225	Ft. 41	-30095.7	768.7	12.2	-158.9
	Fc. 41	-30095.7	768.7	12.2	-314.5
	ClsMax 41	-30095.7	768.7	12.2	-23.2
	ClsMed 41	-30095.7	768.7	12.2	-15.8
325	Ft. 41	-28577.0	-792.2	18.4	-144.2
	Fc. 41	-28577.0	-792.2	18.4	-305.4
	ClsMax 41	-28577.0	-792.2	18.4	-22.6
	ClsMed 41	-28577.0	-792.2	18.4	-15.0

- Pilastro: 325/425 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
325	30	-25076.3	1956.6	-5782.0	1.00	9.37	0.23

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

425	30	-23557.6	-2168.8	5782.0	1.00	10.28	0.24
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5258.1	27721.3	18980.7	48963.7	ø 12/15.0'
0.79	3.26	5258.1	12320.6	18980.7	21761.7	ø 8/15.0'
3.26	3.88	5258.1	27721.3	18980.7	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
325	Ft. 37	-22323.6	873.9	96.0	-81.2
	Fc. 36	-22684.8	874.6	99.8	-273.1
	ClsMax 36	-22684.8	874.6	99.8	-20.8
	ClsMed 36	-22684.8	874.6	99.8	-11.9
425	Ft. 37	-20804.8	-827.4	-69.0	-75.9
	Fc. 36	-21166.1	-827.1	-72.9	-254.5
	ClsMax 36	-21166.1	-827.1	-72.9	-19.4
	ClsMed 36	-21166.1	-827.1	-72.9	-11.1
Combinazioni Frequenti					
325	Ft. 39	-20915.4	796.1	40.8	-81.9
	Fc. 39	-20915.4	796.1	40.8	-247.1
	ClsMax 39	-20915.4	796.1	40.8	-18.8
	ClsMed 39	-20915.4	796.1	40.8	-11.0
425	Ft. 39	-19396.7	-753.5	-16.6	-76.0
	Fc. 39	-19396.7	-753.5	-16.6	-229.2
	ClsMax 39	-19396.7	-753.5	-16.6	-17.4
	ClsMed 39	-19396.7	-753.5	-16.6	-10.2
Combinazioni Quasi Permanenti					
325	Ft. 41	-20566.5	770.3	23.7	-83.0
	Fc. 41	-20566.5	770.3	23.7	-240.6
	ClsMax 41	-20566.5	770.3	23.7	-18.3
	ClsMed 41	-20566.5	770.3	23.7	-10.8
425	Ft. 41	-19047.7	-728.8	-0.5	-76.8
	Fc. 41	-19047.7	-728.8	-0.5	-222.8
	ClsMax 41	-19047.7	-728.8	-0.5	-16.9
	ClsMed 41	-19047.7	-728.8	-0.5	-10.0

- Pilastro: 425/525 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

Staffe: \varnothing 12/15.0' x 61.8+ \varnothing 8/15.0' x 247.3+ \varnothing 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
425	22	-8568.4	1575.0	5822.1	1.00	2.37	0.25
525	24	-6038.5	-1521.1	-4427.4	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7803.1	27721.3	18692.4	48963.7	\varnothing 12/15.0'
0.79	3.26	7803.1	12320.6	18692.4	21761.7	\varnothing 8/15.0'
3.26	3.88	7803.1	27721.3	18692.4	48963.7	\varnothing 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
425	Ft. 37	-11171.5	1064.4	254.5	71.4
	Fc. 36	-11414.8	1067.8	275.9	-227.5
	ClsMax 36	-11414.8	1067.8	275.9	-19.1
	ClsMed 36	-11414.8	1067.8	275.9	-8.6
525	Ft. 36	-9896.1	-1359.5	-435.3	199.0
	Fc. 36	-9896.1	-1359.5	-435.3	-273.5
	ClsMax 36	-9896.1	-1359.5	-435.3	-24.3
	ClsMed 36	-9896.1	-1359.5	-435.3	-10.4
Combinazioni Frequenti					
425	Ft. 39	-10418.4	968.9	170.3	54.6
	Fc. 39	-10418.4	968.9	170.3	-199.5
	ClsMax 39	-10418.4	968.9	170.3	-16.7
	ClsMed 39	-10418.4	968.9	170.3	-7.7
525	Ft. 39	-8899.6	-1230.2	-285.0	168.7
	Fc. 39	-8899.6	-1230.2	-285.0	-235.8
	ClsMax 39	-8899.6	-1230.2	-285.0	-21.1
	ClsMed 39	-8899.6	-1230.2	-285.0	-9.4
Combinazioni Quasi Permanenti					
425	Ft. 41	-10248.5	938.2	149.3	48.6
	Fc. 41	-10248.5	938.2	149.3	-192.7
	ClsMax 41	-10248.5	938.2	149.3	-16.1
	ClsMed 41	-10248.5	938.2	149.3	-7.5
525	Ft. 41	-8729.7	-1192.2	-259.6	159.0
	Fc. 41	-8729.7	-1192.2	-259.6	-227.4
	ClsMax 41	-8729.7	-1192.2	-259.6	-20.3
	ClsMed 41	-8729.7	-1192.2	-259.6	-9.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 26/126 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 10 ø 20 Af=31.42 [cm²] < 2φ20 x 4 V + 1φ20 x 2 B + 0φ12 x 2 H >

Staffe: ø 12/15.0' x 51.3+ø 8/12.5' x 205.3+ø 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
26	25	-32132.5	-12487.9	6429.7	7.79	1.40	0.72
126	25	-30913.8	-12487.9	-6429.7	15.22	3.06	0.73

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	14068.0	27721.3	7899.4	48963.7	ø 12/15.0'
0.51	2.57	14068.0	14784.7	7899.4	26114.0	ø 8/12.5'
2.57	3.08	14068.0	27721.3	7899.4	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
26	Ft. 38	-53518.3	1202.5	466.1	-255.4
	Fc. 36	-56331.3	1316.0	485.5	-593.2
	ClSMax 36	-56331.3	1316.0	485.5	-43.5
	ClSMed 36	-56331.3	1316.0	485.5	-28.6
126	Ft. 37	-54687.2	-2689.2	-869.0	-87.8
	Fc. 36	-55112.5	-2690.1	-869.7	-747.8
	ClSMax 36	-55112.5	-2690.1	-869.7	-57.9
	ClSMed 36	-55112.5	-2690.1	-869.7	-28.1
Combinazioni Frequenti					
26	Ft. 40	-51900.2	1163.8	458.1	-247.5
	Fc. 39	-52667.7	1201.5	464.2	-552.3
	ClSMax 39	-52667.7	1201.5	464.2	-40.5
	ClSMed 39	-52667.7	1201.5	464.2	-26.7
126	Ft. 39	-51448.9	-2456.6	-837.3	-88.8
	Fc. 39	-51448.9	-2456.6	-837.3	-694.1
	ClSMax 39	-51448.9	-2456.6	-837.3	-53.7
	ClSMed 39	-51448.9	-2456.6	-837.3	-26.2
Combinazioni Quasi Permanenti					
26	Ft. 41	-51730.1	1163.6	457.7	-246.3
	Fc. 41	-51730.1	1163.6	457.7	-541.0
	ClSMax 41	-51730.1	1163.6	457.7	-39.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-51730.1	1163.6	457.7	-26.2
126	Ft. 41	-50511.3	-2379.4	-827.0	-90.2
	Fc. 41	-50511.3	-2379.4	-827.0	-678.5
	ClsMax 41	-50511.3	-2379.4	-827.0	-52.4
	ClsMed 41	-50511.3	-2379.4	-827.0	-25.7

- Pilastro: 126/226 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/20.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
126	25	-28432.4	9971.9	5134.3	2.54	1.11	0.82
226	25	-26906.2	-11202.2	-5767.7	2.86	1.73	0.97

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8755.5	27721.3	8298.5	48963.7	$\varnothing 12/15.0'$
0.79	3.28	8755.5	9240.4	8298.5	16321.2	$\varnothing 8/20.0'$
3.28	3.90	8755.5	27721.3	8298.5	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
126	Ft. 37	-44142.4	3202.2	1222.7	133.1
	Fc. 36	-44569.9	3203.9	1225.2	-850.2
	ClsMax 36	-44569.9	3203.9	1225.2	-68.3
	ClsMed 36	-44569.9	3203.9	1225.2	-29.9
226	Ft. 37	-42616.2	-3173.7	-1259.9	154.4
	Fc. 36	-43043.6	-3176.0	-1262.5	-840.6
	ClsMax 36	-43043.6	-3176.0	-1262.5	-67.8
	ClsMed 36	-43043.6	-3176.0	-1262.5	-29.5
Combinazioni Frequenti					
126	Ft. 39	-41564.5	2923.7	1168.8	108.9
	Fc. 39	-41564.5	2923.7	1168.8	-786.0
	ClsMax 39	-41564.5	2923.7	1168.8	-63.0
	ClsMed 39	-41564.5	2923.7	1168.8	-27.5
226	Ft. 39	-40038.3	-2896.3	-1202.1	129.1
	Fc. 39	-40038.3	-2896.3	-1202.1	-776.0

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	ClsMax 39	-40038.3	-2896.3	-1202.1	-62.4
	ClsMed 39	-40038.3	-2896.3	-1202.1	-27.1

Combinazioni Quasi Permanenti

126	Ft. 41	-40847.7	2831.4	1151.7	99.2
	Fc. 41	-40847.7	2831.4	1151.7	-766.7
	ClsMax 41	-40847.7	2831.4	1151.7	-61.4
	ClsMed 41	-40847.7	2831.4	1151.7	-26.8
226	Ft. 41	-39321.5	-2804.5	-1183.7	119.0
	Fc. 41	-39321.5	-2804.5	-1183.7	-756.6
	ClsMax 41	-39321.5	-2804.5	-1183.7	-60.8
	ClsMed 41	-39321.5	-2804.5	-1183.7	-26.3

- Pilastro: 226/326 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
226	21	-23936.5	11257.5	5796.2	2.68	1.25	0.75
326	21	-22417.8	-11229.9	-5782.0	2.65	1.46	0.76

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9892.4	27721.3	10226.4	48963.7	$\phi 12/15.0'$
0.79	3.26	9892.4	12320.6	10226.4	21761.7	$\phi 8/15.0'$
3.26	3.88	9892.4	27721.3	10226.4	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

226	Ft. 37	-33365.6	3204.7	1463.4	293.9
	Fc. 36	-33801.9	3208.1	1468.8	-740.2
	ClsMax 36	-33801.9	3208.1	1468.8	-62.1
	ClsMed 36	-33801.9	3208.1	1468.8	-26.0
326	Ft. 37	-31846.9	-3244.8	-1477.8	335.4
	Fc. 36	-32283.2	-3248.8	-1483.9	-739.9
	ClsMax 36	-32283.2	-3248.8	-1483.9	-62.6
	ClsMed 36	-32283.2	-3248.8	-1483.9	-26.1

Combinazioni Frequenti

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226	Ft. 39	-31335.9	2922.3	1387.2	256.7
	Fc. 39	-31335.9	2922.3	1387.2	-681.5
	ClSMax 39	-31335.9	2922.3	1387.2	-57.1
	ClSMed 39	-31335.9	2922.3	1387.2	-23.8
326	Ft. 39	-29817.1	-2957.8	-1400.7	295.9
	Fc. 39	-29817.1	-2957.8	-1400.7	-680.4
	ClSMax 39	-29817.1	-2957.8	-1400.7	-57.5
	ClSMed 39	-29817.1	-2957.8	-1400.7	-23.8

Combinazioni Quasi Permanenti

226	Ft. 41	-30804.7	2829.3	1363.7	242.2
	Fc. 41	-30804.7	2829.3	1363.7	-664.0
	ClSMax 41	-30804.7	2829.3	1363.7	-55.5
	ClSMed 41	-30804.7	2829.3	1363.7	-23.1
326	Ft. 41	-29286.0	-2863.5	-1377.0	280.6
	Fc. 41	-29286.0	-2863.5	-1377.0	-662.7
	ClSMax 41	-29286.0	-2863.5	-1377.0	-55.9
	ClSMed 41	-29286.0	-2863.5	-1377.0	-23.1

- Pilastro: 326/426 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
326	19	-18522.3	11336.8	5782.0	71.02	1.56	0.79
426	19	-17003.6	-11229.9	-5782.0	1770.70	1.65	0.80

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8869.9	27721.3	9413.9	48963.7	$\phi 12/15.0'$
0.79	3.26	8869.9	12320.6	9413.9	21761.7	$\phi 8/15.0'$
3.26	3.88	8869.9	27721.3	9413.9	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
326	Ft. 37	-23203.6	3287.3	1596.7	568.2
	Fc. 36	-23669.2	3291.6	1607.2	-718.7
	ClSMax 36	-23669.2	3291.6	1607.2	-63.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 36	-23669.2	3291.6	1607.2	-25.6
426	Ft. 37	-21684.9	-3296.1	-1596.9	613.1
	Fc. 36	-22150.5	-3299.9	-1609.1	-712.9
	ClsMax 36	-22150.5	-3299.9	-1609.1	-63.9
	ClsMed 36	-22150.5	-3299.9	-1609.1	-25.5

Combinazioni Frequenti

326	Ft. 39	-21657.9	2995.1	1507.4	510.4
	Fc. 39	-21657.9	2995.1	1507.4	-659.2
	ClsMax 39	-21657.9	2995.1	1507.4	-58.4
	ClsMed 39	-21657.9	2995.1	1507.4	-23.3
426	Ft. 39	-20139.2	-3002.3	-1506.0	554.3
	Fc. 39	-20139.2	-3002.3	-1506.0	-653.0
	ClsMax 39	-20139.2	-3002.3	-1506.0	-58.5
	ClsMed 39	-20139.2	-3002.3	-1506.0	-23.2

Combinazioni Quasi Permanenti

326	Ft. 41	-21297.9	2899.1	1481.1	487.9
	Fc. 41	-21297.9	2899.1	1481.1	-641.9
	ClsMax 41	-21297.9	2899.1	1481.1	-56.8
	ClsMed 41	-21297.9	2899.1	1481.1	-22.6
426	Ft. 41	-19779.1	-2905.7	-1479.8	531.3
	Fc. 41	-19779.1	-2905.7	-1479.8	-635.7
	ClsMax 41	-19779.1	-2905.7	-1479.8	-56.8
	ClsMed 41	-19779.1	-2905.7	-1479.8	-22.5

- Pilastro: 426/526 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
426	16	-13221.2	11847.0	5782.0	554.35	2.51	0.87
526	30	-10001.1	-6306.7	-2940.9	1.00	2.79	0.44

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8372.6	27721.3	9835.3	48963.7	$\varnothing 12/15.0'$
0.79	3.26	8372.6	12320.6	9835.3	21761.7	$\varnothing 8/15.0'$
3.26	3.88	8372.6	27721.3	9835.3	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
426	Ft. 37	-13753.8	3349.4	1837.2	909.6
	Fc. 36	-14319.9	3359.3	1862.4	-708.4
	ClsMax 36	-14319.9	3359.3	1862.4	-67.0
	ClsMed 36	-14319.9	3359.3	1862.4	-25.4
526	Ft. 37	-12235.1	-3393.9	-2011.8	1001.7
	Fc. 36	-12801.1	-3410.1	-2046.5	-727.4
	ClsMax 36	-12801.1	-3410.1	-2046.5	-69.5
	ClsMed 36	-12801.1	-3410.1	-2046.5	-25.8
Combinazioni Frequenti					
426	Ft. 39	-12587.0	3049.6	1723.1	833.4
	Fc. 39	-12587.0	3049.6	1723.1	-644.5
	ClsMax 39	-12587.0	3049.6	1723.1	-61.1
	ClsMed 39	-12587.0	3049.6	1723.1	-23.1
526	Ft. 39	-11068.3	-3089.5	-1882.4	921.9
	Fc. 39	-11068.3	-3089.5	-1882.4	-659.2
	ClsMax 39	-11068.3	-3089.5	-1882.4	-63.2
	ClsMed 39	-11068.3	-3089.5	-1882.4	-23.4
Combinazioni Quasi Permanenti					
426	Ft. 41	-12386.7	2953.0	1693.4	804.0
	Fc. 41	-12386.7	2953.0	1693.4	-628.1
	ClsMax 41	-12386.7	2953.0	1693.4	-59.4
	ClsMed 41	-12386.7	2953.0	1693.4	-22.4
526	Ft. 41	-10868.0	-2993.4	-1850.8	892.3
	Fc. 41	-10868.0	-2993.4	-1850.8	-642.7
	ClsMax 41	-10868.0	-2993.4	-1850.8	-61.5
	ClsMed 41	-10868.0	-2993.4	-1850.8	-22.7

- Pilastro: 526/626 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$ Ast/s=0.100531 < $0.08 fcd bst/fyd 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
526	30	-4219.6	4789.1	1641.6	1.00	1.00	0.37
626	1	-6654.1	-3169.4	13.6	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	1.18	6072.4	9240.4	1700.3	16321.2	ø 8/20.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

526	Ft. 37	-4486.9	3487.2	1536.7	1237.4
	Fc. 36	-5277.2	3465.7	1573.4	-625.1
	ClsMax 36	-5277.2	3465.7	1573.4	-64.8
	ClsMed 36	-5277.2	3465.7	1573.4	-24.8
626	Ft. 36	-4789.7	-2243.7	12.4	589.9
	Fc. 36	-4789.7	-2243.7	12.4	-286.1
	ClsMax 36	-4789.7	-2243.7	12.4	-31.6
	ClsMed 36	-4789.7	-2243.7	12.4	-15.7

Combinazioni Frequenti

526	Ft. 39	-3605.6	3174.4	1433.5	1149.4
	Fc. 39	-3605.6	3174.4	1433.5	-561.8
	ClsMax 39	-3605.6	3174.4	1433.5	-59.1
	ClsMed 39	-3605.6	3174.4	1433.5	-22.5
626	Ft. 40	-3403.9	-1331.3	17.1	332.6
	Fc. 40	-3403.9	-1331.3	17.1	-176.3
	ClsMax 40	-3403.9	-1331.3	17.1	-19.0
	ClsMed 40	-3403.9	-1331.3	17.1	-9.4

Combinazioni Quasi Permanenti

526	Ft. 41	-3575.3	3063.0	1411.4	1109.9
	Fc. 41	-3575.3	3063.0	1411.4	-546.5
	ClsMax 41	-3575.3	3063.0	1411.4	-57.4
	ClsMed 41	-3575.3	3063.0	1411.4	-21.7
626	Ft. 41	-3087.8	-1109.1	17.3	269.2
	Fc. 41	-3087.8	-1109.1	17.3	-149.6
	ClsMax 41	-3087.8	-1109.1	17.3	-15.9
	ClsMed 41	-3087.8	-1109.1	17.3	-7.9

- Pilastro: 27/127 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
27	17	-68523.7	12793.6	5898.7	157.94	6.76	0.82
127	17	-67305.0	-12793.6	-5898.7	6.72	12.55	0.83

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11825.0	27721.3	5585.6	48963.7	ø 12/15.0'
0.51	2.57	11825.0	14784.7	5585.6	26114.0	ø 8/12.5'
2.57	3.08	11825.0	27721.3	5585.6	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

27	Ft. 38	-83723.2	1301.4	83.1	-553.7
	Fc. 36	-88208.3	1425.2	88.9	-907.1
	ClsMax 36	-88208.3	1425.2	88.9	-64.8
	ClsMed 36	-88208.3	1425.2	88.9	-49.5
127	Ft. 38	-82504.5	-2659.1	-35.0	-396.8
	Fc. 36	-86989.5	-2911.5	-37.4	-1057.4
	ClsMax 36	-86989.5	-2911.5	-37.4	-79.2
	ClsMed 36	-86989.5	-2911.5	-37.4	-48.8

Combinazioni Frequenti

27	Ft. 40	-81046.8	1259.9	79.7	-536.1
	Fc. 39	-82246.5	1301.1	81.2	-842.6
	ClsMax 39	-82246.5	1301.1	81.2	-60.1
	ClsMed 39	-82246.5	1301.1	81.2	-46.1
127	Ft. 40	-79828.1	-2574.4	-33.2	-383.8
	Fc. 39	-81027.8	-2658.4	-33.7	-978.9
	ClsMax 39	-81027.8	-2658.4	-33.7	-73.2
	ClsMed 39	-81027.8	-2658.4	-33.7	-45.5

Combinazioni Quasi Permanenti

27	Ft. 41	-80751.5	1259.8	79.3	-533.6
	Fc. 41	-80751.5	1259.8	79.3	-825.3
	ClsMax 41	-80751.5	1259.8	79.3	-58.8
	ClsMed 41	-80751.5	1259.8	79.3	-45.3
127	Ft. 41	-79532.7	-2574.2	-32.9	-381.4
	Fc. 41	-79532.7	-2574.2	-32.9	-957.0
	ClsMax 41	-79532.7	-2574.2	-32.9	-71.5
	ClsMed 41	-79532.7	-2574.2	-32.9	-44.6

- Pilastro: 127/227 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 0φ20 x 2 H >

Staffe: ø 12/15.0' x 62.2+ø 8/15.0' x 248.7+ø 12/15.0' x 62.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
127	8	-57075.4	9971.9	-4710.3	100.03	1.97	0.63
227	16	-53540.4	-11955.4	-5291.4	4441.68	9.31	0.81

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9714.5	27721.3	8183.9	48963.7	ø 12/15.0'
0.79	3.28	9714.5	12320.6	8183.9	21761.7	ø 8/15.0'
3.28	3.90	9714.5	27721.3	8183.9	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

127	Ft. 37	-70989.1	3424.0	176.9	-204.0
	Fc. 36	-71728.2	3424.5	179.1	-997.1
	ClsMax 36	-71728.2	3424.5	179.1	-76.8
	ClsMed 36	-71728.2	3424.5	179.1	-40.2
227	Ft. 37	-69462.9	-3350.5	-168.7	-199.9
	Fc. 36	-70202.0	-3351.2	-170.8	-975.4
	ClsMax 36	-70202.0	-3351.2	-170.8	-75.2
	ClsMed 36	-70202.0	-3351.2	-170.8	-39.4

Combinazioni Frequenti

127	Ft. 39	-66644.2	3124.3	162.9	-201.8
	Fc. 39	-66644.2	3124.3	162.9	-919.7
	ClsMax 39	-66644.2	3124.3	162.9	-70.8
	ClsMed 39	-66644.2	3124.3	162.9	-37.4
227	Ft. 39	-65118.0	-3054.7	-156.4	-197.1
	Fc. 39	-65118.0	-3054.7	-156.4	-898.7
	ClsMax 39	-65118.0	-3054.7	-156.4	-69.1
	ClsMed 39	-65118.0	-3054.7	-156.4	-36.5

Combinazioni Quasi Permanenti

127	Ft. 41	-65442.3	3024.5	158.9	-203.0
	Fc. 41	-65442.3	3024.5	158.9	-898.3
	ClsMax 41	-65442.3	3024.5	158.9	-69.0
	ClsMed 41	-65442.3	3024.5	158.9	-36.7
227	Ft. 41	-63916.0	-2956.3	-153.0	-198.2
	Fc. 41	-63916.0	-2956.3	-153.0	-877.4
	ClsMax 41	-63916.0	-2956.3	-153.0	-67.4
	ClsMed 41	-63916.0	-2956.3	-153.0	-35.9

- Pilastro: 227/327 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
227	15	-45260.1	11257.5	5317.5	29.79	1.57	0.63
327	19	-42867.7	-11229.9	-5304.5	3838.28	1.96	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10988.2	27721.3	9898.2	48963.7	$\phi 12/15.0'$
0.79	3.26	10988.2	12320.6	9898.2	21761.7	$\phi 8/15.0'$
3.26	3.88	10988.2	27721.3	9898.2	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
227	Ft. 37	-54223.0	3311.4	307.1	-68.7
	Fc. 36	-54963.7	3312.5	311.1	-787.8
	ClsMax 36	-54963.7	3312.5	311.1	-62.4
	ClsMed 36	-54963.7	3312.5	311.1	-30.3
327	Ft. 37	-52704.2	-3326.3	-303.2	-53.0
	Fc. 36	-53444.9	-3327.8	-307.1	-777.9
	ClsMax 36	-53444.9	-3327.8	-307.1	-61.8
	ClsMed 36	-53444.9	-3327.8	-307.1	-30.0
Combinazioni Frequenti					
227	Ft. 39	-50763.9	3015.3	283.8	-74.7
	Fc. 39	-50763.9	3015.3	283.8	-722.6
	ClsMax 39	-50763.9	3015.3	283.8	-57.1
	ClsMed 39	-50763.9	3015.3	283.8	-27.7
327	Ft. 39	-49245.1	-3027.3	-281.1	-59.8
	Fc. 39	-49245.1	-3027.3	-281.1	-712.4
	ClsMax 39	-49245.1	-3027.3	-281.1	-56.5
	ClsMed 39	-49245.1	-3027.3	-281.1	-27.4
Combinazioni Quasi Permanenti					
227	Ft. 41	-49857.8	2916.9	277.4	-78.6
	Fc. 41	-49857.8	2916.9	277.4	-704.9
	ClsMax 41	-49857.8	2916.9	277.4	-55.7
	ClsMed 41	-49857.8	2916.9	277.4	-27.0
327	Ft. 41	-48339.0	-2928.1	-275.0	-64.0
	Fc. 41	-48339.0	-2928.1	-275.0	-694.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-48339.0	-2928.1	-275.0	-55.0
	ClsMed 41	-48339.0	-2928.1	-275.0	-26.7

- Pilastro: 327/427 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/15.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
327	8	-30582.6	11443.9	-5304.5	128.07	2.10	0.71
427	5	-29336.6	-11229.9	5304.5	87.75	2.01	0.71

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10142.7	27721.3	9574.0	48963.7	ϕ 12/15.0'
0.79	3.26	10142.7	12320.6	9574.0	21761.7	ϕ 8/15.0'
3.26	3.88	10142.7	27721.3	9574.0	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
327	Ft. 37	-37547.9	3336.3	376.8	140.5
	Fc. 36	-38291.1	3337.2	382.0	-683.1
	ClsMax 36	-38291.1	3337.2	382.0	-56.7
	ClsMed 36	-38291.1	3337.2	382.0	-27.0
427	Ft. 37	-36029.1	-3337.8	-347.0	162.8
	Fc. 36	-36772.3	-3337.8	-351.5	-671.2
	ClsMax 36	-36772.3	-3337.8	-351.5	-56.1
	ClsMed 36	-36772.3	-3337.8	-351.5	-26.8
Combinazioni Frequenti					
327	Ft. 39	-34972.9	3033.7	348.2	115.3
	Fc. 39	-34972.9	3033.7	348.2	-622.1
	ClsMax 39	-34972.9	3033.7	348.2	-51.6
	ClsMed 39	-34972.9	3033.7	348.2	-24.6
427	Ft. 39	-33454.2	-3033.8	-321.1	136.8
	Fc. 39	-33454.2	-3033.8	-321.1	-610.4
	ClsMax 39	-33454.2	-3033.8	-321.1	-51.0
	ClsMed 39	-33454.2	-3033.8	-321.1	-24.3
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

327	Ft. 41	-34362.4	2933.2	340.4	103.6
	Fc. 41	-34362.4	2933.2	340.4	-605.2
	ClsMax 41	-34362.4	2933.2	340.4	-50.1
	ClsMed 41	-34362.4	2933.2	340.4	-23.9
427	Ft. 41	-32843.6	-2932.5	-314.0	124.4
	Fc. 41	-32843.6	-2932.5	-314.0	-593.4
	ClsMax 41	-32843.6	-2932.5	-314.0	-49.4
	ClsMed 41	-32843.6	-2932.5	-314.0	-23.6

- Pilastro: 427/527 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
427	17	-16743.2	11791.2	5304.5	211.39	4.25	0.84
527	22	-19141.3	-5461.8	-4406.2	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9397.2	27721.3	7696.4	48963.7	$\varnothing 12/15.0'$
0.79	3.26	9397.2	12320.6	7696.4	21761.7	$\varnothing 8/15.0'$
3.26	3.88	9397.2	27721.3	7696.4	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
427	Ft. 37	-20905.1	3372.0	523.0	525.5
	Fc. 36	-21650.3	3378.4	530.9	-604.4
	ClsMax 36	-21650.3	3378.4	530.9	-55.4
	ClsMed 36	-21650.3	3378.4	530.9	-25.4
527	Ft. 37	-19386.4	-3405.4	-659.2	595.0
	Fc. 36	-20131.5	-3419.1	-668.8	-615.0
	ClsMax 36	-20131.5	-3419.1	-668.8	-57.0
	ClsMed 36	-20131.5	-3419.1	-668.8	-25.6
Combinazioni Frequenti					
427	Ft. 39	-19215.5	3064.0	484.2	472.5
	Fc. 39	-19215.5	3064.0	484.2	-545.9
	ClsMax 39	-19215.5	3064.0	484.2	-50.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-19215.5	3064.0	484.2	-23.0
527	Ft. 39	-17696.8	-3094.8	-611.9	540.0
	Fc. 39	-17696.8	-3094.8	-611.9	-554.1
	ClsMax 39	-17696.8	-3094.8	-611.9	-51.6
	ClsMed 39	-17696.8	-3094.8	-611.9	-23.1

Combinazioni Quasi Permanenti

427	Ft. 41	-18900.7	2963.5	473.9	449.0
	Fc. 41	-18900.7	2963.5	473.9	-530.5
	ClsMax 41	-18900.7	2963.5	473.9	-48.6
	ClsMed 41	-18900.7	2963.5	473.9	-22.3
527	Ft. 41	-17381.9	-2995.7	-599.3	516.4
	Fc. 41	-17381.9	-2995.7	-599.3	-538.7
	ClsMax 41	-17381.9	-2995.7	-599.3	-50.0
	ClsMed 41	-17381.9	-2995.7	-599.3	-22.4

- Pilastro: 527/627 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$ Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
527	30	-3431.6	4246.2	-141.1	1.00	1.00	0.33
627	1	-5645.2	-2832.4	-355.2	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5379.8	9240.4	1900.9	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
527	Ft. 37	-3805.6	3093.2	-12.9	908.0
	Fc. 36	-4556.7	3066.2	-14.6	-371.1
	ClsMax 37	-3805.6	3093.2	-12.9	-42.6
	ClsMed 37	-3805.6	3093.2	-12.9	-21.2
627	Ft. 36	-4069.2	-2003.7	-254.7	566.8
	Fc. 36	-4069.2	-2003.7	-254.7	-285.5
	ClsMax 36	-4069.2	-2003.7	-254.7	-30.7
	ClsMed 36	-4069.2	-2003.7	-254.7	-14.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Frequenti

527	Ft. 39	-2994.3	2805.2	-15.6	839.8
	Fc. 39	-2994.3	2805.2	-15.6	-327.8
	ClsMax 39	-2994.3	2805.2	-15.6	-38.5
	ClsMed 39	-2994.3	2805.2	-15.6	-19.2
627	Ft. 40	-2787.2	-1140.3	-228.1	317.8
	Fc. 40	-2787.2	-1140.3	-228.1	-177.3
	ClsMax 40	-2787.2	-1140.3	-228.1	-18.5
	ClsMed 40	-2787.2	-1140.3	-228.1	-8.1

Combinazioni Quasi Permanenti

527	Ft. 41	-2974.2	2700.2	-17.1	805.5
	Fc. 41	-2974.2	2700.2	-17.1	-316.7
	ClsMax 41	-2974.2	2700.2	-17.1	-37.1
	ClsMed 41	-2974.2	2700.2	-17.1	-18.5
627	Ft. 41	-2486.7	-927.0	-226.7	256.6
	Fc. 41	-2486.7	-927.0	-226.7	-151.2
	ClsMax 41	-2486.7	-927.0	-226.7	-15.5
	ClsMed 41	-2486.7	-927.0	-226.7	-6.6

- Pilastro: 28/128 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
28	17	-71518.1	12487.9	5898.7	48.21	6.87	0.79
128	17	-70299.4	-12487.9	-5898.7	6.25	13.16	0.80

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11814.6	27721.3	5580.6	48963.7	$\phi 12/15.0'$
0.51	2.57	11814.6	14784.7	5580.6	26114.0	$\phi 8/12.5'$
2.57	3.08	11814.6	27721.3	5580.6	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
28	Ft. 38	-84748.9	1304.2	67.7	-563.2
	Fc. 36	-89294.9	1428.2	72.3	-915.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-89294.9	1428.2	72.3	-65.3
	ClsMed 36	-89294.9	1428.2	72.3	-50.1
128	Ft. 38	-83530.1	-2663.9	-2.8	-407.5
	Fc. 36	-88076.1	-2917.0	-2.6	-1064.4
	ClsMax 36	-88076.1	-2917.0	-2.6	-79.6
	ClsMed 36	-88076.1	-2917.0	-2.6	-49.4

Combinazioni Frequenti

28	Ft. 40	-82027.1	1262.6	65.2	-545.1
	Fc. 39	-83240.8	1303.9	66.5	-850.1
	ClsMax 39	-83240.8	1303.9	66.5	-60.6
	ClsMed 39	-83240.8	1303.9	66.5	-46.7
128	Ft. 40	-80808.3	-2579.2	-2.9	-394.0
	Fc. 39	-82022.0	-2663.4	-2.8	-985.4
	ClsMax 39	-82022.0	-2663.4	-2.8	-73.6
	ClsMed 39	-82022.0	-2663.4	-2.8	-46.0

Combinazioni Quasi Permanenti

28	Ft. 41	-81725.4	1262.6	65.0	-542.6
	Fc. 41	-81725.4	1262.6	65.0	-832.6
	ClsMax 41	-81725.4	1262.6	65.0	-59.3
	ClsMed 41	-81725.4	1262.6	65.0	-45.8
128	Ft. 41	-80506.7	-2579.1	-2.9	-391.4
	Fc. 41	-80506.7	-2579.1	-2.9	-963.3
	ClsMax 41	-80506.7	-2579.1	-2.9	-71.9
	ClsMed 41	-80506.7	-2579.1	-2.9	-45.2

- Pilastro: 128/228 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
128	17	-57498.9	9971.9	4710.3	94.40	7.08	0.63
228	17	-55972.7	-11599.0	-5291.4	25.22	10.69	0.77

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9698.5	27721.3	4581.1	48963.7	$\phi 12/15.0'$
0.79	3.28	9698.5	12320.6	4581.1	21761.7	$\phi 8/15.0'$
3.28	3.90	9698.5	27721.3	4581.1	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
128	Ft. 37	-72033.9	3427.0	99.4	-218.6
	Fc. 36	-72787.7	3427.4	100.4	-1000.1
	ClsMax 36	-72787.7	3427.4	100.4	-77.0
	ClsMed 36	-72787.7	3427.4	100.4	-40.8
228	Ft. 37	-70507.6	-3350.4	-52.6	-217.9
	Fc. 36	-71261.4	-3351.0	-53.0	-975.0
	ClsMax 36	-71261.4	-3351.0	-53.0	-75.0
	ClsMed 36	-71261.4	-3351.0	-53.0	-40.0
Combinazioni Frequenti					
128	Ft. 39	-67616.1	3126.9	91.5	-215.3
	Fc. 39	-67616.1	3126.9	91.5	-922.6
	ClsMax 39	-67616.1	3126.9	91.5	-70.9
	ClsMed 39	-67616.1	3126.9	91.5	-37.9
228	Ft. 39	-66089.8	-3054.6	-48.7	-213.8
	Fc. 39	-66089.8	-3054.6	-48.7	-898.3
	ClsMax 39	-66089.8	-3054.6	-48.7	-69.0
	ClsMed 39	-66089.8	-3054.6	-48.7	-37.1
Combinazioni Quasi Permanenti					
128	Ft. 41	-66394.8	3027.1	89.2	-216.2
	Fc. 41	-66394.8	3027.1	89.2	-901.1
	ClsMax 41	-66394.8	3027.1	89.2	-69.2
	ClsMed 41	-66394.8	3027.1	89.2	-37.2
228	Ft. 41	-64868.5	-2956.1	-47.6	-214.5
	Fc. 41	-64868.5	-2956.1	-47.6	-877.1
	ClsMax 41	-64868.5	-2956.1	-47.6	-67.3
	ClsMed 41	-64868.5	-2956.1	-47.6	-36.4

- Pilastro: 228/328 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
228	8	-45599.5	11257.5	-5317.5	107.15	1.97	0.63
328	9	-43856.3	-11229.9	5304.5	236.74	2.24	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	10971.6	27721.3	9762.6	48963.7	ø 12/15.0'
0.79	3.26	10971.6	12320.6	9762.6	21761.7	ø 8/15.0'
3.26	3.88	10971.6	27721.3	9762.6	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
228	Ft. 37	-55137.8	3304.8	129.5	-91.2
	Fc. 36	-55890.9	3305.8	131.0	-780.6
	ClsMax 36	-55890.9	3305.8	131.0	-61.7
	ClsMed 36	-55890.9	3305.8	131.0	-30.4
328	Ft. 37	-53619.0	-3318.3	-99.7	-78.2
	Fc. 36	-54372.2	-3319.5	-100.7	-768.3
	ClsMax 36	-54372.2	-3319.5	-100.7	-60.9
	ClsMed 36	-54372.2	-3319.5	-100.7	-30.1
Combinazioni Frequenti					
228	Ft. 39	-51615.6	3009.1	118.6	-95.2
	Fc. 39	-51615.6	3009.1	118.6	-716.1
	ClsMax 39	-51615.6	3009.1	118.6	-56.5
	ClsMed 39	-51615.6	3009.1	118.6	-27.9
328	Ft. 39	-50096.8	-3019.8	-91.7	-82.8
	Fc. 39	-50096.8	-3019.8	-91.7	-703.7
	ClsMax 39	-50096.8	-3019.8	-91.7	-55.7
	ClsMed 39	-50096.8	-3019.8	-91.7	-27.6
Combinazioni Quasi Permanenti					
228	Ft. 41	-50692.6	2910.8	115.5	-98.5
	Fc. 41	-50692.6	2910.8	115.5	-698.6
	ClsMax 41	-50692.6	2910.8	115.5	-55.0
	ClsMed 41	-50692.6	2910.8	115.5	-27.2
328	Ft. 41	-49173.8	-2920.7	-89.4	-86.4
	Fc. 41	-49173.8	-2920.7	-89.4	-686.1
	ClsMax 41	-49173.8	-2920.7	-89.4	-54.2
	ClsMed 41	-49173.8	-2920.7	-89.4	-26.8

- Pilastro: 328/428 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
328	13	-31340.7	11336.4	5304.5	58.74	5.22	0.70

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

428	13	-29822.0	-11229.9	-5304.5	207.58	5.78	0.70
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10132.7	27721.3	9446.3	48963.7	ø 12/15.0'
0.79	3.26	10132.7	12320.6	9446.3	21761.7	ø 8/15.0'
3.26	3.88	10132.7	27721.3	9446.3	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
328	Ft. 37	-38250.1	3324.5	134.9	105.3
	Fc. 36	-39002.4	3325.1	136.7	-664.7
	ClsMax 36	-39002.4	3325.1	136.7	-55.0
	ClsMed 36	-39002.4	3325.1	136.7	-27.0
428	Ft. 37	-36731.4	-3324.7	-90.3	124.9
	Fc. 36	-37483.6	-3324.4	-91.1	-650.9
	ClsMax 36	-37483.6	-3324.4	-91.1	-54.2
	ClsMed 36	-37483.6	-3324.4	-91.1	-26.8
Combinazioni Frequenti					
328	Ft. 39	-35627.4	3022.7	123.1	83.2
	Fc. 39	-35627.4	3022.7	123.1	-605.2
	ClsMax 39	-35627.4	3022.7	123.1	-50.0
	ClsMed 39	-35627.4	3022.7	123.1	-24.6
428	Ft. 39	-34108.6	-3021.6	-82.2	102.1
	Fc. 39	-34108.6	-3021.6	-82.2	-591.8
	ClsMax 39	-34108.6	-3021.6	-82.2	-49.3
	ClsMed 39	-34108.6	-3021.6	-82.2	-24.3
Combinazioni Quasi Permanenti					
328	Ft. 41	-35003.9	2922.4	119.8	72.4
	Fc. 41	-35003.9	2922.4	119.8	-588.8
	ClsMax 41	-35003.9	2922.4	119.8	-48.6
	ClsMed 41	-35003.9	2922.4	119.8	-23.9
428	Ft. 41	-33485.1	-2920.4	-79.8	90.8
	Fc. 41	-33485.1	-2920.4	-79.8	-575.3
	ClsMax 41	-33485.1	-2920.4	-79.8	-47.8
	ClsMed 41	-33485.1	-2920.4	-79.8	-23.6

- Pilastro: 428/528 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

Staffe: \varnothing 12/15.0' x 61.8+ \varnothing 8/15.0' x 247.3+ \varnothing 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
428	17	-17476.3	11417.2	5304.5	20.66	5.66	0.80
528	22	-19259.7	-5020.3	-3957.3	1.00	1.00	0.33

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9472.7	27721.3	7625.8	48963.7	\varnothing 12/15.0'
0.79	3.26	9472.7	12320.6	7625.8	21761.7	\varnothing 8/15.0'
3.26	3.88	9472.7	27721.3	7625.8	48963.7	\varnothing 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
428	Ft. 37	-21345.2	3358.3	228.4	475.5
	Fc. 36	-22095.4	3364.3	232.2	-573.3
	ClSMax 36	-22095.4	3364.3	232.2	-52.6
	ClSMed 36	-22095.4	3364.3	232.2	-25.3
528	Ft. 37	-19826.4	-3393.7	-339.3	540.8
	Fc. 36	-20576.7	-3407.0	-344.6	-580.6
	ClSMax 36	-20576.7	-3407.0	-344.6	-54.0
	ClSMed 36	-20576.7	-3407.0	-344.6	-25.5
Combinazioni Frequenti					
428	Ft. 39	-19626.2	3051.3	209.8	426.0
	Fc. 39	-19626.2	3051.3	209.8	-517.1
	ClSMax 39	-19626.2	3051.3	209.8	-47.6
	ClSMed 39	-19626.2	3051.3	209.8	-22.9
528	Ft. 39	-18107.4	-3083.9	-313.5	489.5
	Fc. 39	-18107.4	-3083.9	-313.5	-522.2
	ClSMax 39	-18107.4	-3083.9	-313.5	-48.8
	ClSMed 39	-18107.4	-3083.9	-313.5	-23.0
Combinazioni Quasi Permanenti					
428	Ft. 41	-19303.2	2951.0	204.8	403.7
	Fc. 41	-19303.2	2951.0	204.8	-502.4
	ClSMax 41	-19303.2	2951.0	204.8	-46.1
	ClSMed 41	-19303.2	2951.0	204.8	-22.2
528	Ft. 41	-17784.5	-2985.0	-306.7	467.0
	Fc. 41	-17784.5	-2985.0	-306.7	-507.6
	ClSMax 41	-17784.5	-2985.0	-306.7	-47.3
	ClSMed 41	-17784.5	-2985.0	-306.7	-22.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 528/628 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
528	2	-5360.0	4164.9	-350.9	1.00	1.00	0.30
628	1	-5856.0	-2830.8	7.3	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5350.0	9240.4	1966.1	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
528	Ft. 37	-3953.9	3066.7	-248.9	926.7
	Fc. 36	-4707.0	3039.6	-252.7	-401.8
	ClsMax 37	-3953.9	3066.7	-248.9	-44.9
	ClsMed 37	-3953.9	3066.7	-248.9	-21.1
628	Ft. 36	-4219.5	-2002.7	3.9	527.5
	Fc. 36	-4219.5	-2002.7	3.9	-253.9
	ClsMax 36	-4219.5	-2002.7	3.9	-28.1
	ClsMed 36	-4219.5	-2002.7	3.9	-14.0
Combinazioni Frequenti					
528	Ft. 39	-3132.9	2780.6	-235.3	857.4
	Fc. 39	-3132.9	2780.6	-235.3	-356.7
	ClsMax 39	-3132.9	2780.6	-235.3	-40.7
	ClsMed 39	-3132.9	2780.6	-235.3	-19.0
628	Ft. 40	-2924.0	-1140.2	6.7	283.5
	Fc. 40	-2924.0	-1140.2	6.7	-150.1
	ClsMax 40	-2924.0	-1140.2	6.7	-16.2
	ClsMed 40	-2924.0	-1140.2	6.7	-8.1
Combinazioni Quasi Permanenti					
528	Ft. 41	-3110.2	2676.1	-232.1	822.6
	Fc. 41	-3110.2	2676.1	-232.1	-345.0
	ClsMax 41	-3110.2	2676.1	-232.1	-39.2
	ClsMed 41	-3110.2	2676.1	-232.1	-18.3
628	Ft. 41	-2622.7	-927.3	6.7	222.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 41	-2622.7	-927.3	6.7	-124.4
	ClsMax 41	-2622.7	-927.3	6.7	-13.2
	ClsMed 41	-2622.7	-927.3	6.7	-6.6

- Pilastro: 29/129 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/12.5' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
29	17	-73687.1	12487.9	5898.7	28.67	6.87	0.79
129	17	-72468.4	-12487.9	-5898.7	5.97	13.19	0.79

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11791.3	27721.3	5569.6	48963.7	$\varnothing 12/15.0'$
0.51	2.57	11791.3	14784.7	5569.6	26114.0	$\varnothing 8/12.5'$
2.57	3.08	11791.3	27721.3	5569.6	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
29	Ft. 38	-84737.6	1304.8	67.1	-563.1
	Fc. 36	-89282.5	1428.9	71.7	-915.2
	ClsMax 36	-89282.5	1428.9	71.7	-65.3
	ClsMed 36	-89282.5	1428.9	71.7	-50.1
129	Ft. 38	-83518.8	-2664.5	-1.6	-407.4
	Fc. 36	-88063.7	-2917.6	-1.4	-1064.3
	ClsMax 36	-88063.7	-2917.6	-1.4	-79.6
	ClsMed 36	-88063.7	-2917.6	-1.4	-49.4
Combinazioni Frequenti					
29	Ft. 40	-82016.4	1263.3	64.7	-545.0
	Fc. 39	-83229.8	1304.6	66.0	-850.0
	ClsMax 39	-83229.8	1304.6	66.0	-60.6
	ClsMed 39	-83229.8	1304.6	66.0	-46.7
129	Ft. 40	-80797.6	-2579.8	-1.7	-393.9
	Fc. 39	-82011.0	-2664.0	-1.7	-985.3
	ClsMax 39	-82011.0	-2664.0	-1.7	-73.6
	ClsMed 39	-82011.0	-2664.0	-1.7	-46.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

29	Ft. 41	-81714.8	1263.3	64.4	-542.5
	Fc. 41	-81714.8	1263.3	64.4	-832.6
	ClsMax 41	-81714.8	1263.3	64.4	-59.3
	ClsMed 41	-81714.8	1263.3	64.4	-45.8
129	Ft. 41	-80496.1	-2579.7	-1.8	-391.4
	Fc. 41	-80496.1	-2579.7	-1.8	-963.2
	ClsMax 41	-80496.1	-2579.7	-1.8	-71.9
	ClsMed 41	-80496.1	-2579.7	-1.8	-45.2

- Pilastro: 129/229 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
129	17	-59413.8	9971.9	4710.3	13.87	7.09	0.63
229	17	-57887.5	-11202.2	-5291.4	11.47	10.70	0.73

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9658.1	27721.3	4562.0	48963.7	$\phi 12/15.0'$
0.79	3.28	9658.1	12320.6	4562.0	21761.7	$\phi 8/15.0'$
3.28	3.90	9658.1	27721.3	4562.0	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
129	Ft. 37	-72020.0	3427.2	98.5	-218.5
	Fc. 36	-72773.7	3427.6	99.4	-999.9
	ClsMax 36	-72773.7	3427.6	99.4	-76.9
	ClsMed 36	-72773.7	3427.6	99.4	-40.8
229	Ft. 37	-70493.8	-3350.8	-52.2	-217.8
	Fc. 36	-71247.4	-3351.4	-52.6	-974.9
	ClsMax 36	-71247.4	-3351.4	-52.6	-75.0
	ClsMed 36	-71247.4	-3351.4	-52.6	-40.0
Combinazioni Frequenti					
129	Ft. 39	-67603.4	3127.3	90.6	-215.2
	Fc. 39	-67603.4	3127.3	90.6	-922.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-67603.4	3127.3	90.6	-70.9
	ClsMed 39	-67603.4	3127.3	90.6	-37.9
229	Ft. 39	-66077.2	-3055.0	-48.3	-213.7
	Fc. 39	-66077.2	-3055.0	-48.3	-898.2
	ClsMax 39	-66077.2	-3055.0	-48.3	-69.0
	ClsMed 39	-66077.2	-3055.0	-48.3	-37.1

Combinazioni Quasi Permanenti

129	Ft. 41	-66382.5	3027.4	88.3	-216.2
	Fc. 41	-66382.5	3027.4	88.3	-900.9
	ClsMax 41	-66382.5	3027.4	88.3	-69.1
	ClsMed 41	-66382.5	3027.4	88.3	-37.2
229	Ft. 41	-64856.2	-2956.6	-47.2	-214.4
	Fc. 41	-64856.2	-2956.6	-47.2	-877.0
	ClsMax 41	-64856.2	-2956.6	-47.2	-67.3
	ClsMed 41	-64856.2	-2956.6	-47.2	-36.4

- Pilastro: 229/329 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
229	17	-45506.8	11257.5	5317.5	183.93	6.60	0.63
329	17	-43988.0	-11229.9	-5304.5	71.02	8.18	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10916.8	27721.3	5156.6	48963.7	$\varnothing 12/15.0'$
0.79	3.26	10916.8	12320.6	5156.6	21761.7	$\varnothing 8/15.0'$
3.26	3.88	10916.8	27721.3	5156.6	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
229	Ft. 37	-55127.1	3303.5	128.3	-91.4
	Fc. 36	-55880.2	3304.4	129.8	-780.2
	ClsMax 36	-55880.2	3304.4	129.8	-61.6
	ClsMed 36	-55880.2	3304.4	129.8	-30.4
329	Ft. 37	-53608.4	-3317.2	-97.1	-78.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-54361.4	-3318.4	-98.1	-767.9
	ClsMax 36	-54361.4	-3318.4	-98.1	-60.8
	ClsMed 36	-54361.4	-3318.4	-98.1	-30.1

Combinazioni Frequenti

229	Ft. 39	-51605.8	3008.0	117.5	-95.3
	Fc. 39	-51605.8	3008.0	117.5	-715.8
	ClsMax 39	-51605.8	3008.0	117.5	-56.5
	ClsMed 39	-51605.8	3008.0	117.5	-27.9
329	Ft. 39	-50087.1	-3018.9	-89.3	-83.0
	Fc. 39	-50087.1	-3018.9	-89.3	-703.3
	ClsMax 39	-50087.1	-3018.9	-89.3	-55.7
	ClsMed 39	-50087.1	-3018.9	-89.3	-27.6

Combinazioni Quasi Permanenti

229	Ft. 41	-50683.1	2909.8	114.4	-98.6
	Fc. 41	-50683.1	2909.8	114.4	-698.3
	ClsMax 41	-50683.1	2909.8	114.4	-55.0
	ClsMed 41	-50683.1	2909.8	114.4	-27.2
329	Ft. 41	-49164.3	-2919.9	-87.0	-86.6
	Fc. 41	-49164.3	-2919.9	-87.0	-685.8
	ClsMax 41	-49164.3	-2919.9	-87.0	-54.2
	ClsMed 41	-49164.3	-2919.9	-87.0	-26.8

- Pilastro: 329/429 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
329	17	-31816.3	11229.9	5304.5	23.06	6.65	0.69
429	17	-30297.5	-11229.9	-5304.5	31.06	7.36	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10062.7	27721.3	4753.2	48963.7	$\phi 12/15.0'$
0.79	3.26	10062.7	12320.6	4753.2	21761.7	$\phi 8/15.0'$
3.26	3.88	10062.7	27721.3	4753.2	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

329	Ft. 37	-38244.4	3322.9	137.7	105.3
	Fc. 36	-38996.5	3323.5	139.6	-664.7
	ClsMax 36	-38996.5	3323.5	139.6	-55.0
	ClsMed 36	-38996.5	3323.5	139.6	-27.0
429	Ft. 37	-36725.6	-3323.2	-100.2	125.6
	Fc. 36	-37477.8	-3322.9	-101.2	-651.5
	ClsMax 36	-37477.8	-3322.9	-101.2	-54.2
	ClsMed 36	-37477.8	-3322.9	-101.2	-26.8

Combinazioni Frequenti

329	Ft. 39	-35622.1	3021.4	125.7	83.2
	Fc. 39	-35622.1	3021.4	125.7	-605.3
	ClsMax 39	-35622.1	3021.4	125.7	-50.0
	ClsMed 39	-35622.1	3021.4	125.7	-24.6
429	Ft. 39	-34103.3	-3020.3	-91.4	102.8
	Fc. 39	-34103.3	-3020.3	-91.4	-592.4
	ClsMax 39	-34103.3	-3020.3	-91.4	-49.3
	ClsMed 39	-34103.3	-3020.3	-91.4	-24.3

Combinazioni Quasi Permanenti

329	Ft. 41	-34998.7	2921.1	122.4	72.5
	Fc. 41	-34998.7	2921.1	122.4	-588.9
	ClsMax 41	-34998.7	2921.1	122.4	-48.6
	ClsMed 41	-34998.7	2921.1	122.4	-23.9
429	Ft. 41	-33480.0	-2919.3	-88.9	91.5
	Fc. 41	-33480.0	-2919.3	-88.9	-575.9
	ClsMax 41	-33480.0	-2919.3	-88.9	-47.8
	ClsMed 41	-33480.0	-2919.3	-88.9	-23.6

- Pilastro: 429/529 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8 + $\phi 8/15.0'$ x 247.3 + $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
429	17	-17893.9	11229.9	5304.5	10.50	5.88	0.79
529	22	-18930.3	-4580.3	-3762.9	1.00	1.00	0.30

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9428.0	27721.3	7581.4	48963.7	$\phi 12/15.0'$
0.79	3.26	9428.0	12320.6	7581.4	21761.7	$\phi 8/15.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	9428.0	27721.3	7581.4	48963.7	ø 12/15.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

429	Ft. 37	-21346.5	3355.6	203.6	471.8
	Fc. 36	-22096.8	3361.6	206.9	-570.2
	ClsMax 36	-22096.8	3361.6	206.9	-52.3
	ClsMed 36	-22096.8	3361.6	206.9	-25.3
529	Ft. 37	-19827.8	-3390.8	-270.4	531.9
	Fc. 36	-20578.1	-3404.1	-274.5	-572.5
	ClsMax 36	-20578.1	-3404.1	-274.5	-53.3
	ClsMed 36	-20578.1	-3404.1	-274.5	-25.4

Combinazioni Frequenti

429	Ft. 39	-19627.4	3048.9	186.6	422.7
	Fc. 39	-19627.4	3048.9	186.6	-514.3
	ClsMax 39	-19627.4	3048.9	186.6	-47.4
	ClsMed 39	-19627.4	3048.9	186.6	-22.9
529	Ft. 39	-18108.6	-3081.4	-249.4	481.2
	Fc. 39	-18108.6	-3081.4	-249.4	-514.8
	ClsMax 39	-18108.6	-3081.4	-249.4	-48.2
	ClsMed 39	-18108.6	-3081.4	-249.4	-23.0

Combinazioni Quasi Permanenti

429	Ft. 41	-19304.4	2948.7	182.1	400.5
	Fc. 41	-19304.4	2948.7	182.1	-499.7
	ClsMax 41	-19304.4	2948.7	182.1	-45.9
	ClsMed 41	-19304.4	2948.7	182.1	-22.2
529	Ft. 41	-17785.7	-2982.6	-243.7	458.9
	Fc. 41	-17785.7	-2982.6	-243.7	-500.3
	ClsMax 41	-17785.7	-2982.6	-243.7	-46.7
	ClsMed 41	-17785.7	-2982.6	-243.7	-22.3

- Pilastro: 529/629 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6 \text{ Ast/s}=0.100531 < 0.08 \text{ fcd bst/fyd } 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
529	2	-5362.2	4166.1	-155.6	1.00	1.00	0.30
629	1	-5858.1	-2832.1	-47.0	1.00	1.00	0.19

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5351.9	9240.4	2254.4	16321.2	ø 8/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
529	Ft. 37	-3955.5	3067.5	-109.6	907.5
	Fc. 36	-4708.6	3040.4	-110.9	-382.9
	ClsMax 37	-3955.5	3067.5	-109.6	-43.4
	ClsMed 37	-3955.5	3067.5	-109.6	-21.1
629	Ft. 36	-4221.1	-2003.6	-34.7	531.9
	Fc. 36	-4221.1	-2003.6	-34.7	-258.1
	ClsMax 36	-4221.1	-2003.6	-34.7	-28.4
	ClsMed 36	-4221.1	-2003.6	-34.7	-14.0
Combinazioni Frequenti					
529	Ft. 39	-3134.3	2781.3	-105.5	839.4
	Fc. 39	-3134.3	2781.3	-105.5	-339.1
	ClsMax 39	-3134.3	2781.3	-105.5	-39.2
	ClsMed 39	-3134.3	2781.3	-105.5	-19.0
629	Ft. 40	-2925.3	-1141.1	-28.3	286.6
	Fc. 40	-2925.3	-1141.1	-28.3	-153.0
	ClsMax 40	-2925.3	-1141.1	-28.3	-16.4
	ClsMed 40	-2925.3	-1141.1	-28.3	-8.1
Combinazioni Quasi Permanenti					
529	Ft. 41	-3111.6	2676.9	-104.6	805.0
	Fc. 41	-3111.6	2676.9	-104.6	-327.7
	ClsMax 41	-3111.6	2676.9	-104.6	-37.8
	ClsMed 41	-3111.6	2676.9	-104.6	-18.3
629	Ft. 41	-2624.1	-928.2	-28.0	225.7
	Fc. 41	-2624.1	-928.2	-28.0	-127.3
	ClsMax 41	-2624.1	-928.2	-28.0	-13.5
	ClsMed 41	-2624.1	-928.2	-28.0	-6.6

- Pilastro: 30/130 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
30	17	-75901.5	12487.9	5898.7	20.50	6.88	0.78
130	17	-74682.8	-12487.9	-5898.7	5.72	13.29	0.78

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11767.0	27721.3	5558.2	48963.7	Ø 12/15.0'
0.51	2.57	11767.0	14784.7	5558.2	26114.0	Ø 8/12.5'
2.57	3.08	11767.0	27721.3	5558.2	48963.7	Ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
30	Ft. 38	-84792.2	1304.7	65.6	-563.7
	Fc. 36	-89340.9	1428.6	70.3	-915.5
	ClSMax 36	-89340.9	1428.6	70.3	-65.4
	ClSMed 36	-89340.9	1428.6	70.3	-50.1
130	Ft. 38	-83573.5	-2663.4	1.6	-408.0
	Fc. 36	-88122.1	-2916.3	1.7	-1064.7
	ClSMax 36	-88122.1	-2916.3	1.7	-79.6
	ClSMed 36	-88122.1	-2916.3	1.7	-49.4
Combinazioni Frequenti					
30	Ft. 40	-82068.8	1263.2	63.2	-545.6
	Fc. 39	-83283.2	1304.4	64.5	-850.4
	ClSMax 39	-83283.2	1304.4	64.5	-60.6
	ClSMed 39	-83283.2	1304.4	64.5	-46.7
130	Ft. 40	-80850.0	-2578.7	1.4	-394.5
	Fc. 39	-82064.5	-2662.9	1.4	-985.6
	ClSMax 39	-82064.5	-2662.9	1.4	-73.6
	ClSMed 39	-82064.5	-2662.9	1.4	-46.0
Combinazioni Quasi Permanenti					
30	Ft. 41	-81767.0	1263.1	62.9	-543.1
	Fc. 41	-81767.0	1263.1	62.9	-832.9
	ClSMax 41	-81767.0	1263.1	62.9	-59.3
	ClSMed 41	-81767.0	1263.1	62.9	-45.9
130	Ft. 41	-80548.2	-2578.6	1.4	-391.9
	Fc. 41	-80548.2	-2578.6	1.4	-963.5
	ClSMax 41	-80548.2	-2578.6	1.4	-71.9
	ClSMed 41	-80548.2	-2578.6	1.4	-45.2

- Pilastro: 130/230 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/15.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
130	17	-61383.9	9971.9	4710.3	7.50	7.10	0.62
230	17	-59857.6	-11202.2	-5291.4	7.52	10.64	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9617.2	27721.3	4542.7	48963.7	$\varnothing 12/15.0'$
0.79	3.28	9617.2	12320.6	4542.7	21761.7	$\varnothing 8/15.0'$
3.28	3.90	9617.2	27721.3	4542.7	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
130	Ft. 37	-72081.3	3425.3	98.4	-219.2
	Fc. 36	-72835.6	3425.8	99.3	-1000.2
	ClsMax 36	-72835.6	3425.8	99.3	-77.0
	ClsMed 36	-72835.6	3425.8	99.3	-40.9
230	Ft. 37	-70555.1	-3349.4	-55.9	-218.2
	Fc. 36	-71309.3	-3350.0	-56.3	-975.6
	ClsMax 36	-71309.3	-3350.0	-56.3	-75.0
	ClsMed 36	-71309.3	-3350.0	-56.3	-40.0
Combinazioni Frequenti					
130	Ft. 39	-67660.8	3125.7	90.3	-215.9
	Fc. 39	-67660.8	3125.7	90.3	-922.7
	ClsMax 39	-67660.8	3125.7	90.3	-70.9
	ClsMed 39	-67660.8	3125.7	90.3	-38.0
230	Ft. 39	-66134.5	-3053.8	-51.7	-214.0
	Fc. 39	-66134.5	-3053.8	-51.7	-898.9
	ClsMax 39	-66134.5	-3053.8	-51.7	-69.0
	ClsMed 39	-66134.5	-3053.8	-51.7	-37.1
Combinazioni Quasi Permanenti					
130	Ft. 41	-66438.7	3025.9	87.9	-216.8
	Fc. 41	-66438.7	3025.9	87.9	-901.2
	ClsMax 41	-66438.7	3025.9	87.9	-69.2
	ClsMed 41	-66438.7	3025.9	87.9	-37.3
230	Ft. 41	-64912.4	-2955.5	-50.4	-214.8
	Fc. 41	-64912.4	-2955.5	-50.4	-877.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-64912.4	-2955.5	-50.4	-67.3
	ClsMed 41	-64912.4	-2955.5	-50.4	-36.4

- Pilastro: 230/330 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/15.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
230	17	-47001.5	11257.5	5317.5	13.36	6.56	0.63
330	17	-45482.7	-11229.9	-5304.5	12.32	8.13	0.63

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10863.5	27721.3	5131.4	48963.7	ϕ 12/15.0'
0.79	3.26	10863.5	12320.6	5131.4	21761.7	ϕ 8/15.0'
3.26	3.88	10863.5	27721.3	5131.4	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
230	Ft. 37	-55177.5	3300.6	134.9	-91.7
	Fc. 36	-55931.1	3301.6	136.4	-780.8
	ClsMax 36	-55931.1	3301.6	136.4	-61.7
	ClsMed 36	-55931.1	3301.6	136.4	-30.4
330	Ft. 37	-53658.8	-3314.5	-103.0	-78.8
	Fc. 36	-54412.4	-3315.8	-103.9	-768.4
	ClsMax 36	-54412.4	-3315.8	-103.9	-60.9
	ClsMed 36	-54412.4	-3315.8	-103.9	-30.1
Combinazioni Frequenti					
230	Ft. 39	-51653.2	3005.5	123.7	-95.5
	Fc. 39	-51653.2	3005.5	123.7	-716.4
	ClsMax 39	-51653.2	3005.5	123.7	-56.5
	ClsMed 39	-51653.2	3005.5	123.7	-27.9
330	Ft. 39	-50134.5	-3016.6	-94.9	-83.3
	Fc. 39	-50134.5	-3016.6	-94.9	-703.9
	ClsMax 39	-50134.5	-3016.6	-94.9	-55.7
	ClsMed 39	-50134.5	-3016.6	-94.9	-27.6
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

230	Ft. 41	-50729.6	2907.4	120.5	-98.8
	Fc. 41	-50729.6	2907.4	120.5	-698.9
	ClsMax 41	-50729.6	2907.4	120.5	-55.0
	ClsMed 41	-50729.6	2907.4	120.5	-27.2
330	Ft. 41	-49210.9	-2917.7	-92.5	-86.8
	Fc. 41	-49210.9	-2917.7	-92.5	-686.3
	ClsMax 41	-49210.9	-2917.7	-92.5	-54.2
	ClsMed 41	-49210.9	-2917.7	-92.5	-26.8

- Pilastro: 330/430 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
330	17	-32753.6	11229.9	5304.5	9.74	6.53	0.69
430	17	-31234.8	-11229.9	-5304.5	10.60	7.10	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9996.0	27721.3	4721.6	48963.7	$\varnothing 12/15.0'$
0.79	3.26	9996.0	12320.6	4721.6	21761.7	$\varnothing 8/15.0'$
3.26	3.88	9996.0	27721.3	4721.6	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
330	Ft. 37	-38278.6	3319.6	150.9	105.3
	Fc. 36	-39031.2	3320.2	152.8	-665.7
	ClsMax 36	-39031.2	3320.2	152.8	-55.1
	ClsMed 36	-39031.2	3320.2	152.8	-27.0
430	Ft. 37	-36759.9	-3320.1	-121.8	126.3
	Fc. 36	-37512.5	-3319.8	-123.0	-653.3
	ClsMax 36	-37512.5	-3319.8	-123.0	-54.4
	ClsMed 36	-37512.5	-3319.8	-123.0	-26.7
Combinazioni Frequenti					
330	Ft. 39	-35654.4	3018.5	138.1	83.3
	Fc. 39	-35654.4	3018.5	138.1	-606.2
	ClsMax 39	-35654.4	3018.5	138.1	-50.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-35654.4	3018.5	138.1	-24.6
430	Ft. 39	-34135.7	-3017.6	-111.7	103.5
	Fc. 39	-34135.7	-3017.6	-111.7	-594.1
	ClsMax 39	-34135.7	-3017.6	-111.7	-49.4
	ClsMed 39	-34135.7	-3017.6	-111.7	-24.3

Combinazioni Quasi Permanenti

330	Ft. 41	-35030.5	2918.3	134.5	72.6
	Fc. 41	-35030.5	2918.3	134.5	-589.8
	ClsMax 41	-35030.5	2918.3	134.5	-48.6
	ClsMed 41	-35030.5	2918.3	134.5	-23.8
430	Ft. 41	-33511.8	-2916.7	-108.8	92.2
	Fc. 41	-33511.8	-2916.7	-108.8	-577.6
	ClsMax 41	-33511.8	-2916.7	-108.8	-47.9
	ClsMed 41	-33511.8	-2916.7	-108.8	-23.6

- Pilastro: 430/530 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
430	17	-18300.0	11229.9	5304.5	7.10	6.07	0.78
530	24	-18074.2	-3467.4	-5028.1	1.04	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9351.9	27721.3	7411.5	48963.7	$\phi 12/15.0'$
0.79	3.26	9351.9	12320.6	7411.5	21761.7	$\phi 8/15.0'$
3.26	3.88	9351.9	27721.3	7411.5	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
430	Ft. 37	-21358.2	3352.2	191.6	469.1
	Fc. 36	-22108.7	3358.2	194.5	-568.5
	ClsMax 36	-22108.7	3358.2	194.5	-52.2
	ClsMed 36	-22108.7	3358.2	194.5	-25.2
530	Ft. 37	-19839.4	-3388.3	-214.2	524.3
	Fc. 36	-20589.9	-3401.7	-217.2	-566.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-20589.9	-3401.7	-217.2	-52.7
	ClsMed 36	-20589.9	-3401.7	-217.2	-25.4

Combinazioni Frequenti

430	Ft. 39	-19638.5	3045.9	175.8	420.3
	Fc. 39	-19638.5	3045.9	175.8	-512.8
	ClsMax 39	-19638.5	3045.9	175.8	-47.3
	ClsMed 39	-19638.5	3045.9	175.8	-22.9
530	Ft. 39	-18119.7	-3079.1	-197.5	474.2
	Fc. 39	-18119.7	-3079.1	-197.5	-508.8
	ClsMax 39	-18119.7	-3079.1	-197.5	-47.7
	ClsMed 39	-18119.7	-3079.1	-197.5	-22.9

Combinazioni Quasi Permanenti

430	Ft. 41	-19315.4	2945.8	171.5	398.1
	Fc. 41	-19315.4	2945.8	171.5	-498.3
	ClsMax 41	-19315.4	2945.8	171.5	-45.8
	ClsMed 41	-19315.4	2945.8	171.5	-22.1
530	Ft. 41	-17796.6	-2980.5	-192.9	452.1
	Fc. 41	-17796.6	-2980.5	-192.9	-494.5
	ClsMax 41	-17796.6	-2980.5	-192.9	-46.2
	ClsMed 41	-17796.6	-2980.5	-192.9	-22.2

- Pilastro: 530/630 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
530	2	-5367.1	4152.1	43.9	1.00	1.00	0.30
630	1	-5863.3	-2822.4	-110.0	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5332.9	9240.4	2957.1	16321.2	$\varnothing 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
530	Ft. 37	-3958.7	3057.5	32.8	893.5
	Fc. 36	-4712.0	3029.6	34.0	-371.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 37	-3958.7	3057.5	32.8	-42.4
	ClsMed 37	-3958.7	3057.5	32.8	-21.0
630	Ft. 36	-4224.5	-1996.7	-79.3	535.4
	Fc. 36	-4224.5	-1996.7	-79.3	-263.2
	ClsMax 36	-4224.5	-1996.7	-79.3	-28.8
	ClsMed 36	-4224.5	-1996.7	-79.3	-14.0

Combinazioni Frequenti

530	Ft. 39	-3137.5	2772.6	26.9	825.5
	Fc. 39	-3137.5	2772.6	26.9	-327.4
	ClsMax 39	-3137.5	2772.6	26.9	-38.2
	ClsMed 39	-3137.5	2772.6	26.9	-19.0
630	Ft. 40	-2928.7	-1135.9	-69.4	290.2
	Fc. 40	-2928.7	-1135.9	-69.4	-157.7
	ClsMax 40	-2928.7	-1135.9	-69.4	-16.8
	ClsMed 40	-2928.7	-1135.9	-69.4	-8.0

Combinazioni Quasi Permanenti

530	Ft. 41	-3114.9	2668.3	25.4	791.0
	Fc. 41	-3114.9	2668.3	25.4	-316.0
	ClsMax 41	-3114.9	2668.3	25.4	-36.8
	ClsMed 41	-3114.9	2668.3	25.4	-18.3
630	Ft. 41	-2627.4	-923.4	-68.8	229.3
	Fc. 41	-2627.4	-923.4	-68.8	-132.0
	ClsMax 41	-2627.4	-923.4	-68.8	-13.8
	ClsMed 41	-2627.4	-923.4	-68.8	-6.6

- Pilastro: 31/131 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
31	17	-77407.6	12487.9	7200.1	16.46	8.21	0.81
131	17	-76188.9	-12487.9	-7200.1	5.59	15.72	0.82

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11218.3	27721.3	6468.1	48963.7	$\phi 12/15.0'$
0.51	2.57	11218.3	14784.7	6468.1	26114.0	$\phi 8/12.5'$
2.57	3.08	11218.3	27721.3	6468.1	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
31	Ft. 38	-84568.0	1282.5	81.1	-563.1
	Fc. 36	-89048.3	1404.4	82.2	-911.3
	ClsMax 36	-89048.3	1404.4	82.2	-65.0
	ClsMed 36	-89048.3	1404.4	82.2	-50.0
131	Ft. 38	-83349.3	-2617.4	-30.8	-408.9
	Fc. 36	-87829.5	-2866.4	-23.4	-1058.4
	ClsMax 36	-87829.5	-2866.4	-23.4	-79.1
	ClsMed 36	-87829.5	-2866.4	-23.4	-49.3
Combinazioni Frequenti					
31	Ft. 40	-81910.3	1241.6	80.7	-545.3
	Fc. 39	-83112.6	1282.2	81.0	-847.8
	ClsMax 39	-83112.6	1282.2	81.0	-60.4
	ClsMed 39	-83112.6	1282.2	81.0	-46.6
131	Ft. 40	-80691.5	-2534.0	-35.3	-395.4
	Fc. 39	-81893.9	-2616.8	-33.3	-981.6
	ClsMax 39	-81893.9	-2616.8	-33.3	-73.2
	ClsMed 39	-81893.9	-2616.8	-33.3	-45.9
Combinazioni Quasi Permanenti					
31	Ft. 41	-81619.2	1241.5	80.7	-542.8
	Fc. 41	-81619.2	1241.5	80.7	-830.7
	ClsMax 41	-81619.2	1241.5	80.7	-59.2
	ClsMed 41	-81619.2	1241.5	80.7	-45.8
131	Ft. 41	-80400.4	-2533.8	-35.8	-392.9
	Fc. 41	-80400.4	-2533.8	-35.8	-960.0
	ClsMax 41	-80400.4	-2533.8	-35.8	-71.6
	ClsMed 41	-80400.4	-2533.8	-35.8	-45.1

- Pilastro: 131/231 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/15.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
131	17	-62326.8	9971.9	5749.5	5.27	8.34	0.65
231	17	-60800.5	-11202.2	-6458.9	5.70	15.01	0.76

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	9147.8	27721.3	5274.3	48963.7	ø 12/15.0'
0.79	3.28	9147.8	12320.6	5274.3	21761.7	ø 8/15.0'
3.28	3.90	9147.8	27721.3	5274.3	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
131	Ft. 37	-71520.3	3370.4	54.3	-224.1
	Fc. 36	-72249.2	3370.9	53.0	-985.5
	ClsMax 36	-72249.2	3370.9	53.0	-75.8
	ClsMed 36	-72249.2	3370.9	53.0	-40.5
231	Ft. 37	-69994.0	-3300.4	68.6	-217.9
	Fc. 36	-70723.0	-3301.1	71.2	-966.4
	ClsMax 36	-70723.0	-3301.1	71.2	-74.3
	ClsMed 36	-70723.0	-3301.1	71.2	-39.7
Combinazioni Frequenti					
131	Ft. 39	-67198.4	3075.1	61.0	-219.9
	Fc. 39	-67198.4	3075.1	61.0	-910.9
	ClsMax 39	-67198.4	3075.1	61.0	-69.9
	ClsMed 39	-67198.4	3075.1	61.0	-37.7
231	Ft. 39	-65672.1	-3008.7	53.1	-215.0
	Fc. 39	-65672.1	-3008.7	53.1	-890.1
	ClsMax 39	-65672.1	-3008.7	53.1	-68.3
	ClsMed 39	-65672.1	-3008.7	53.1	-36.8
Combinazioni Quasi Permanenti					
131	Ft. 41	-66000.7	2976.9	62.8	-220.6
	Fc. 41	-66000.7	2976.9	62.8	-890.1
	ClsMax 41	-66000.7	2976.9	62.8	-68.2
	ClsMed 41	-66000.7	2976.9	62.8	-37.0
231	Ft. 41	-64474.4	-2911.6	48.8	-216.1
	Fc. 41	-64474.4	-2911.6	48.8	-868.9
	ClsMax 41	-64474.4	-2911.6	48.8	-66.6
	ClsMed 41	-64474.4	-2911.6	48.8	-36.2

- Pilastro: 231/331 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
231	17	-47406.3	11257.5	6490.8	7.08	9.31	0.66

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

331	17	-45887.5	-11229.9	-6474.8	6.88	13.09	0.66
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10323.2	27721.3	5952.0	48963.7	ø 12/15.0'
0.79	3.26	10323.2	12320.6	5952.0	21761.7	ø 8/15.0'
3.26	3.88	10323.2	27721.3	5952.0	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
231	Ft. 37	-54527.7	3255.4	-106.9	-93.3
	Fc. 36	-55259.6	3256.6	-109.9	-769.0
	ClsMax 36	-55259.6	3256.6	-109.9	-60.7
	ClsMed 36	-55259.6	3256.6	-109.9	-30.0
331	Ft. 37	-53009.0	-3269.6	182.1	-72.3
	Fc. 36	-53740.8	-3271.1	186.3	-764.8
	ClsMax 36	-53740.8	-3271.1	186.3	-60.6
	ClsMed 36	-53740.8	-3271.1	186.3	-29.7
Combinazioni Frequenti					
231	Ft. 39	-51092.7	2963.8	-90.8	-97.9
	Fc. 39	-51092.7	2963.8	-90.8	-705.3
	ClsMax 39	-51092.7	2963.8	-90.8	-55.6
	ClsMed 39	-51092.7	2963.8	-90.8	-27.5
331	Ft. 39	-49573.9	-2975.2	159.7	-78.3
	Fc. 39	-49573.9	-2975.2	159.7	-700.1
	ClsMax 39	-49573.9	-2975.2	159.7	-55.4
	ClsMed 39	-49573.9	-2975.2	159.7	-27.2
Combinazioni Quasi Permanenti					
231	Ft. 41	-50191.6	2867.0	-86.4	-101.2
	Fc. 41	-50191.6	2867.0	-86.4	-688.1
	ClsMax 41	-50191.6	2867.0	-86.4	-54.2
	ClsMed 41	-50191.6	2867.0	-86.4	-26.8
331	Ft. 41	-48672.9	-2877.6	153.7	-82.1
	Fc. 41	-48672.9	-2877.6	153.7	-682.6
	ClsMax 41	-48672.9	-2877.6	153.7	-53.9
	ClsMed 41	-48672.9	-2877.6	153.7	-26.5

- Pilastro: 331/431 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

Staffe: \varnothing 12/15.0' x 61.8+ \varnothing 8/15.0' x 247.3+ \varnothing 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
331	16	-32698.3	11229.9	6474.8	6.19	12.04	0.71
431	16	-31179.6	-11229.9	-6474.8	6.40	14.42	0.71

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9638.7	27721.3	5557.4	48963.7	\varnothing 12/15.0'
0.79	3.26	9638.7	12320.6	5557.4	21761.7	\varnothing 8/15.0'
3.26	3.88	9638.7	27721.3	5557.4	48963.7	\varnothing 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
331	Ft. 37	-37683.6	3276.8	-210.4	111.0
	Fc. 36	-38420.1	3277.9	-215.0	-662.0
	ClsMax 36	-38420.1	3277.9	-215.0	-54.8
	ClsMed 36	-38420.1	3277.9	-215.0	-26.6
431	Ft. 37	-36164.9	-3280.2	277.0	141.6
	Fc. 36	-36901.3	-3280.6	283.1	-658.8
	ClsMax 36	-36901.3	-3280.6	283.1	-54.8
	ClsMed 36	-36901.3	-3280.6	283.1	-26.4
Combinazioni Frequenti					
331	Ft. 39	-35129.9	2979.0	-187.0	87.5
	Fc. 39	-35129.9	2979.0	-187.0	-602.3
	ClsMax 39	-35129.9	2979.0	-187.0	-49.8
	ClsMed 39	-35129.9	2979.0	-187.0	-24.2
431	Ft. 39	-33611.1	-2980.7	248.3	116.4
	Fc. 39	-33611.1	-2980.7	248.3	-598.3
	ClsMax 39	-33611.1	-2980.7	248.3	-49.8
	ClsMed 39	-33611.1	-2980.7	248.3	-24.0
Combinazioni Quasi Permanenti					
331	Ft. 41	-34524.1	2880.1	-180.8	76.5
	Fc. 41	-34524.1	2880.1	-180.8	-585.9
	ClsMax 41	-34524.1	2880.1	-180.8	-48.3
	ClsMed 41	-34524.1	2880.1	-180.8	-23.5
431	Ft. 41	-33005.4	-2881.0	240.7	104.5
	Fc. 41	-33005.4	-2881.0	240.7	-581.6
	ClsMax 41	-33005.4	-2881.0	240.7	-48.3
	ClsMed 41	-33005.4	-2881.0	240.7	-23.3

- Pilastro: 431/531 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
431	16	-17903.3	11229.9	6474.8	5.38	12.64	0.80
531	7	-16933.5	-3467.4	4951.3	1.28	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8869.6	27721.3	7695.9	48963.7	$\phi 12/15.0'$
0.79	3.26	8869.6	12320.6	7695.9	21761.7	$\phi 8/15.0'$
3.26	3.88	8869.6	27721.3	7695.9	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
431	Ft. 37	-20918.3	3302.9	-236.5	471.0
	Fc. 36	-21660.5	3308.6	-242.0	-564.8
	ClsMax 36	-21660.5	3308.6	-242.0	-51.8
	ClsMed 36	-21660.5	3308.6	-242.0	-24.9
531	Ft. 37	-19399.5	-3327.7	207.4	516.9
	Fc. 36	-20141.8	-3339.5	213.5	-555.2
	ClsMax 36	-20141.8	-3339.5	213.5	-51.8
	ClsMed 36	-20141.8	-3339.5	213.5	-24.9
Combinazioni Frequenti					
431	Ft. 39	-19242.9	3001.0	-210.8	421.1
	Fc. 39	-19242.9	3001.0	-210.8	-508.7
	ClsMax 39	-19242.9	3001.0	-210.8	-46.9
	ClsMed 39	-19242.9	3001.0	-210.8	-22.5
531	Ft. 39	-17724.1	-3024.5	182.4	466.6
	Fc. 39	-17724.1	-3024.5	182.4	-498.0
	ClsMax 39	-17724.1	-3024.5	182.4	-46.7
	ClsMed 39	-17724.1	-3024.5	182.4	-22.5
Combinazioni Quasi Permanenti					
431	Ft. 41	-18931.8	2902.3	-204.0	398.7
	Fc. 41	-18931.8	2902.3	-204.0	-494.1
	ClsMax 41	-18931.8	2902.3	-204.0	-45.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-18931.8	2902.3	-204.0	-21.8
531	Ft. 41	-17413.1	-2927.4	176.1	444.4
	Fc. 41	-17413.1	-2927.4	176.1	-483.8
	ClsMax 41	-17413.1	-2927.4	176.1	-45.2
	ClsMed 41	-17413.1	-2927.4	176.1	-21.8

- Pilastro: 531/631 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0' \times 100.6$ Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
531	2	-4961.6	4172.2	-624.3	1.00	1.00	0.31
631	1	-5458.7	-2772.2	652.4	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5315.6	9240.4	5569.2	16321.2	$\varnothing 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
531	Ft. 37	-3671.7	3071.8	-451.4	966.9
	Fc. 36	-4425.6	3049.1	-461.6	-428.1
	ClsMax 36	-4425.6	3049.1	-461.6	-47.1
	ClsMed 37	-3671.7	3071.8	-451.4	-21.1
631	Ft. 36	-3938.1	-1962.3	461.5	586.3
	Fc. 36	-3938.1	-1962.3	461.5	-306.7
	ClsMax 36	-3938.1	-1962.3	461.5	-32.3
	ClsMed 36	-3938.1	-1962.3	461.5	-13.8
Combinazioni Frequenti					
531	Ft. 39	-2866.1	2781.3	-406.9	891.4
	Fc. 39	-2866.1	2781.3	-406.9	-377.5
	ClsMax 39	-2866.1	2781.3	-406.9	-42.5
	ClsMed 39	-2866.1	2781.3	-406.9	-19.1
631	Ft. 40	-2662.9	-1117.1	416.9	341.1
	Fc. 40	-2662.9	-1117.1	416.9	-197.5
	ClsMax 40	-2662.9	-1117.1	416.9	-20.1
	ClsMed 40	-2662.9	-1117.1	416.9	-8.0

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

531	Ft. 41	-2848.8	2676.9	-395.4	855.3
	Fc. 41	-2848.8	2676.9	-395.4	-364.7
	ClsMax 41	-2848.8	2676.9	-395.4	-41.0
	ClsMed 41	-2848.8	2676.9	-395.4	-18.4
631	Ft. 41	-2361.3	-909.0	413.8	281.7
	Fc. 41	-2361.3	-909.0	413.8	-171.4
	ClsMax 41	-2361.3	-909.0	413.8	-17.1
	ClsMed 41	-2361.3	-909.0	413.8	-6.6

- Pilastro: 32/132 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
32	22	-81996.4	-21436.0	2981.6	2.49	1.00	0.50
132	22	-79965.2	21436.0	2772.2	9.68	1.56	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	32255.9	73445.6	6541.8	73445.6	$\varnothing 12/10.0'$
0.51	2.57	32255.9	36722.8	6541.8	36722.8	$\varnothing 12/20.0'$
2.57	3.08	32255.9	73445.6	6541.8	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
32	Ft. 38	-82096.3	391.4	161.5	-401.3
	Fc. 36	-87472.7	427.2	168.5	-484.9
	ClsMax 36	-87472.7	427.2	168.5	-32.7
	ClsMed 36	-87472.7	427.2	168.5	-30.4
132	Ft. 38	-80065.1	-888.2	-111.7	-369.1
	Fc. 36	-85441.5	-965.8	-109.8	-497.5
	ClsMax 36	-85441.5	-965.8	-109.8	-33.9
	ClsMed 36	-85441.5	-965.8	-109.8	-29.7
Combinazioni Frequenti					
32	Ft. 40	-79234.2	379.2	157.7	-387.1
	Fc. 39	-80758.9	391.0	159.7	-447.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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	ClsMax 39	-80758.9	391.0	159.7	-30.2
	ClsMed 39	-80758.9	391.0	159.7	-28.1
132	Ft. 40	-77203.0	-862.1	-112.7	-355.4
	Fc. 39	-78727.6	-887.8	-112.2	-458.8
	ClsMax 39	-78727.6	-887.8	-112.2	-31.3
	ClsMed 39	-78727.6	-887.8	-112.2	-27.4

Combinazioni Quasi Permanenti

32	Ft. 41	-78966.7	379.1	157.4	-385.8
	Fc. 41	-78966.7	379.1	157.4	-437.7
	ClsMax 41	-78966.7	379.1	157.4	-29.5
	ClsMed 41	-78966.7	379.1	157.4	-27.4
132	Ft. 41	-76935.5	-862.0	-112.8	-354.0
	Fc. 41	-76935.5	-862.0	-112.8	-448.3
	ClsMax 41	-76935.5	-862.0	-112.8	-30.5
	ClsMed 41	-76935.5	-862.0	-112.8	-26.7

- Pilastro: 132/232 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
132	30	-61715.4	17631.9	2381.4	1.00	1.00	0.42
232	22	-64071.5	26451.5	963.3	6.81	1.00	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26133.2	73445.6	3171.3	73445.6	$\varnothing 12/10.0'$
0.79	3.28	26133.2	36722.8	3171.3	36722.8	$\varnothing 12/20.0'$
3.28	3.90	26133.2	73445.6	3171.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
132	Ft. 38	-66911.8	1048.4	268.6	-285.2
	Fc. 36	-71206.1	1142.9	278.4	-440.0
	ClsMax 36	-71206.1	1142.9	278.4	-30.3
	ClsMed 36	-71206.1	1142.9	278.4	-24.8
232	Ft. 38	-64368.0	-1014.0	-174.8	-278.1

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-68662.4	-1106.3	-177.8	-420.1
	ClsMax 36	-68662.4	-1106.3	-177.8	-28.9
	ClsMed 36	-68662.4	-1106.3	-177.8	-23.9

Combinazioni Frequenti

132	Ft. 40	-64411.0	1016.8	263.3	-273.9
	Fc. 39	-65575.1	1048.3	266.1	-405.5
	ClsMax 39	-65575.1	1048.3	266.1	-27.9
	ClsMed 39	-65575.1	1048.3	266.1	-22.8
232	Ft. 40	-61867.3	-982.9	-173.5	-266.6
	Fc. 39	-63031.4	-1013.6	-174.4	-386.1
	ClsMax 39	-63031.4	-1013.6	-174.4	-26.5
	ClsMed 39	-63031.4	-1013.6	-174.4	-21.9

Combinazioni Quasi Permanenti

132	Ft. 41	-64143.7	1016.8	262.8	-272.5
	Fc. 41	-64143.7	1016.8	262.8	-396.3
	ClsMax 41	-64143.7	1016.8	262.8	-27.3
	ClsMed 41	-64143.7	1016.8	262.8	-22.3
232	Ft. 41	-61599.9	-982.8	-173.4	-265.2
	Fc. 41	-61599.9	-982.8	-173.4	-377.1
	ClsMax 41	-61599.9	-982.8	-173.4	-25.9
	ClsMed 41	-61599.9	-982.8	-173.4	-21.4

- Pilastro: 232/332 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
232	10	-45378.2	-23784.6	-1015.3	5.47	1.00	0.53
332	30	-44370.2	-18401.2	-844.6	1.00	1.00	0.39

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29322.3	73445.6	2346.1	73445.6	$\varnothing 12/10.0'$
0.79	3.26	29322.3	36722.8	2346.1	36722.8	$\varnothing 12/20.0'$
3.26	3.88	29322.3	73445.6	2346.1	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

232	Ft. 38	-51217.7	1035.7	292.4	-193.5
	Fc. 36	-54432.2	1132.1	305.4	-332.2
	ClsMax 36	-54432.2	1132.1	305.4	-23.1
	ClsMed 36	-54432.2	1132.1	305.4	-17.9
332	Ft. 38	-48686.5	-1042.0	-251.4	-182.5
	Fc. 36	-51901.0	-1139.8	-260.2	-318.1
	ClsMax 36	-51901.0	-1139.8	-260.2	-22.1
	ClsMed 36	-51901.0	-1139.8	-260.2	-17.1

Combinazioni Frequenti

232	Ft. 40	-49078.4	1003.5	284.8	-184.7
	Fc. 39	-49883.0	1035.7	288.3	-304.7
	ClsMax 39	-49883.0	1035.7	288.3	-21.2
	ClsMed 39	-49883.0	1035.7	288.3	-16.4
332	Ft. 40	-46547.2	-1009.3	-246.5	-173.6
	Fc. 39	-47351.7	-1041.9	-248.9	-290.8
	ClsMax 39	-47351.7	-1041.9	-248.9	-20.2
	ClsMed 39	-47351.7	-1041.9	-248.9	-15.6

Combinazioni Quasi Permanenti

232	Ft. 41	-48811.5	1003.5	284.0	-183.4
	Fc. 41	-48811.5	1003.5	284.0	-297.8
	ClsMax 41	-48811.5	1003.5	284.0	-20.7
	ClsMed 41	-48811.5	1003.5	284.0	-16.0
332	Ft. 41	-46280.2	-1009.3	-246.0	-172.4
	Fc. 41	-46280.2	-1009.3	-246.0	-283.9
	ClsMax 41	-46280.2	-1009.3	-246.0	-19.7
	ClsMed 41	-46280.2	-1009.3	-246.0	-15.2

- Pilastro: 332/432 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
332	10	-31173.0	-17878.3	-1065.2	6.34	1.00	0.41
432	29	-28572.1	-17878.3	-470.4	1.65	1.00	0.42

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26464.6	73445.6	1815.8	73445.6	$\varnothing 12/10.0'$
0.79	3.26	26464.6	36722.8	1815.8	36722.8	$\varnothing 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	26464.6	73445.6	1815.8	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

332	Ft. 38	-35502.7	1006.5	283.8	-117.7
	Fc. 36	-37636.0	1101.8	296.7	-247.7
	ClsMax 36	-37636.0	1101.8	296.7	-17.4
	ClsMed 36	-37636.0	1101.8	296.7	-12.4
432	Ft. 38	-32971.4	-971.6	-177.2	-111.5
	Fc. 36	-35104.7	-1064.0	-184.1	-228.5
	ClsMax 36	-35104.7	-1064.0	-184.1	-16.0
	ClsMed 36	-35104.7	-1064.0	-184.1	-11.5

Combinazioni Frequenti

332	Ft. 40	-33726.1	974.2	275.9	-110.7
	Fc. 39	-34170.9	1005.8	279.2	-225.6
	ClsMax 39	-34170.9	1005.8	279.2	-15.9
	ClsMed 39	-34170.9	1005.8	279.2	-11.2
432	Ft. 40	-31194.9	-940.3	-174.4	-104.2
	Fc. 39	-31639.6	-971.0	-176.6	-207.0
	ClsMax 39	-31639.6	-971.0	-176.6	-14.5
	ClsMed 39	-31639.6	-971.0	-176.6	-10.4

Combinazioni Quasi Permanenti

332	Ft. 41	-33459.8	974.0	274.9	-109.4
	Fc. 41	-33459.8	974.0	274.9	-220.4
	ClsMax 41	-33459.8	974.0	274.9	-15.5
	ClsMed 41	-33459.8	974.0	274.9	-11.0
432	Ft. 41	-30928.5	-940.2	-174.3	-102.9
	Fc. 41	-30928.5	-940.2	-174.3	-202.0
	ClsMax 41	-30928.5	-940.2	-174.3	-14.2
	ClsMed 41	-30928.5	-940.2	-174.3	-10.2

- Pilastro: 432/532 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
432	29	-16627.8	17878.3	-29.7	1.95	1.00	0.49
532	30	-14701.8	-20827.5	-307.6	1.00	1.00	0.60

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	23707.8	73445.6	2073.8	73445.6	ø 12/10.0'
0.79	3.26	23707.8	36722.8	2073.8	36722.8	ø 12/20.0'
3.26	3.88	23707.8	73445.6	2073.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

432	Ft. 37	-20159.3	1221.5	422.2	-26.3
	Fc. 36	-20823.6	1223.2	426.8	-176.0
	ClsMax 36	-20823.6	1223.2	426.8	-12.8
	ClsMed 36	-20823.6	1223.2	426.8	-6.8
532	Ft. 37	-17628.0	-1404.0	-644.0	5.1
	Fc. 36	-18292.4	-1404.7	-650.4	-181.9
	ClsMax 36	-18292.4	-1404.7	-650.4	-13.5
	ClsMed 36	-18292.4	-1404.7	-650.4	-6.2

Combinazioni Frequenti

432	Ft. 39	-18443.4	1113.6	399.0	-23.7
	Fc. 39	-18443.4	1113.6	399.0	-158.1
	ClsMax 39	-18443.4	1113.6	399.0	-11.5
	ClsMed 39	-18443.4	1113.6	399.0	-6.1
532	Ft. 39	-15912.2	-1278.6	-609.7	6.6
	Fc. 39	-15912.2	-1278.6	-609.7	-163.0
	ClsMax 39	-15912.2	-1278.6	-609.7	-12.1
	ClsMed 39	-15912.2	-1278.6	-609.7	-5.4

Combinazioni Quasi Permanenti

432	Ft. 41	-18092.9	1078.2	392.7	-23.8
	Fc. 41	-18092.9	1078.2	392.7	-154.6
	ClsMax 41	-18092.9	1078.2	392.7	-11.3
	ClsMed 41	-18092.9	1078.2	392.7	-5.9
532	Ft. 41	-15561.7	-1237.0	-600.3	6.0
	Fc. 41	-15561.7	-1237.0	-600.3	-159.0
	ClsMax 41	-15561.7	-1237.0	-600.3	-11.8
	ClsMed 41	-15561.7	-1237.0	-600.3	-5.3

- Pilastro: 532/632 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af} = 20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
532	17	-3345.7	5644.8	335.8	1.00	1.00	0.29
632	30	-329.7	-1209.6	2.6	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1863.9	25501.9	644.7	25501.9	ø 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
532	Ft. 37	-3298.8	689.4	-0.6	50.5
	Fc. 36	-3958.2	686.2	-0.5	-61.2
	ClSMax 37	-3298.8	689.4	-0.6	-4.8
	ClSMed 37	-3298.8	689.4	-0.6	-2.4
632	Ft. 36	-2270.7	-565.1	0.2	55.3
	Fc. 36	-2270.7	-565.1	0.2	-48.7
	ClSMax 36	-2270.7	-565.1	0.2	-3.9
	ClSMed 36	-2270.7	-565.1	0.2	-2.0
Combinazioni Frequenti					
532	Ft. 39	-2670.9	630.9	-0.6	57.2
	Fc. 39	-2670.9	630.9	-0.6	-54.7
	ClSMax 39	-2670.9	630.9	-0.6	-4.4
	ClSMed 39	-2670.9	630.9	-0.6	-2.2
632	Ft. 40	-1257.7	-329.5	0.2	34.6
	Fc. 40	-1257.7	-329.5	0.2	-28.3
	ClSMax 40	-1257.7	-329.5	0.2	-2.3
	ClSMed 40	-1257.7	-329.5	0.2	-1.2
Combinazioni Quasi Permanenti					
532	Ft. 41	-2681.4	610.4	-0.6	52.1
	Fc. 41	-2681.4	610.4	-0.6	-53.1
	ClSMax 41	-2681.4	610.4	-0.6	-4.2
	ClSMed 41	-2681.4	610.4	-0.6	-2.1
632	Ft. 41	-993.9	-271.5	0.2	30.1
	Fc. 41	-993.9	-271.5	0.2	-23.2
	ClSMax 41	-993.9	-271.5	0.2	-1.9
	ClSMed 41	-993.9	-271.5	0.2	-1.0

- Pilastro: 33/133 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4$ V + $1\varnothing 20 \times 2$ B + $1\varnothing 20 \times 2$ H >

Staffe: $\varnothing 12/10.0'$ x 51.3 + $\varnothing 12/20.0'$ x 205.3 + $\varnothing 12/10.0'$ x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
33	22	-128342.8	-31841.9	5728.2	4.30	1.90	0.74
133	22	-126311.6	31841.9	5728.2	27.86	3.28	0.74

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31770.0	73445.6	7395.6	73445.6	$\varnothing 12/10.0'$
0.51	2.57	31770.0	36722.8	7395.6	36722.8	$\varnothing 12/20.0'$
2.57	3.08	31770.0	73445.6	7395.6	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
33	Ft. 38	-138754.4	766.2	101.8	-681.5
	Fc. 36	-149423.4	841.2	109.1	-825.0
	ClsMax 36	-149423.4	841.2	109.1	-55.6
	ClsMed 36	-149423.4	841.2	109.1	-51.9
133	Ft. 38	-136723.1	-1671.3	13.8	-631.3
	Fc. 36	-147392.2	-1831.3	14.8	-857.8
	ClsMax 36	-147392.2	-1831.3	14.8	-58.4
	ClsMed 36	-147392.2	-1831.3	14.8	-51.2
Combinazioni Frequenti					
33	Ft. 40	-133076.0	740.7	97.8	-653.3
	Fc. 39	-136101.8	765.6	99.8	-751.5
	ClsMax 39	-136101.8	765.6	99.8	-50.7
	ClsMed 39	-136101.8	765.6	99.8	-47.3
133	Ft. 40	-131044.7	-1617.3	13.2	-604.4
	Fc. 39	-134070.5	-1670.4	13.5	-780.5
	ClsMax 39	-134070.5	-1670.4	13.5	-53.2
	ClsMed 39	-134070.5	-1670.4	13.5	-46.6
Combinazioni Quasi Permanenti					
33	Ft. 41	-132545.4	740.6	97.4	-650.5
	Fc. 41	-132545.4	740.6	97.4	-731.6
	ClsMax 41	-132545.4	740.6	97.4	-49.3
	ClsMed 41	-132545.4	740.6	97.4	-46.1
133	Ft. 41	-130514.2	-1617.1	13.1	-601.6
	Fc. 41	-130514.2	-1617.1	13.1	-759.3

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	ClsMax 41	-130514.2	-1617.1	13.1	-51.7
	ClsMed 41	-130514.2	-1617.1	13.1	-45.4

- Pilastro: 133/233 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 62.2+ø 12/20.0' x 248.7+ø 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
133	7	-108169.1	-22045.2	-3625.0	8.86	2.12	0.49
233	22	-100853.7	29024.7	810.8	11.44	1.00	0.67

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27116.3	73445.6	3385.4	73445.6	ø 12/10.0'
0.79	3.28	27116.3	36722.8	3385.4	36722.8	ø 12/20.0'
3.28	3.90	27116.3	73445.6	3385.4	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
133	Ft. 38	-112552.7	1970.5	133.0	-485.1
	Fc. 36	-121058.3	2163.1	144.2	-742.8
	ClsMax 36	-121058.3	2163.1	144.2	-51.1
	ClsMed 36	-121058.3	2163.1	144.2	-42.1
233	Ft. 38	-110008.9	-1915.7	-55.8	-478.2
	Fc. 36	-118514.6	-2105.3	-60.7	-722.7
	ClsMax 36	-118514.6	-2105.3	-60.7	-49.6
	ClsMed 36	-118514.6	-2105.3	-60.7	-41.2
Combinazioni Frequenti					
133	Ft. 40	-107594.3	1905.5	127.0	-462.7
	Fc. 39	-109898.8	1969.5	130.1	-674.5
	ClsMax 39	-109898.8	1969.5	130.1	-46.4
	ClsMed 39	-109898.8	1969.5	130.1	-38.2
233	Ft. 40	-105050.6	-1851.1	-53.4	-455.6
	Fc. 39	-107355.0	-1914.0	-54.9	-654.9
	ClsMax 39	-107355.0	-1914.0	-54.9	-45.0
	ClsMed 39	-107355.0	-1914.0	-54.9	-37.3
Combinazioni Quasi Permanenti					

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133	Ft. 41	-107063.5	1905.3	126.4	-459.9
	Fc. 41	-107063.5	1905.3	126.4	-656.5
	ClsMax 41	-107063.5	1905.3	126.4	-45.1
	ClsMed 41	-107063.5	1905.3	126.4	-37.2
233	Ft. 41	-104519.8	-1850.7	-53.2	-452.9
	Fc. 41	-104519.8	-1850.7	-53.2	-637.0
	ClsMax 41	-104519.8	-1850.7	-53.2	-43.7
	ClsMed 41	-104519.8	-1850.7	-53.2	-36.3

- Pilastro: 233/333 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
233	10	-82215.2	-26652.9	-1508.5	8.98	1.00	0.53
333	30	-75040.3	-20780.2	-1046.6	1.18	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31289.0	73445.6	2791.5	73445.6	ø 12/10.0'
0.79	3.26	31289.0	36722.8	2791.5	36722.8	ø 12/20.0'
3.26	3.88	31289.0	73445.6	2791.5	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
233	Ft. 38	-85950.6	1926.8	182.6	-330.0
	Fc. 36	-92307.7	2121.8	198.0	-558.1
	ClsMax 36	-92307.7	2121.8	198.0	-38.7
	ClsMed 36	-92307.7	2121.8	198.0	-30.3
333	Ft. 38	-83419.3	-1946.3	-135.3	-318.7
	Fc. 36	-89776.4	-2145.2	-146.8	-544.4
	ClsMax 36	-89776.4	-2145.2	-146.8	-37.8
	ClsMed 36	-89776.4	-2145.2	-146.8	-29.5
Combinazioni Frequenti					
233	Ft. 40	-81706.0	1860.4	173.5	-312.4
	Fc. 39	-83293.7	1925.1	177.7	-504.0
	ClsMax 39	-83293.7	1925.1	177.7	-35.0

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	ClsMed 39	-83293.7	1925.1	177.7	-27.4
333	Ft. 40	-79174.8	-1878.6	-128.8	-301.1
	Fc. 39	-80762.4	-1944.6	-131.9	-490.4
	ClsMax 39	-80762.4	-1944.6	-131.9	-34.0
	ClsMed 39	-80762.4	-1944.6	-131.9	-26.5

Combinazioni Quasi Permanenti

233	Ft. 41	-81174.6	1860.1	172.5	-309.8
	Fc. 41	-81174.6	1860.1	172.5	-490.5
	ClsMax 41	-81174.6	1860.1	172.5	-34.0
	ClsMed 41	-81174.6	1860.1	172.5	-26.7
333	Ft. 41	-78643.4	-1878.3	-128.1	-298.5
	Fc. 41	-78643.4	-1878.3	-128.1	-476.8
	ClsMax 41	-78643.4	-1878.3	-128.1	-33.1
	ClsMed 41	-78643.4	-1878.3	-128.1	-25.8

- Pilastro: 333/433 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \phi 24$ Af=36.19 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $1\phi 24 \times 2$ H >

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
333	24	-54749.8	20780.2	2287.4	4.47	1.00	0.44
433	26	-51045.5	-20780.2	-1782.2	1.84	1.00	0.44

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28883.6	73445.6	2398.5	73445.6	$\phi 12/10.0'$
0.79	3.26	28883.6	36722.8	2398.5	36722.8	$\phi 12/20.0'$
3.26	3.88	28883.6	73445.6	2398.5	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
333	Ft. 38	-59382.4	1897.1	186.1	-200.1
	Fc. 36	-63596.6	2092.7	202.1	-415.5
	ClsMax 36	-63596.6	2092.7	202.1	-29.2
	ClsMed 36	-63596.6	2092.7	202.1	-20.9
433	Ft. 38	-56851.1	-1838.5	-105.5	-193.9
	Fc. 36	-61065.4	-2028.2	-115.7	-396.3

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	ClsMax 36	-61065.4	-2028.2	-115.7	-27.8
	ClsMed 36	-61065.4	-2028.2	-115.7	-20.1

Combinazioni Frequenti

333	Ft. 40	-55848.6	1829.0	176.4	-186.2
	Fc. 39	-56721.1	1893.5	180.6	-371.8
	ClsMax 39	-56721.1	1893.5	180.6	-26.1
	ClsMed 39	-56721.1	1893.5	180.6	-18.6
433	Ft. 40	-53317.4	-1771.2	-100.7	-179.6
	Fc. 39	-54189.9	-1833.4	-103.8	-353.2
	ClsMax 39	-54189.9	-1833.4	-103.8	-24.8
	ClsMed 39	-54189.9	-1833.4	-103.8	-17.8

Combinazioni Quasi Permanenti

333	Ft. 41	-55316.4	1828.3	175.2	-183.6
	Fc. 41	-55316.4	1828.3	175.2	-361.7
	ClsMax 41	-55316.4	1828.3	175.2	-25.4
	ClsMed 41	-55316.4	1828.3	175.2	-18.2
433	Ft. 41	-52785.1	-1770.1	-100.4	-177.1
	Fc. 41	-52785.1	-1770.1	-100.4	-343.3
	ClsMax 41	-52785.1	-1770.1	-100.4	-24.1
	ClsMed 41	-52785.1	-1770.1	-100.4	-17.3

- Pilastro: 433/533 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
433	22	-28263.9	20780.2	1003.0	1.95	1.00	0.52
533	30	-25408.6	-19718.7	176.9	1.00	1.00	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25010.8	73445.6	2078.0	73445.6	$\varnothing 12/10.0'$
0.79	3.26	25010.8	36722.8	2078.0	36722.8	$\varnothing 12/20.0'$
3.26	3.88	25010.8	73445.6	2078.0	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

433	Ft. 37	-33592.3	2295.5	302.2	-50.2
	Fc. 36	-34926.6	2297.9	307.6	-288.0
	ClsMax 36	-34926.6	2297.9	307.6	-20.9
	ClsMed 36	-34926.6	2297.9	307.6	-11.5
533	Ft. 37	-31061.0	-2630.2	-443.7	-16.4
	Fc. 36	-32395.3	-2629.2	-451.2	-296.6
	ClsMax 36	-32395.3	-2629.2	-451.2	-21.8
	ClsMed 36	-32395.3	-2629.2	-451.2	-10.7

Combinazioni Frequenti

433	Ft. 39	-30181.9	2075.7	273.7	-44.4
	Fc. 39	-30181.9	2075.7	273.7	-253.2
	ClsMax 39	-30181.9	2075.7	273.7	-18.4
	ClsMed 39	-30181.9	2075.7	273.7	-9.9
533	Ft. 39	-27650.6	-2377.0	-402.8	-12.6
	Fc. 39	-27650.6	-2377.0	-402.8	-260.0
	ClsMax 39	-27650.6	-2377.0	-402.8	-19.1
	ClsMed 39	-27650.6	-2377.0	-402.8	-9.2

Combinazioni Quasi Permanenti

433	Ft. 41	-29489.8	2003.2	266.0	-44.5
	Fc. 41	-29489.8	2003.2	266.0	-246.2
	ClsMax 41	-29489.8	2003.2	266.0	-17.9
	ClsMed 41	-29489.8	2003.2	266.0	-9.7
533	Ft. 41	-26958.6	-2292.3	-391.6	-13.5
	Fc. 41	-26958.6	-2292.3	-391.6	-252.3
	ClsMax 41	-26958.6	-2292.3	-391.6	-18.6
	ClsMed 41	-26958.6	-2292.3	-391.6	-8.9

- Pilastro: 533/633 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
533	17	-4246.5	5224.5	537.9	1.00	1.00	0.26
633	30	-1242.6	-1464.0	2.7	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1816.1	25501.9	1007.6	25501.9	$\varnothing 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
533	Ft. 37	-4838.6	1350.5	-0.6	153.8
	Fc. 36	-6172.7	1351.5	-0.6	-117.8
	ClsMax 37	-4838.6	1350.5	-0.6	-9.5
	ClsMed 37	-4838.6	1350.5	-0.6	-4.7
633	Ft. 36	-4485.2	-1118.8	0.2	109.9
	Fc. 36	-4485.2	-1118.8	0.2	-96.5
	ClsMax 36	-4485.2	-1118.8	0.2	-7.8
	ClsMed 36	-4485.2	-1118.8	0.2	-3.9
Combinazioni Frequenti					
533	Ft. 39	-3567.4	1219.4	-0.6	171.0
	Fc. 39	-3567.4	1219.4	-0.6	-102.1
	ClsMax 39	-3567.4	1219.4	-0.6	-8.6
	ClsMed 39	-3567.4	1219.4	-0.6	-4.3
633	Ft. 40	-2434.4	-638.5	0.2	67.2
	Fc. 40	-2434.4	-638.5	0.2	-54.8
	ClsMax 40	-2434.4	-638.5	0.2	-4.5
	ClsMed 40	-2434.4	-638.5	0.2	-2.2
Combinazioni Quasi Permanenti					
533	Ft. 41	-3588.3	1176.0	-0.6	158.7
	Fc. 41	-3588.3	1176.0	-0.6	-98.9
	ClsMax 41	-3588.3	1176.0	-0.6	-8.3
	ClsMed 41	-3588.3	1176.0	-0.6	-4.2
633	Ft. 41	-1900.8	-520.6	0.2	57.9
	Fc. 41	-1900.8	-520.6	0.2	-44.5
	ClsMax 41	-1900.8	-520.6	0.2	-3.7
	ClsMed 41	-1900.8	-520.6	0.2	-1.8

- Pilastro: 34/134 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
34	22	-137879.7	-31153.0	5695.9	4.81	1.90	0.71
134	22	-135848.5	31153.0	5695.9	44.13	3.23	0.71

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.00	0.51	31926.5	73445.6	7344.1	73445.6	ø 12/10.0'
0.51	2.57	31926.5	36722.8	7344.1	36722.8	ø 12/20.0'
2.57	3.08	31926.5	73445.6	7344.1	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
34	Ft. 38	-148567.6	839.5	102.8	-729.0
	Fc. 36	-160163.9	921.6	108.8	-884.9
	ClsMax 36	-160163.9	921.6	108.8	-59.7
	ClsMed 36	-160163.9	921.6	108.8	-55.7
134	Ft. 38	-146536.4	-1821.7	11.6	-675.3
	Fc. 36	-158132.7	-1996.7	15.5	-921.8
	ClsMax 36	-158132.7	-1996.7	15.5	-62.8
	ClsMed 36	-158132.7	-1996.7	15.5	-55.0
Combinazioni Frequenti					
34	Ft. 40	-142395.3	811.7	99.5	-698.4
	Fc. 39	-145684.0	838.9	101.1	-805.0
	ClsMax 39	-145684.0	838.9	101.1	-54.3
	ClsMed 39	-145684.0	838.9	101.1	-50.6
134	Ft. 40	-140364.1	-1762.6	9.6	-646.1
	Fc. 39	-143652.8	-1820.7	10.7	-837.6
	ClsMax 39	-143652.8	-1820.7	10.7	-57.1
	ClsMed 39	-143652.8	-1820.7	10.7	-49.9
Combinazioni Quasi Permanenti					
34	Ft. 41	-141818.6	811.6	99.1	-695.4
	Fc. 41	-141818.6	811.6	99.1	-783.5
	ClsMax 41	-141818.6	811.6	99.1	-52.8
	ClsMed 41	-141818.6	811.6	99.1	-49.3
134	Ft. 41	-139787.4	-1762.4	9.4	-643.1
	Fc. 41	-139787.4	-1762.4	9.4	-814.5
	ClsMax 41	-139787.4	-1762.4	9.4	-55.5
	ClsMed 41	-139787.4	-1762.4	9.4	-48.6

- Pilastro: 134/234 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
134	7	-115557.3	-21827.2	-3634.7	11.67	2.15	0.48

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

234	22	-108495.5	28343.0	868.6	14.74	1.00	0.64
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27243.7	73445.6	3369.8	73445.6	∅ 12/10.0'
0.79	3.28	27243.7	36722.8	3369.8	36722.8	∅ 12/20.0'
3.28	3.90	27243.7	73445.6	3369.8	73445.6	∅ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
134	Ft. 38	-120494.4	2150.4	116.0	-518.6
	Fc. 36	-129742.7	2360.6	122.4	-796.5
	ClsMax 36	-129742.7	2360.6	122.4	-54.8
	ClsMed 36	-129742.7	2360.6	122.4	-45.1
234	Ft. 38	-117950.6	-2096.6	-18.0	-512.7
	Fc. 36	-127198.9	-2303.9	-16.5	-775.4
	ClsMax 36	-127198.9	-2303.9	-16.5	-53.2
	ClsMed 36	-127198.9	-2303.9	-16.5	-44.2
Combinazioni Frequenti					
134	Ft. 40	-115104.0	2079.4	112.5	-494.1
	Fc. 39	-117609.8	2149.2	114.3	-722.7
	ClsMax 39	-117609.8	2149.2	114.3	-49.7
	ClsMed 39	-117609.8	2149.2	114.3	-40.9
234	Ft. 40	-112560.2	-2025.8	-19.0	-488.0
	Fc. 39	-115066.1	-2094.5	-18.7	-702.1
	ClsMax 39	-115066.1	-2094.5	-18.7	-48.2
	ClsMed 39	-115066.1	-2094.5	-18.7	-40.0
Combinazioni Quasi Permanenti					
134	Ft. 41	-114527.1	2079.1	112.2	-491.1
	Fc. 41	-114527.1	2079.1	112.2	-703.1
	ClsMax 41	-114527.1	2079.1	112.2	-48.3
	ClsMed 41	-114527.1	2079.1	112.2	-39.8
234	Ft. 41	-111983.3	-2025.4	-19.2	-485.0
	Fc. 41	-111983.3	-2025.4	-19.2	-682.7
	ClsMax 41	-111983.3	-2025.4	-19.2	-46.9
	ClsMed 41	-111983.3	-2025.4	-19.2	-38.9

- Pilastro: 234/334 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: \varnothing 12/10.0' x 61.8+ \varnothing 12/20.0' x 247.3+ \varnothing 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
234	10	-87812.5	-26260.1	-1531.6	11.49	1.00	0.52
334	30	-80821.7	-20780.2	-915.1	1.29	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31576.8	73445.6	2672.4	73445.6	\varnothing 12/10.0'
0.79	3.26	31576.8	36722.8	2672.4	36722.8	\varnothing 12/20.0'
3.26	3.88	31576.8	73445.6	2672.4	73445.6	\varnothing 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
234	Ft. 38	-92009.8	2108.2	112.3	-354.9
	Fc. 36	-98924.1	2320.7	118.9	-596.1
	ClsMax 36	-98924.1	2320.7	118.9	-41.3
	ClsMed 36	-98924.1	2320.7	118.9	-32.5
334	Ft. 38	-89478.6	-2134.8	-51.7	-343.9
	Fc. 36	-96392.9	-2351.9	-53.1	-582.1
	ClsMax 36	-96392.9	-2351.9	-53.1	-40.4
	ClsMed 36	-96392.9	-2351.9	-53.1	-31.7
Combinazioni Frequenti					
234	Ft. 40	-87395.9	2035.6	108.4	-335.5
	Fc. 39	-89123.4	2106.0	110.1	-537.8
	ClsMax 39	-89123.4	2106.0	110.1	-37.3
	ClsMed 39	-89123.4	2106.0	110.1	-29.3
334	Ft. 40	-84864.7	-2060.7	-51.2	-324.5
	Fc. 39	-86592.1	-2132.6	-51.6	-523.9
	ClsMax 39	-86592.1	-2132.6	-51.6	-36.3
	ClsMed 39	-86592.1	-2132.6	-51.6	-28.5
Combinazioni Quasi Permanenti					
234	Ft. 41	-86818.6	2035.2	107.9	-332.7
	Fc. 41	-86818.6	2035.2	107.9	-523.2
	ClsMax 41	-86818.6	2035.2	107.9	-36.3
	ClsMed 41	-86818.6	2035.2	107.9	-28.5
334	Ft. 41	-84287.4	-2060.2	-51.2	-321.7
	Fc. 41	-84287.4	-2060.2	-51.2	-509.3
	ClsMax 41	-84287.4	-2060.2	-51.2	-35.3
	ClsMed 41	-84287.4	-2060.2	-51.2	-27.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 334/434 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
334	24	-58560.6	20780.2	2146.1	4.58	1.00	0.43
434	26	-54907.1	-20780.2	-1673.3	1.98	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29287.3	73445.6	2277.6	73445.6	ø 12/10.0'
0.79	3.26	29287.3	36722.8	2277.6	36722.8	ø 12/20.0'
3.26	3.88	29287.3	73445.6	2277.6	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
334	Ft. 38	-63547.5	2084.1	97.7	-216.3
	Fc. 36	-68132.1	2297.7	103.3	-442.6
	ClSMax 36	-68132.1	2297.7	103.3	-31.1
	ClSMed 36	-68132.1	2297.7	103.3	-22.4
434	Ft. 38	-61016.3	-2020.7	-25.1	-209.9
	Fc. 36	-65600.9	-2228.1	-25.9	-423.6
	ClSMax 36	-65600.9	-2228.1	-25.9	-29.7
	ClSMed 36	-65600.9	-2228.1	-25.9	-21.6
Combinazioni Frequenti					
334	Ft. 40	-59707.9	2009.5	94.1	-200.8
	Fc. 39	-60658.2	2079.9	95.5	-395.7
	ClSMax 39	-60658.2	2079.9	95.5	-27.8
	ClSMed 39	-60658.2	2079.9	95.5	-19.9
434	Ft. 40	-57176.6	-1947.0	-25.9	-194.2
	Fc. 39	-58127.0	-2014.9	-26.5	-377.3
	ClSMax 39	-58127.0	-2014.9	-26.5	-26.5
	ClSMed 39	-58127.0	-2014.9	-26.5	-19.1
Combinazioni Quasi Permanenti					
334	Ft. 41	-59130.0	2008.7	93.7	-198.1
	Fc. 41	-59130.0	2008.7	93.7	-384.9
	ClSMax 41	-59130.0	2008.7	93.7	-27.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-59130.0	2008.7	93.7	-19.4
434	Ft. 41	-56598.8	-1945.8	-26.2	-191.4
	Fc. 41	-56598.8	-1945.8	-26.2	-366.6
	ClsMax 41	-56598.8	-1945.8	-26.2	-25.7
	ClsMed 41	-56598.8	-1945.8	-26.2	-18.6

- Pilastro: 434/534 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
434	6	-31779.0	21122.7	-907.4	767.88	1.00	0.51
534	30	-27485.8	-18031.4	346.6	1.00	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25547.1	73445.6	1681.9	73445.6	$\varnothing 12/10.0'$
0.79	3.26	25547.1	36722.8	1681.9	36722.8	$\varnothing 12/20.0'$
3.26	3.88	25547.1	73445.6	1681.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
434	Ft. 37	-35929.3	2533.1	143.9	-58.1
	Fc. 36	-37376.6	2536.0	146.1	-303.4
	ClsMax 36	-37376.6	2536.0	146.1	-22.0
	ClsMed 36	-37376.6	2536.0	146.1	-12.3
534	Ft. 37	-33398.0	-2918.7	-202.2	-25.9
	Fc. 36	-34845.3	-2918.7	-204.4	-310.6
	ClsMax 36	-34845.3	-2918.7	-204.4	-22.7
	ClsMed 36	-34845.3	-2918.7	-204.4	-11.5
Combinazioni Frequenti					
434	Ft. 39	-32222.6	2292.7	134.1	-51.0
	Fc. 39	-32222.6	2292.7	134.1	-266.7
	ClsMax 39	-32222.6	2292.7	134.1	-19.4
	ClsMed 39	-32222.6	2292.7	134.1	-10.6
534	Ft. 39	-29691.3	-2641.5	-189.4	-20.5
	Fc. 39	-29691.3	-2641.5	-189.4	-272.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-29691.3	-2641.5	-189.4	-20.0
	ClsMed 39	-29691.3	-2641.5	-189.4	-9.8

Combinazioni Quasi Permanenti

434	Ft. 41	-31469.5	2213.6	131.6	-50.9
	Fc. 41	-31469.5	2213.6	131.6	-259.4
	ClsMax 41	-31469.5	2213.6	131.6	-18.8
	ClsMed 41	-31469.5	2213.6	131.6	-10.3
534	Ft. 41	-28938.2	-2549.1	-185.8	-21.1
	Fc. 41	-28938.2	-2549.1	-185.8	-264.2
	ClsMax 41	-28938.2	-2549.1	-185.8	-19.4
	ClsMed 41	-28938.2	-2549.1	-185.8	-9.5

- Pilastro: 534/634 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ø 18 Af=20.36 [cm²] < 1ø18 x 4 V + 1ø18 x 2 B + 1ø18 x 2 H >

Staffe: ø 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
534	17	-4302.6	4735.3	574.3	1.00	1.00	0.23
634	30	-1454.3	-1424.6	2.8	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1679.1	25501.9	1073.6	25501.9	ø 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
534	Ft. 37	-5076.4	1445.1	-1.2	168.4
	Fc. 36	-6521.6	1444.3	-1.2	-125.8
	ClsMax 37	-5076.4	1445.1	-1.2	-10.2
	ClsMed 37	-5076.4	1445.1	-1.2	-5.1
634	Ft. 36	-4834.1	-1213.0	0.3	120.2
	Fc. 36	-4834.1	-1213.0	0.3	-104.5
	ClsMax 36	-4834.1	-1213.0	0.3	-8.5
	ClsMed 36	-4834.1	-1213.0	0.3	-4.2
Combinazioni Frequenti					
534	Ft. 39	-3699.5	1303.3	-1.1	187.6
	Fc. 39	-3699.5	1303.3	-1.1	-108.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-3699.5	1303.3	-1.1	-9.3
	ClsMed 39	-3699.5	1303.3	-1.1	-4.6
634	Ft. 40	-2612.8	-692.7	0.3	74.0
	Fc. 40	-2612.8	-692.7	0.3	-59.4
	ClsMax 40	-2612.8	-692.7	0.3	-4.9
	ClsMed 40	-2612.8	-692.7	0.3	-2.4

Combinazioni Quasi Permanenti

534	Ft. 41	-3722.2	1255.8	-1.1	174.1
	Fc. 41	-3722.2	1255.8	-1.1	-105.4
	ClsMax 41	-3722.2	1255.8	-1.1	-8.9
	ClsMed 41	-3722.2	1255.8	-1.1	-4.4
634	Ft. 41	-2034.7	-565.1	0.3	63.9
	Fc. 41	-2034.7	-565.1	0.3	-48.3
	ClsMax 41	-2034.7	-565.1	0.3	-4.0
	ClsMed 41	-2034.7	-565.1	0.3	-2.0

- Pilastro: 35/135 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
35	22	-139963.1	-30421.4	5675.7	5.63	1.90	0.69
135	22	-137931.9	30421.4	5675.7	195.88	3.19	0.69

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31925.8	73445.6	7580.8	73445.6	$\varnothing 12/10.0'$
0.51	2.57	31925.8	36722.8	7580.8	36722.8	$\varnothing 12/20.0'$
2.57	3.08	31925.8	73445.6	7580.8	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
35	Ft. 38	-150692.0	939.4	99.6	-735.4
	Fc. 36	-162528.0	1029.5	106.4	-902.3
	ClsMax 36	-162528.0	1029.5	106.4	-60.9
	ClsMed 36	-162528.0	1029.5	106.4	-56.5
135	Ft. 38	-148660.8	-2027.4	18.2	-676.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-160496.7	-2219.5	20.6	-945.1
	ClsMax 36	-160496.7	-2219.5	20.6	-64.5
	ClsMed 36	-160496.7	-2219.5	20.6	-55.8

Combinazioni Frequenti

35	Ft. 40	-144397.9	908.3	96.1	-704.3
	Fc. 39	-147756.0	938.0	98.0	-820.5
	ClsMax 39	-147756.0	938.0	98.0	-55.4
	ClsMed 39	-147756.0	938.0	98.0	-51.4
135	Ft. 40	-142366.7	-1961.2	16.7	-646.6
	Fc. 39	-145724.8	-2024.7	17.3	-858.5
	ClsMax 39	-145724.8	-2024.7	17.3	-58.6
	ClsMed 39	-145724.8	-2024.7	17.3	-50.7

Combinazioni Quasi Permanenti

35	Ft. 41	-143810.7	908.0	95.7	-701.3
	Fc. 41	-143810.7	908.0	95.7	-798.3
	ClsMax 41	-143810.7	908.0	95.7	-53.9
	ClsMed 41	-143810.7	908.0	95.7	-50.0
135	Ft. 41	-141779.5	-1960.7	16.5	-643.6
	Fc. 41	-141779.5	-1960.7	16.5	-834.8
	ClsMax 41	-141779.5	-1960.7	16.5	-57.0
	ClsMed 41	-141779.5	-1960.7	16.5	-49.3

- Pilastro: 135/235 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
135	7	-117007.9	-21581.7	-3635.6	20.06	2.18	0.48
235	26	-110466.4	27069.6	861.5	31.32	1.00	0.60

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27205.9	73445.6	3398.2	73445.6	$\phi 12/10.0'$
0.79	3.28	27205.9	36722.8	3398.2	36722.8	$\phi 12/20.0'$
3.28	3.90	27205.9	73445.6	3398.2	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

135	Ft. 38	-122072.2	2431.5	114.2	-513.3
	Fc. 36	-131503.0	2663.8	122.7	-820.4
	ClsMax 36	-131503.0	2663.8	122.7	-56.6
	ClsMed 36	-131503.0	2663.8	122.7	-45.7
235	Ft. 38	-119528.4	-2415.8	-22.7	-505.3
	Fc. 36	-128959.3	-2647.7	-23.8	-801.6
	ClsMax 36	-128959.3	-2647.7	-23.8	-55.2
	ClsMed 36	-128959.3	-2647.7	-23.8	-44.8

Combinazioni Frequenti

135	Ft. 40	-116577.6	2350.6	110.0	-488.8
	Fc. 39	-119133.5	2427.1	112.5	-744.0
	ClsMax 39	-119133.5	2427.1	112.5	-51.3
	ClsMed 39	-119133.5	2427.1	112.5	-41.4
235	Ft. 40	-114033.9	-2333.5	-22.8	-480.6
	Fc. 39	-116589.7	-2409.5	-23.3	-725.5
	ClsMax 39	-116589.7	-2409.5	-23.3	-50.0
	ClsMed 39	-116589.7	-2409.5	-23.3	-40.5

Combinazioni Quasi Permanenti

135	Ft. 41	-115989.9	2349.7	109.6	-485.8
	Fc. 41	-115989.9	2349.7	109.6	-723.7
	ClsMax 41	-115989.9	2349.7	109.6	-49.9
	ClsMed 41	-115989.9	2349.7	109.6	-40.3
235	Ft. 41	-113446.1	-2332.2	-23.0	-477.6
	Fc. 41	-113446.1	-2332.2	-23.0	-705.4
	ClsMax 41	-113446.1	-2332.2	-23.0	-48.6
	ClsMed 41	-113446.1	-2332.2	-23.0	-39.4

- Pilastro: 235/335 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
235	6	-88490.7	-25751.8	-1525.4	125.15	1.00	0.50
335	6	-85959.5	21084.4	405.2	61.79	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31615.7	73445.6	2646.0	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31615.7	36722.8	2646.0	36722.8	$\varnothing 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	31615.7	73445.6	2646.0	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

235	Ft. 38	-93117.1	2492.6	123.9	-342.7
	Fc. 36	-100161.4	2733.2	133.4	-621.1
	ClSMax 36	-100161.4	2733.2	133.4	-43.3
	ClSMed 36	-100161.4	2733.2	133.4	-32.9
335	Ft. 38	-90585.9	-2558.3	-63.9	-330.0
	Fc. 36	-97630.1	-2806.0	-68.3	-609.0
	ClSMax 36	-97630.1	-2806.0	-68.3	-42.5
	ClSMed 36	-97630.1	-2806.0	-68.3	-32.1

Combinazioni Frequenti

235	Ft. 40	-88413.3	2405.4	118.7	-323.7
	Fc. 39	-90172.5	2483.9	121.4	-560.3
	ClSMax 39	-90172.5	2483.9	121.4	-39.0
	ClSMed 39	-90172.5	2483.9	121.4	-29.6
335	Ft. 40	-85882.1	-2467.7	-62.1	-310.9
	Fc. 39	-87641.2	-2548.3	-63.4	-548.1
	ClSMax 39	-87641.2	-2548.3	-63.4	-38.2
	ClSMed 39	-87641.2	-2548.3	-63.4	-28.8

Combinazioni Quasi Permanenti

235	Ft. 41	-87824.4	2403.7	118.2	-320.9
	Fc. 41	-87824.4	2403.7	118.2	-545.0
	ClSMax 41	-87824.4	2403.7	118.2	-38.0
	ClSMed 41	-87824.4	2403.7	118.2	-28.9
335	Ft. 41	-85293.1	-2465.7	-62.0	-308.1
	Fc. 41	-85293.1	-2465.7	-62.0	-532.8
	ClSMax 41	-85293.1	-2465.7	-62.0	-37.2
	ClSMed 41	-85293.1	-2465.7	-62.0	-28.0

- Pilastro: 335/435 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1 \phi 24 \times 4 \text{ V} + 1 \phi 24 \times 2 \text{ B} + 1 \phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
335	7	-60258.5	21196.3	-1860.8	96.46	1.00	0.44
435	7	-57727.3	21115.0	1042.3	85.93	1.00	0.43

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29339.3	73445.6	2217.4	73445.6	ø 12/10.0'
0.79	3.26	29339.3	36722.8	2217.4	36722.8	ø 12/20.0'
3.26	3.88	29339.3	73445.6	2217.4	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

335	Ft. 38	-64248.7	2530.4	112.2	-199.3
	Fc. 36	-68914.7	2776.3	120.7	-468.5
	ClsMax 36	-68914.7	2776.3	120.7	-33.1
	ClsMed 36	-68914.7	2776.3	120.7	-22.6
435	Ft. 38	-61717.4	-2456.9	-41.4	-193.2
	Fc. 36	-66383.4	-2696.5	-45.0	-449.1
	ClsMax 36	-66383.4	-2696.5	-45.0	-31.7
	ClsMed 36	-66383.4	-2696.5	-45.0	-21.8

Combinazioni Frequenti

335	Ft. 40	-60330.3	2438.1	107.4	-184.3
	Fc. 39	-61294.9	2517.5	109.7	-418.9
	ClsMax 39	-61294.9	2517.5	109.7	-29.6
	ClsMed 39	-61294.9	2517.5	109.7	-20.1
435	Ft. 40	-57799.1	-2365.7	-41.2	-178.0
	Fc. 39	-58763.7	-2442.7	-42.7	-400.1
	ClsMax 39	-58763.7	-2442.7	-42.7	-28.3
	ClsMed 39	-58763.7	-2442.7	-42.7	-19.3

Combinazioni Quasi Permanenti

335	Ft. 41	-59739.6	2435.5	106.9	-181.5
	Fc. 41	-59739.6	2435.5	106.9	-407.5
	ClsMax 41	-59739.6	2435.5	106.9	-28.8
	ClsMed 41	-59739.6	2435.5	106.9	-19.6
435	Ft. 41	-57208.3	-2362.8	-41.5	-175.2
	Fc. 41	-57208.3	-2362.8	-41.5	-388.9
	ClsMax 41	-57208.3	-2362.8	-41.5	-27.5
	ClsMed 41	-57208.3	-2362.8	-41.5	-18.8

- Pilastro: 435/535 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1φ24 x 4 V + 1φ24 x 2 B + 1φ24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
435	11	-32148.3	21413.4	-713.0	4653.88	1.00	0.52
535	30	-27894.8	-16820.9	-1167.2	1.00	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25884.8	73445.6	1583.8	73445.6	Ø 12/10.0'
0.79	3.26	25884.8	36722.8	1583.8	36722.8	Ø 12/20.0'
3.26	3.88	25884.8	73445.6	1583.8	73445.6	Ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

435	Ft. 37	-36273.9	3174.2	174.7	-30.0
	Fc. 36	-37757.5	3184.4	178.3	-335.6
	ClsMax 36	-37757.5	3184.4	178.3	-24.6
	ClsMed 36	-37757.5	3184.4	178.3	-12.4
535	Ft. 37	-33742.6	-3764.4	-243.5	19.0
	Fc. 36	-35226.2	-3775.4	-248.8	-354.7
	ClsMax 36	-35226.2	-3775.4	-248.8	-26.3
	ClsMed 36	-35226.2	-3775.4	-248.8	-12.7

Combinazioni Frequenti

435	Ft. 39	-32494.7	2884.9	159.9	-24.9
	Fc. 39	-32494.7	2884.9	159.9	-295.5
	ClsMax 39	-32494.7	2884.9	159.9	-21.7
	ClsMed 39	-32494.7	2884.9	159.9	-10.7
535	Ft. 39	-29963.4	-3424.1	-223.3	22.5
	Fc. 39	-29963.4	-3424.1	-223.3	-313.3
	ClsMax 39	-29963.4	-3424.1	-223.3	-23.3
	ClsMed 39	-29963.4	-3424.1	-223.3	-11.2

Combinazioni Quasi Permanenti

435	Ft. 41	-31729.5	2791.9	156.2	-25.4
	Fc. 41	-31729.5	2791.9	156.2	-287.4
	ClsMax 41	-31729.5	2791.9	156.2	-21.1
	ClsMed 41	-31729.5	2791.9	156.2	-10.4
535	Ft. 41	-29198.2	-3314.3	-218.3	20.5
	Fc. 41	-29198.2	-3314.3	-218.3	-304.1
	ClsMax 41	-29198.2	-3314.3	-218.3	-22.7
	ClsMed 41	-29198.2	-3314.3	-218.3	-10.9

- Pilastro: 535/635 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
535	17	-4140.0	4222.7	590.7	1.00	1.00	0.20
635	30	-1477.3	-1400.5	2.8	1.00	1.00	0.06

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1549.1	25501.9	1101.2	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
535	Ft. 37	-5036.3	1502.3	-0.7	184.5
	Fc. 36	-6523.3	1500.7	-0.7	-130.3
	ClsMax 37	-5036.3	1502.3	-0.7	-10.6
	ClsMed 37	-5036.3	1502.3	-0.7	-5.3
635	Ft. 36	-4835.8	-1322.8	0.3	146.9
	Fc. 36	-4835.8	-1322.8	0.3	-113.1
	ClsMax 36	-4835.8	-1322.8	0.3	-9.3
	ClsMed 36	-4835.8	-1322.8	0.3	-4.6
Combinazioni Frequenti					
535	Ft. 39	-3626.7	1352.1	-0.6	203.6
	Fc. 39	-3626.7	1352.1	-0.6	-112.2
	ClsMax 39	-3626.7	1352.1	-0.6	-9.6
	ClsMed 39	-3626.7	1352.1	-0.6	-4.8
635	Ft. 40	-2559.7	-779.0	0.2	97.7
	Fc. 40	-2559.7	-779.0	0.2	-66.0
	ClsMax 40	-2559.7	-779.0	0.2	-5.5
	ClsMed 40	-2559.7	-779.0	0.2	-2.7
Combinazioni Quasi Permanenti					
535	Ft. 41	-3652.4	1301.4	-0.6	189.0
	Fc. 41	-3652.4	1301.4	-0.6	-108.5
	ClsMax 41	-3652.4	1301.4	-0.6	-9.2
	ClsMed 41	-3652.4	1301.4	-0.6	-4.6
635	Ft. 41	-1964.9	-647.1	0.2	87.7
	Fc. 41	-1964.9	-647.1	0.2	-54.4
	ClsMax 41	-1964.9	-647.1	0.2	-4.6
	ClsMed 41	-1964.9	-647.1	0.2	-2.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 36/136 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
36	22	-138073.0	-29324.2	5672.1	6.38	1.90	0.66
136	22	-136041.7	29324.2	5672.1	448.18	3.16	0.67

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31863.4	73445.6	7582.9	73445.6	$\varnothing 12/10.0'$
0.51	2.57	31863.4	36722.8	7582.9	36722.8	$\varnothing 12/20.0'$
2.57	3.08	31863.4	73445.6	7582.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
36	Ft. 38	-147536.7	824.5	86.1	-725.2
	Fc. 36	-159027.3	904.9	92.0	-877.4
	ClsMax 36	-159027.3	904.9	92.0	-59.2
	ClsMed 36	-159027.3	904.9	92.0	-55.3
136	Ft. 38	-145505.4	-1782.6	46.7	-670.2
	Fc. 36	-156996.1	-1954.4	50.7	-915.5
	ClsMax 36	-156996.1	-1954.4	50.7	-62.4
	ClsMed 36	-156996.1	-1954.4	50.7	-54.6
Combinazioni Frequenti					
36	Ft. 40	-141421.1	797.4	82.8	-694.8
	Fc. 39	-144680.1	824.1	84.4	-798.3
	ClsMax 39	-144680.1	824.1	84.4	-53.8
	ClsMed 39	-144680.1	824.1	84.4	-50.3
136	Ft. 40	-139389.9	-1724.8	44.6	-641.2
	Fc. 39	-142648.8	-1781.9	45.7	-832.1
	ClsMax 39	-142648.8	-1781.9	45.7	-56.7
	ClsMed 39	-142648.8	-1781.9	45.7	-49.6
Combinazioni Quasi Permanenti					
36	Ft. 41	-140849.8	797.3	82.5	-691.8
	Fc. 41	-140849.8	797.3	82.5	-776.9
	ClsMax 41	-140849.8	797.3	82.5	-52.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-140849.8	797.3	82.5	-49.0
136	Ft. 41	-138818.6	-1724.6	44.4	-638.2
	Fc. 41	-138818.6	-1724.6	44.4	-809.3
	ClsMax 41	-138818.6	-1724.6	44.4	-55.1
	ClsMed 41	-138818.6	-1724.6	44.4	-48.3

- Pilastro: 136/236 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
136	7	-114521.1	-21147.3	-3618.4	23.58	2.09	0.47
236	22	-108825.0	26542.7	898.6	27.78	1.00	0.59

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27209.4	73445.6	3396.7	73445.6	$\varnothing 12/10.0'$
0.79	3.28	27209.4	36722.8	3396.7	36722.8	$\varnothing 12/20.0'$
3.28	3.90	27209.4	73445.6	3396.7	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
136	Ft. 38	-119687.2	2098.9	78.3	-518.7
	Fc. 36	-128852.6	2304.2	84.5	-787.3
	ClsMax 36	-128852.6	2304.2	84.5	-54.1
	ClsMed 36	-128852.6	2304.2	84.5	-44.8
236	Ft. 38	-117143.4	-2045.8	14.8	-511.1
	Fc. 36	-126308.9	-2248.9	16.4	-768.1
	ClsMax 36	-126308.9	-2248.9	16.4	-52.7
	ClsMed 36	-126308.9	-2248.9	16.4	-43.9
Combinazioni Frequenti					
136	Ft. 40	-114346.3	2029.7	74.9	-494.4
	Fc. 39	-116830.0	2097.9	76.7	-714.3
	ClsMax 39	-116830.0	2097.9	76.7	-49.1
	ClsMed 39	-116830.0	2097.9	76.7	-40.6
236	Ft. 40	-111802.5	-1976.7	13.7	-486.6
	Fc. 39	-114286.2	-2044.1	14.1	-695.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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	ClsMax 39	-114286.2	-2044.1	14.1	-47.7
	ClsMed 39	-114286.2	-2044.1	14.1	-39.7

Combinazioni Quasi Permanenti

136	Ft. 41	-113774.8	2029.5	74.6	-491.4
	Fc. 41	-113774.8	2029.5	74.6	-695.0
	ClsMax 41	-113774.8	2029.5	74.6	-47.7
	ClsMed 41	-113774.8	2029.5	74.6	-39.5
236	Ft. 41	-111231.1	-1976.4	13.6	-483.7
	Fc. 41	-111231.1	-1976.4	13.6	-676.2
	ClsMax 41	-111231.1	-1976.4	13.6	-46.4
	ClsMed 41	-111231.1	-1976.4	13.6	-38.7

- Pilastro: 236/336 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
236	10	-86961.0	-25106.3	-1557.8	21.00	1.00	0.49
336	6	-84225.5	20978.6	503.2	51.04	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31506.6	73445.6	2679.3	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31506.6	36722.8	2679.3	36722.8	$\varnothing 12/20.0'$
3.26	3.88	31506.6	73445.6	2679.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

236	Ft. 38	-91410.4	2039.9	82.5	-356.3
	Fc. 36	-98263.5	2246.7	88.9	-588.2
	ClsMax 36	-98263.5	2246.7	88.9	-40.7
	ClsMed 36	-98263.5	2246.7	88.9	-32.3
336	Ft. 38	-88879.1	-2065.8	-20.4	-345.4
	Fc. 36	-95732.2	-2277.5	-21.5	-574.1
	ClsMax 36	-95732.2	-2277.5	-21.5	-39.8
	ClsMed 36	-95732.2	-2277.5	-21.5	-31.5

Combinazioni Frequenti

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

236	Ft. 40	-86839.2	1969.5	78.6	-337.1
	Fc. 39	-88551.9	2038.0	80.3	-530.7
	ClsMax 39	-88551.9	2038.0	80.3	-36.8
	ClsMed 39	-88551.9	2038.0	80.3	-29.1
336	Ft. 40	-84308.0	-1993.8	-19.9	-326.1
	Fc. 39	-86020.6	-2064.0	-20.3	-516.7
	ClsMax 39	-86020.6	-2064.0	-20.3	-35.8
	ClsMed 39	-86020.6	-2064.0	-20.3	-28.3

Combinazioni Quasi Permanenti

236	Ft. 41	-86267.5	1969.1	78.2	-334.3
	Fc. 41	-86267.5	1969.1	78.2	-516.2
	ClsMax 41	-86267.5	1969.1	78.2	-35.7
	ClsMed 41	-86267.5	1969.1	78.2	-28.4
336	Ft. 41	-83736.3	-1993.5	-19.9	-323.3
	Fc. 41	-83736.3	-1993.5	-19.9	-502.3
	ClsMax 41	-83736.3	-1993.5	-19.9	-34.8
	ClsMed 41	-83736.3	-1993.5	-19.9	-27.5

- Pilastro: 336/436 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
336	7	-59150.6	21195.4	-1981.9	264.79	1.00	0.44
436	6	-56573.4	21083.4	1124.4	862.24	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29164.6	73445.6	2240.3	73445.6	ø 12/10.0'
0.79	3.26	29164.6	36722.8	2240.3	36722.8	ø 12/20.0'
3.26	3.88	29164.6	73445.6	2240.3	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
336	Ft. 38	-63142.3	2009.6	71.5	-218.8
	Fc. 36	-67686.7	2217.4	76.9	-435.6
	ClsMax 36	-67686.7	2217.4	76.9	-30.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 36	-67686.7	2217.4	76.9	-22.2
436	Ft. 38	-60611.1	-1950.1	-5.9	-211.9
	Fc. 36	-65155.4	-2151.8	-6.7	-417.1
	ClsMax 36	-65155.4	-2151.8	-6.7	-29.2
	ClsMed 36	-65155.4	-2151.8	-6.7	-21.4

Combinazioni Frequenti

336	Ft. 40	-59339.3	1937.4	67.8	-203.4
	Fc. 39	-60282.0	2006.0	69.2	-389.4
	ClsMax 39	-60282.0	2006.0	69.2	-27.3
	ClsMed 39	-60282.0	2006.0	69.2	-19.8
436	Ft. 40	-56808.0	-1878.5	-6.5	-196.3
	Fc. 39	-57750.7	-1944.7	-7.0	-371.4
	ClsMax 39	-57750.7	-1944.7	-7.0	-26.0
	ClsMed 39	-57750.7	-1944.7	-7.0	-19.0

Combinazioni Quasi Permanenti

336	Ft. 41	-58767.2	1936.7	67.4	-200.6
	Fc. 41	-58767.2	1936.7	67.4	-378.8
	ClsMax 41	-58767.2	1936.7	67.4	-26.6
	ClsMed 41	-58767.2	1936.7	67.4	-19.3
436	Ft. 41	-56236.0	-1877.4	-6.8	-193.5
	Fc. 41	-56236.0	-1877.4	-6.8	-361.0
	ClsMax 41	-56236.0	-1877.4	-6.8	-25.3
	ClsMed 41	-56236.0	-1877.4	-6.8	-18.5

- Pilastro: 436/536 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
436	10	-31583.3	21206.4	-894.5	531.45	1.00	0.51
536	17	-29729.9	16529.9	-674.4	1.86	1.00	0.38

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25563.3	73445.6	1616.5	73445.6	$\varnothing 12/10.0'$
0.79	3.26	25563.3	36722.8	1616.5	36722.8	$\varnothing 12/20.0'$
3.26	3.88	25563.3	73445.6	1616.5	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
436	Ft. 37	-35700.9	2427.5	109.3	-63.3
	Fc. 36	-37133.1	2429.7	111.5	-296.0
	ClsMax 36	-37133.1	2429.7	111.5	-21.4
	ClsMed 36	-37133.1	2429.7	111.5	-12.2
536	Ft. 37	-33169.7	-2790.0	-144.2	-33.1
	Fc. 36	-34601.8	-2789.4	-146.3	-301.0
	ClsMax 36	-34601.8	-2789.4	-146.3	-22.0
	ClsMed 36	-34601.8	-2789.4	-146.3	-11.4
Combinazioni Frequenti					
436	Ft. 39	-32029.6	2194.4	100.2	-55.9
	Fc. 39	-32029.6	2194.4	100.2	-259.9
	ClsMax 39	-32029.6	2194.4	100.2	-18.8
	ClsMed 39	-32029.6	2194.4	100.2	-10.5
536	Ft. 39	-29498.4	-2520.8	-133.1	-27.5
	Fc. 39	-29498.4	-2520.8	-133.1	-263.4
	ClsMax 39	-29498.4	-2520.8	-133.1	-19.3
	ClsMed 39	-29498.4	-2520.8	-133.1	-9.7
Combinazioni Quasi Permanenti					
436	Ft. 41	-31283.3	2117.4	97.9	-55.8
	Fc. 41	-31283.3	2117.4	97.9	-252.7
	ClsMax 41	-31283.3	2117.4	97.9	-18.3
	ClsMed 41	-31283.3	2117.4	97.9	-10.3
536	Ft. 41	-28752.0	-2430.8	-130.1	-27.9
	Fc. 41	-28752.0	-2430.8	-130.1	-255.5
	ClsMax 41	-28752.0	-2430.8	-130.1	-18.7
	ClsMed 41	-28752.0	-2430.8	-130.1	-9.4

- Pilastro: 536/636 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0'$ x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
536	17	-4123.1	3865.1	569.6	1.00	1.00	0.18
636	30	-1612.8	-1150.2	2.6	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	2.58	1427.3	25501.9	1064.6	25501.9	∅ 10/20.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

536	Ft. 37	-5050.4	1414.8	-0.8	161.8
	Fc. 36	-6479.4	1413.6	-0.8	-123.3
	ClsMax 37	-5050.4	1414.8	-0.8	-10.0
	ClsMed 37	-5050.4	1414.8	-0.8	-5.0
636	Ft. 36	-4791.9	-1188.7	0.2	115.8
	Fc. 36	-4791.9	-1188.7	0.2	-102.5
	ClsMax 36	-4791.9	-1188.7	0.2	-8.3
	ClsMed 36	-4791.9	-1188.7	0.2	-4.2

Combinazioni Frequenti

536	Ft. 39	-3689.1	1276.9	-0.7	181.0
	Fc. 39	-3689.1	1276.9	-0.7	-106.8
	ClsMax 39	-3689.1	1276.9	-0.7	-9.1
	ClsMed 39	-3689.1	1276.9	-0.7	-4.5
636	Ft. 40	-2595.8	-675.2	0.2	70.3
	Fc. 40	-2595.8	-675.2	0.2	-58.0
	ClsMax 40	-2595.8	-675.2	0.2	-4.7
	ClsMed 40	-2595.8	-675.2	0.2	-2.4

Combinazioni Quasi Permanenti

536	Ft. 41	-3711.7	1230.6	-0.7	167.9
	Fc. 41	-3711.7	1230.6	-0.7	-103.4
	ClsMax 41	-3711.7	1230.6	-0.7	-8.7
	ClsMed 41	-3711.7	1230.6	-0.7	-4.4
636	Ft. 41	-2024.2	-549.1	0.2	60.4
	Fc. 41	-2024.2	-549.1	0.2	-47.0
	ClsMax 41	-2024.2	-549.1	0.2	-3.9
	ClsMed 41	-2024.2	-549.1	0.2	-1.9

- Pilastro: 37/137 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 51.3+∅ 12/20.0' x 205.3+∅ 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
37	9	-143163.6	25986.9	-5579.7	4.92	1.98	0.59
137	9	-141132.3	-25986.9	-5579.7	8.15	3.26	0.59

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31813.1	73445.6	7631.1	73445.6	ø 12/10.0'
0.51	2.57	31813.1	36722.8	7631.1	36722.8	ø 12/20.0'
2.57	3.08	31813.1	73445.6	7631.1	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

37	Ft. 38	-147567.5	824.2	86.3	-725.3
	Fc. 36	-159059.6	904.4	92.2	-877.5
	ClsMax 36	-159059.6	904.4	92.2	-59.2
	ClsMed 36	-159059.6	904.4	92.2	-55.3
137	Ft. 38	-145536.3	-1778.3	46.3	-670.5
	Fc. 36	-157028.3	-1949.8	50.3	-915.4
	ClsMax 36	-157028.3	-1949.8	50.3	-62.4
	ClsMed 36	-157028.3	-1949.8	50.3	-54.6

Combinazioni Frequenti

37	Ft. 40	-141451.0	797.3	83.0	-694.9
	Fc. 39	-144710.2	823.9	84.6	-798.4
	ClsMax 39	-144710.2	823.9	84.6	-53.8
	ClsMed 39	-144710.2	823.9	84.6	-50.3
137	Ft. 40	-139419.7	-1720.6	44.2	-641.5
	Fc. 39	-142678.9	-1777.7	45.3	-832.1
	ClsMax 39	-142678.9	-1777.7	45.3	-56.7
	ClsMed 39	-142678.9	-1777.7	45.3	-49.6

Combinazioni Quasi Permanenti

37	Ft. 41	-140879.5	797.2	82.6	-692.0
	Fc. 41	-140879.5	797.2	82.6	-777.1
	ClsMax 41	-140879.5	797.2	82.6	-52.4
	ClsMed 41	-140879.5	797.2	82.6	-49.0
137	Ft. 41	-138848.2	-1720.5	44.0	-638.6
	Fc. 41	-138848.2	-1720.5	44.0	-809.3
	ClsMax 41	-138848.2	-1720.5	44.0	-55.1
	ClsMed 41	-138848.2	-1720.5	44.0	-48.3

- Pilastro: 137/237 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 62.2+ø 12/20.0' x 248.7+ø 12/10.0' x 62.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
137	7	-114426.4	-20831.2	-3619.1	49.85	2.10	0.46
237	22	-109288.2	25691.6	904.3	53.41	1.00	0.56

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27182.3	73445.6	3399.6	73445.6	ø 12/10.0'
0.79	3.28	27182.3	36722.8	3399.6	36722.8	ø 12/20.0'
3.28	3.90	27182.3	73445.6	3399.6	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

137	Ft. 38	-119714.9	2091.6	77.0	-519.3
	Fc. 36	-128881.5	2296.0	83.2	-787.0
	ClsMax 36	-128881.5	2296.0	83.2	-54.1
	ClsMed 36	-128881.5	2296.0	83.2	-44.8
237	Ft. 38	-117171.1	-2038.9	18.1	-511.4
	Fc. 36	-126337.8	-2241.4	19.7	-768.1
	ClsMax 36	-126337.8	-2241.4	19.7	-52.7
	ClsMed 36	-126337.8	-2241.4	19.7	-43.9

Combinazioni Frequenti

137	Ft. 40	-114373.0	2022.8	73.6	-494.9
	Fc. 39	-116857.0	2090.7	75.4	-714.0
	ClsMax 39	-116857.0	2090.7	75.4	-49.1
	ClsMed 39	-116857.0	2090.7	75.4	-40.6
237	Ft. 40	-111829.3	-1970.2	16.9	-486.9
	Fc. 39	-114313.2	-2037.4	17.3	-695.4
	ClsMax 39	-114313.2	-2037.4	17.3	-47.7
	ClsMed 39	-114313.2	-2037.4	17.3	-39.7

Combinazioni Quasi Permanenti

137	Ft. 41	-113801.4	2022.6	73.3	-492.0
	Fc. 41	-113801.4	2022.6	73.3	-694.7
	ClsMax 41	-113801.4	2022.6	73.3	-47.7
	ClsMed 41	-113801.4	2022.6	73.3	-39.6
237	Ft. 41	-111257.7	-1969.9	16.8	-484.0
	Fc. 41	-111257.7	-1969.9	16.8	-676.2
	ClsMax 41	-111257.7	-1969.9	16.8	-46.4
	ClsMed 41	-111257.7	-1969.9	16.8	-38.7

- Pilastro: 237/337 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4$ V + $1\varnothing 24 \times 2$ B + $1\varnothing 24 \times 2$ H >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
237	10	-86865.1	-24567.6	-1558.4	37.25	1.00	0.48
337	6	-84168.0	21119.8	504.7	745.40	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31491.2	73445.6	2682.2	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31491.2	36722.8	2682.2	36722.8	$\varnothing 12/20.0'$
3.26	3.88	31491.2	73445.6	2682.2	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
237	Ft. 38	-91434.5	2024.7	76.2	-357.4
	Fc. 36	-98288.6	2230.1	82.5	-587.3
	ClsMax 36	-98288.6	2230.1	82.5	-40.7
	ClsMed 36	-98288.6	2230.1	82.5	-32.3
337	Ft. 38	-88903.3	-2050.4	-12.8	-346.6
	Fc. 36	-95757.4	-2260.8	-13.7	-573.1
	ClsMax 36	-95757.4	-2260.8	-13.7	-39.7
	ClsMed 36	-95757.4	-2260.8	-13.7	-31.5
Combinazioni Frequenti					
237	Ft. 40	-86862.5	1955.0	72.5	-338.1
	Fc. 39	-88575.4	2023.1	74.2	-529.8
	ClsMax 39	-88575.4	2023.1	74.2	-36.7
	ClsMed 39	-88575.4	2023.1	74.2	-29.1
337	Ft. 40	-84331.2	-1979.1	-12.6	-327.2
	Fc. 39	-86044.1	-2048.9	-12.9	-515.8
	ClsMax 39	-86044.1	-2048.9	-12.9	-35.7
	ClsMed 39	-86044.1	-2048.9	-12.9	-28.3
Combinazioni Quasi Permanenti					
237	Ft. 41	-86290.7	1954.7	72.1	-335.3
	Fc. 41	-86290.7	1954.7	72.1	-515.4
	ClsMax 41	-86290.7	1954.7	72.1	-35.7
	ClsMed 41	-86290.7	1954.7	72.1	-28.4
337	Ft. 41	-83759.4	-1978.8	-12.6	-324.4
	Fc. 41	-83759.4	-1978.8	-12.6	-501.4

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	ClsMax 41	-83759.4	-1978.8	-12.6	-34.7
	ClsMed 41	-83759.4	-1978.8	-12.6	-27.5

- Pilastro: 337/437 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ϕ 24 Af=36.19 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 1 ϕ 24 x 2 H >

Staffe: ϕ 12/10.0' x 61.8+ ϕ 12/20.0' x 247.3+ ϕ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
337	10	-59174.7	21167.2	-1860.4	297.06	1.00	0.44
437	10	-56643.5	21001.8	1059.5	61.79	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29133.8	73445.6	2227.2	73445.6	ϕ 12/10.0'
0.79	3.26	29133.8	36722.8	2227.2	36722.8	ϕ 12/20.0'
3.26	3.88	29133.8	73445.6	2227.2	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
337	Ft. 38	-63161.3	1992.7	63.8	-220.0
	Fc. 36	-67706.5	2199.0	69.0	-434.6
	ClsMax 36	-67706.5	2199.0	69.0	-30.4
	ClsMed 36	-67706.5	2199.0	69.0	-22.3
437	Ft. 38	-60630.1	-1936.2	0.6	-212.8
	Fc. 36	-65175.2	-2136.6	-0.1	-416.2
	ClsMax 36	-65175.2	-2136.6	-0.1	-29.1
	ClsMed 36	-65175.2	-2136.6	-0.1	-21.4
Combinazioni Frequenti					
337	Ft. 40	-59357.6	1921.3	60.5	-204.5
	Fc. 39	-60300.4	1989.4	61.8	-388.4
	ClsMax 39	-60300.4	1989.4	61.8	-27.2
	ClsMed 39	-60300.4	1989.4	61.8	-19.8
437	Ft. 40	-56826.3	-1865.2	-0.3	-197.2
	Fc. 39	-57769.2	-1930.9	-0.8	-370.6
	ClsMax 39	-57769.2	-1930.9	-0.8	-26.0
	ClsMed 39	-57769.2	-1930.9	-0.8	-19.0
Combinazioni Quasi Permanenti					

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337	Ft. 41	-58785.4	1920.7	60.1	-201.8
	Fc. 41	-58785.4	1920.7	60.1	-377.8
	ClsMax 41	-58785.4	1920.7	60.1	-26.5
	ClsMed 41	-58785.4	1920.7	60.1	-19.3
437	Ft. 41	-56254.2	-1864.1	-0.6	-194.4
	Fc. 41	-56254.2	-1864.1	-0.6	-360.2
	ClsMax 41	-56254.2	-1864.1	-0.6	-25.2
	ClsMed 41	-56254.2	-1864.1	-0.6	-18.5

- Pilastro: 437/537 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
437	11	-31565.5	21110.8	-902.6	95.67	1.00	0.51
537	17	-29545.1	16347.6	-646.5	2.37	1.00	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25570.3	73445.6	1568.2	73445.6	ø 12/10.0'
0.79	3.26	25570.3	36722.8	1568.2	36722.8	ø 12/20.0'
3.26	3.88	25570.3	73445.6	1568.2	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
437	Ft. 37	-35713.8	2396.7	96.0	-65.3
	Fc. 36	-37146.2	2398.4	98.0	-294.1
	ClsMax 36	-37146.2	2398.4	98.0	-21.2
	ClsMed 36	-37146.2	2398.4	98.0	-12.2
537	Ft. 37	-33182.6	-2745.5	-122.3	-36.1
	Fc. 36	-34615.0	-2744.1	-124.3	-298.1
	ClsMax 36	-34615.0	-2744.1	-124.3	-21.7
	ClsMed 36	-34615.0	-2744.1	-124.3	-11.4
Combinazioni Frequenti					
437	Ft. 39	-32041.8	2166.3	87.4	-57.8
	Fc. 39	-32041.8	2166.3	87.4	-258.1
	ClsMax 39	-32041.8	2166.3	87.4	-18.7

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-32041.8	2166.3	87.4	-10.5
537	Ft. 39	-29510.5	-2480.1	-112.1	-30.3
	Fc. 39	-29510.5	-2480.1	-112.1	-260.7
	ClsMax 39	-29510.5	-2480.1	-112.1	-19.1
	ClsMed 39	-29510.5	-2480.1	-112.1	-9.7

Combinazioni Quasi Permanenti

437	Ft. 41	-31295.2	2090.1	85.2	-57.6
	Fc. 41	-31295.2	2090.1	85.2	-250.9
	ClsMax 41	-31295.2	2090.1	85.2	-18.1
	ClsMed 41	-31295.2	2090.1	85.2	-10.3
537	Ft. 41	-28764.0	-2391.1	-109.3	-30.7
	Fc. 41	-28764.0	-2391.1	-109.3	-252.9
	ClsMax 41	-28764.0	-2391.1	-109.3	-18.5
	ClsMed 41	-28764.0	-2391.1	-109.3	-9.5

- Pilastro: 537/637 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
537	9	-3987.1	2982.2	-1969.4	1.00	1.00	0.16
637	1	-6847.0	-1673.2	0.3	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1334.3	25501.9	1065.1	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
537	Ft. 37	-5054.2	1417.8	-0.6	162.4
	Fc. 36	-6483.4	1416.9	-0.6	-123.5
	ClsMax 37	-5054.2	1417.8	-0.6	-10.0
	ClsMed 37	-5054.2	1417.8	-0.6	-5.0
637	Ft. 36	-4795.9	-1185.2	0.2	114.9
	Fc. 36	-4795.9	-1185.2	0.2	-102.3
	ClsMax 36	-4795.9	-1185.2	0.2	-8.3
	ClsMed 36	-4795.9	-1185.2	0.2	-4.1

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Frequenti

537	Ft. 39	-3692.5	1279.6	-0.6	181.6
	Fc. 39	-3692.5	1279.6	-0.6	-107.0
	ClsMax 39	-3692.5	1279.6	-0.6	-9.1
	ClsMed 39	-3692.5	1279.6	-0.6	-4.5
637	Ft. 40	-2599.2	-672.1	0.2	69.4
	Fc. 40	-2599.2	-672.1	0.2	-57.8
	ClsMax 40	-2599.2	-672.1	0.2	-4.7
	ClsMed 40	-2599.2	-672.1	0.2	-2.4

Combinazioni Quasi Permanenti

537	Ft. 41	-3715.0	1233.3	-0.6	168.4
	Fc. 41	-3715.0	1233.3	-0.6	-103.6
	ClsMax 41	-3715.0	1233.3	-0.6	-8.7
	ClsMed 41	-3715.0	1233.3	-0.6	-4.4
637	Ft. 41	-2027.5	-546.0	0.2	59.5
	Fc. 41	-2027.5	-546.0	0.2	-46.8
	ClsMax 41	-2027.5	-546.0	0.2	-3.8
	ClsMed 41	-2027.5	-546.0	0.2	-1.9

- Pilastro: 38/138 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 51.3+ø 12/20.0' x 205.3+ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
38	17	-143053.6	-25751.4	5336.7	11.55	8.52	0.58
138	17	-141022.4	-25751.4	-5336.7	95.27	3.23	0.58

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31758.6	73445.6	7629.9	73445.6	ø 12/10.0'
0.51	2.57	31758.6	36722.8	7629.9	36722.8	ø 12/20.0'
2.57	3.08	31758.6	73445.6	7629.9	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
38	Ft. 38	-147567.8	826.5	86.2	-725.2
	Fc. 36	-159060.1	906.6	92.2	-877.6

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	ClsMax 36	-159060.1	906.6	92.2	-59.2
	ClsMed 36	-159060.1	906.6	92.2	-55.3
138	Ft. 38	-145536.5	-1779.4	46.5	-670.5
	Fc. 36	-157028.8	-1951.0	50.4	-915.5
	ClsMax 36	-157028.8	-1951.0	50.4	-62.4
	ClsMed 36	-157028.8	-1951.0	50.4	-54.6

Combinazioni Frequenti

38	Ft. 40	-141451.1	799.6	82.9	-694.8
	Fc. 39	-144710.4	826.2	84.6	-798.5
	ClsMax 39	-144710.4	826.2	84.6	-53.8
	ClsMed 39	-144710.4	826.2	84.6	-50.3
138	Ft. 40	-139419.9	-1721.7	44.4	-641.5
	Fc. 39	-142679.2	-1778.8	45.5	-832.1
	ClsMax 39	-142679.2	-1778.8	45.5	-56.7
	ClsMed 39	-142679.2	-1778.8	45.5	-49.6

Combinazioni Quasi Permanenti

38	Ft. 41	-140879.7	799.5	82.6	-691.9
	Fc. 41	-140879.7	799.5	82.6	-777.2
	ClsMax 41	-140879.7	799.5	82.6	-52.4
	ClsMed 41	-140879.7	799.5	82.6	-49.0
138	Ft. 41	-138848.4	-1721.6	44.2	-638.5
	Fc. 41	-138848.4	-1721.6	44.2	-809.3
	ClsMax 41	-138848.4	-1721.6	44.2	-55.1
	ClsMed 41	-138848.4	-1721.6	44.2	-48.3

- Pilastro: 138/238 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
138	11	-114474.5	-20480.3	-3629.8	53.61	2.20	0.46
238	23	-109769.6	24718.2	882.7	216.78	1.00	0.54

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27147.7	73445.6	3427.0	73445.6	$\varnothing 12/10.0'$
0.79	3.28	27147.7	36722.8	3427.0	36722.8	$\varnothing 12/20.0'$
3.28	3.90	27147.7	73445.6	3427.0	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
138	Ft. 38	-119715.2	2092.1	77.0	-519.3
	Fc. 36	-128882.0	2296.2	83.2	-787.0
	ClsMax 36	-128882.0	2296.2	83.2	-54.1
	ClsMed 36	-128882.0	2296.2	83.2	-44.8
238	Ft. 38	-117171.5	-2041.1	17.9	-511.3
	Fc. 36	-126338.3	-2243.5	19.5	-768.2
	ClsMax 36	-126338.3	-2243.5	19.5	-52.7
	ClsMed 36	-126338.3	-2243.5	19.5	-43.9
Combinazioni Frequenti					
138	Ft. 40	-114373.3	2023.3	73.6	-494.9
	Fc. 39	-116857.3	2091.1	75.4	-714.1
	ClsMax 39	-116857.3	2091.1	75.4	-49.1
	ClsMed 39	-116857.3	2091.1	75.4	-40.6
238	Ft. 40	-111829.5	-1972.3	16.7	-486.9
	Fc. 39	-114313.5	-2039.5	17.1	-695.5
	ClsMax 39	-114313.5	-2039.5	17.1	-47.7
	ClsMed 39	-114313.5	-2039.5	17.1	-39.7
Combinazioni Quasi Permanenti					
138	Ft. 41	-113801.7	2023.1	73.3	-491.9
	Fc. 41	-113801.7	2023.1	73.3	-694.7
	ClsMax 41	-113801.7	2023.1	73.3	-47.7
	ClsMed 41	-113801.7	2023.1	73.3	-39.6
238	Ft. 41	-111257.9	-1972.0	16.6	-483.9
	Fc. 41	-111257.9	-1972.0	16.6	-676.3
	ClsMax 41	-111257.9	-1972.0	16.6	-46.4
	ClsMed 41	-111257.9	-1972.0	16.6	-38.7

- Pilastro: 238/338 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
238	10	-86749.3	-24034.5	-1558.2	209.43	1.00	0.47
338	10	-84218.1	21031.8	519.5	130.80	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	31476.1	73445.6	2698.1	73445.6	ø 12/10.0'
0.79	3.26	31476.1	36722.8	2698.1	36722.8	ø 12/20.0'
3.26	3.88	31476.1	73445.6	2698.1	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
238	Ft. 38	-91434.9	2021.6	76.0	-357.5
	Fc. 36	-98289.2	2226.4	82.2	-587.1
	ClsMax 36	-98289.2	2226.4	82.2	-40.6
	ClsMed 36	-98289.2	2226.4	82.2	-32.3
338	Ft. 38	-88903.7	-2049.0	-11.9	-346.7
	Fc. 36	-95758.0	-2258.9	-12.7	-573.0
	ClsMax 36	-95758.0	-2258.9	-12.7	-39.7
	ClsMed 36	-95758.0	-2258.9	-12.7	-31.5
Combinazioni Frequenti					
238	Ft. 40	-86862.8	1952.1	72.3	-338.2
	Fc. 39	-88575.8	2020.0	74.0	-529.7
	ClsMax 39	-88575.8	2020.0	74.0	-36.7
	ClsMed 39	-88575.8	2020.0	74.0	-29.1
338	Ft. 40	-84331.6	-1977.8	-11.7	-327.3
	Fc. 39	-86044.5	-2047.5	-12.1	-515.7
	ClsMax 39	-86044.5	-2047.5	-12.1	-35.7
	ClsMed 39	-86044.5	-2047.5	-12.1	-28.3
Combinazioni Quasi Permanenti					
238	Ft. 41	-86291.0	1951.8	71.9	-335.4
	Fc. 41	-86291.0	1951.8	71.9	-515.3
	ClsMax 41	-86291.0	1951.8	71.9	-35.7
	ClsMed 41	-86291.0	1951.8	71.9	-28.4
338	Ft. 41	-83759.8	-1977.5	-11.8	-324.5
	Fc. 41	-83759.8	-1977.5	-11.8	-501.3
	ClsMax 41	-83759.8	-1977.5	-11.8	-34.7
	ClsMed 41	-83759.8	-1977.5	-11.8	-27.5

- Pilastro: 338/438 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
338	11	-59126.0	20986.9	-1881.8	78.24	1.00	0.43

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

438	11	-56594.8	21127.4	1053.6	212.42	1.00	0.44
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29102.0	73445.6	2236.5	73445.6	∅ 12/10.0'
0.79	3.26	29102.0	36722.8	2236.5	36722.8	∅ 12/20.0'
3.26	3.88	29102.0	73445.6	2236.5	73445.6	∅ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
338	Ft. 38	-63161.8	1990.5	64.6	-220.0
	Fc. 36	-67707.1	2196.2	69.8	-434.5
	ClsMax 36	-67707.1	2196.2	69.8	-30.4
	ClsMed 36	-67707.1	2196.2	69.8	-22.3
438	Ft. 38	-60630.6	-1935.7	-2.6	-212.7
	Fc. 36	-65175.8	-2135.7	-3.4	-416.3
	ClsMax 36	-65175.8	-2135.7	-3.4	-29.1
	ClsMed 36	-65175.8	-2135.7	-3.4	-21.4
Combinazioni Frequenti					
338	Ft. 40	-59358.0	1919.3	61.2	-204.6
	Fc. 39	-60300.9	1987.2	62.5	-388.3
	ClsMax 39	-60300.9	1987.2	62.5	-27.2
	ClsMed 39	-60300.9	1987.2	62.5	-19.8
438	Ft. 40	-56826.7	-1864.7	-3.3	-197.1
	Fc. 39	-57769.6	-1930.3	-3.8	-370.7
	ClsMax 39	-57769.6	-1930.3	-3.8	-26.0
	ClsMed 39	-57769.6	-1930.3	-3.8	-19.0
Combinazioni Quasi Permanenti					
338	Ft. 41	-58785.8	1918.6	60.8	-201.8
	Fc. 41	-58785.8	1918.6	60.8	-377.8
	ClsMax 41	-58785.8	1918.6	60.8	-26.5
	ClsMed 41	-58785.8	1918.6	60.8	-19.3
438	Ft. 41	-56254.5	-1863.6	-3.6	-194.3
	Fc. 41	-56254.5	-1863.6	-3.6	-360.3
	ClsMax 41	-56254.5	-1863.6	-3.6	-25.2
	ClsMed 41	-56254.5	-1863.6	-3.6	-18.5

- Pilastro: 438/538 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: \varnothing 12/10.0' x 61.8+ \varnothing 12/20.0' x 247.3+ \varnothing 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
438	20	-31080.0	20780.2	1064.9	5.87	1.00	0.50
538	17	-29361.0	16171.8	-633.1	3.30	1.00	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25564.3	73445.6	1543.7	73445.6	\varnothing 12/10.0'
0.79	3.26	25564.3	36722.8	1543.7	36722.8	\varnothing 12/20.0'
3.26	3.88	25564.3	73445.6	1543.7	73445.6	\varnothing 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
438	Ft. 37	-35714.3	2390.3	93.8	-65.7
	Fc. 36	-37146.8	2391.9	95.9	-293.7
	ClsMax 36	-37146.8	2391.9	95.9	-21.2
	ClsMed 36	-37146.8	2391.9	95.9	-12.2
538	Ft. 37	-33183.1	-2737.4	-112.0	-37.0
	Fc. 36	-34615.5	-2735.8	-113.7	-297.3
	ClsMax 36	-34615.5	-2735.8	-113.7	-21.7
	ClsMed 36	-34615.5	-2735.8	-113.7	-11.4
Combinazioni Frequenti					
438	Ft. 39	-32042.2	2160.9	85.4	-58.1
	Fc. 39	-32042.2	2160.9	85.4	-257.8
	ClsMax 39	-32042.2	2160.9	85.4	-18.6
	ClsMed 39	-32042.2	2160.9	85.4	-10.5
538	Ft. 39	-29510.9	-2473.2	-102.4	-31.0
	Fc. 39	-29510.9	-2473.2	-102.4	-259.9
	ClsMax 39	-29510.9	-2473.2	-102.4	-19.0
	ClsMed 39	-29510.9	-2473.2	-102.4	-9.7
Combinazioni Quasi Permanenti					
438	Ft. 41	-31295.6	2084.9	83.2	-57.9
	Fc. 41	-31295.6	2084.9	83.2	-250.6
	ClsMax 41	-31295.6	2084.9	83.2	-18.1
	ClsMed 41	-31295.6	2084.9	83.2	-10.3
538	Ft. 41	-28764.3	-2384.6	-99.9	-31.4
	Fc. 41	-28764.3	-2384.6	-99.9	-252.2
	ClsMax 41	-28764.3	-2384.6	-99.9	-18.4
	ClsMed 41	-28764.3	-2384.6	-99.9	-9.5

- Pilastro: 538/638 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
538	7	-3786.2	1634.1	-2879.9	1.00	1.00	0.15
638	1	-6848.1	-1673.1	0.2	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1335.9	25501.9	1065.7	25501.9	$\varnothing 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
538	Ft. 37	-5054.9	1421.0	-0.4	163.1
	Fc. 36	-6484.2	1420.2	-0.4	-123.8
	ClsMax 37	-5054.9	1421.0	-0.4	-10.0
	ClsMed 37	-5054.9	1421.0	-0.4	-5.0
638	Ft. 36	-4796.7	-1185.1	0.1	114.8
	Fc. 36	-4796.7	-1185.1	0.1	-102.3
	ClsMax 36	-4796.7	-1185.1	0.1	-8.3
	ClsMed 36	-4796.7	-1185.1	0.1	-4.1
Combinazioni Frequenti					
538	Ft. 39	-3693.1	1282.4	-0.4	182.2
	Fc. 39	-3693.1	1282.4	-0.4	-107.2
	ClsMax 39	-3693.1	1282.4	-0.4	-9.1
	ClsMed 39	-3693.1	1282.4	-0.4	-4.5
638	Ft. 40	-2599.8	-672.0	0.1	69.4
	Fc. 40	-2599.8	-672.0	0.1	-57.8
	ClsMax 40	-2599.8	-672.0	0.1	-4.7
	ClsMed 40	-2599.8	-672.0	0.1	-2.4
Combinazioni Quasi Permanenti					
538	Ft. 41	-3715.6	1235.9	-0.4	169.1
	Fc. 41	-3715.6	1235.9	-0.4	-103.8
	ClsMax 41	-3715.6	1235.9	-0.4	-8.8
	ClsMed 41	-3715.6	1235.9	-0.4	-4.4
638	Ft. 41	-2028.1	-545.9	0.1	59.4

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 41	-2028.1	-545.9	0.1	-46.8
	ClsMax 41	-2028.1	-545.9	0.1	-3.8
	ClsMed 41	-2028.1	-545.9	0.1	-1.9

- Pilastro: 39/139 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 51.3+ø 12/20.0' x 205.3+ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
39	20	-140287.1	-25446.6	5059.6	6.37	1.27	0.57
139	20	-138255.9	25446.6	5059.6	289.28	4.83	0.57

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31700.0	73445.6	7629.2	73445.6	ø 12/10.0'
0.51	2.57	31700.0	36722.8	7629.2	36722.8	ø 12/20.0'
2.57	3.08	31700.0	73445.6	7629.2	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
39	Ft. 38	-147583.0	829.0	86.2	-725.2
	Fc. 36	-159076.8	909.1	92.2	-877.8
	ClsMax 36	-159076.8	909.1	92.2	-59.2
	ClsMed 36	-159076.8	909.1	92.2	-55.3
139	Ft. 38	-145551.7	-1780.9	46.4	-670.5
	Fc. 36	-157045.5	-1952.7	50.3	-915.7
	ClsMax 36	-157045.5	-1952.7	50.3	-62.4
	ClsMed 36	-157045.5	-1952.7	50.3	-54.6
Combinazioni Frequenti					
39	Ft. 40	-141465.5	802.1	82.9	-694.8
	Fc. 39	-144725.2	828.8	84.6	-798.7
	ClsMax 39	-144725.2	828.8	84.6	-53.9
	ClsMed 39	-144725.2	828.8	84.6	-50.3
139	Ft. 40	-139434.3	-1723.2	44.3	-641.5
	Fc. 39	-142694.0	-1780.4	45.4	-832.3
	ClsMax 39	-142694.0	-1780.4	45.4	-56.7
	ClsMed 39	-142694.0	-1780.4	45.4	-49.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

39	Ft. 41	-140894.0	802.1	82.6	-691.8
	Fc. 41	-140894.0	802.1	82.6	-777.4
	ClSMax 41	-140894.0	802.1	82.6	-52.4
	ClSMed 41	-140894.0	802.1	82.6	-49.0
139	Ft. 41	-138862.7	-1723.1	44.1	-638.5
	Fc. 41	-138862.7	-1723.1	44.1	-809.5
	ClSMax 41	-138862.7	-1723.1	44.1	-55.1
	ClSMed 41	-138862.7	-1723.1	44.1	-48.3

- Pilastro: 139/239 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
139	5	-114829.4	-19725.2	-3985.5	12.50	1.46	0.45
239	20	-110768.3	22728.3	525.6	27.87	1.00	0.48

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26963.2	73445.6	3424.8	73445.6	$\varnothing 12/10.0'$
0.79	3.28	26963.2	36722.8	3424.8	36722.8	$\varnothing 12/20.0'$
3.28	3.90	26963.2	73445.6	3424.8	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
139	Ft. 38	-119730.0	2092.8	77.8	-519.3
	Fc. 36	-128898.3	2296.6	84.1	-787.2
	ClSMax 36	-128898.3	2296.6	84.1	-54.1
	ClSMed 36	-128898.3	2296.6	84.1	-44.8
239	Ft. 38	-117186.2	-2043.2	16.2	-511.4
	Fc. 36	-126354.5	-2245.6	17.7	-768.3
	ClSMax 36	-126354.5	-2245.6	17.7	-52.7
	ClSMed 36	-126354.5	-2245.6	17.7	-43.9
Combinazioni Frequenti					
139	Ft. 40	-114387.3	2024.1	74.4	-494.9
	Fc. 39	-116871.7	2091.9	76.2	-714.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-116871.7	2091.9	76.2	-49.1
	ClsMed 39	-116871.7	2091.9	76.2	-40.6
239	Ft. 40	-111843.5	-1974.5	15.1	-486.9
	Fc. 39	-114328.0	-2041.7	15.5	-695.6
	ClsMax 39	-114328.0	-2041.7	15.5	-47.7
	ClsMed 39	-114328.0	-2041.7	15.5	-39.7

Combinazioni Quasi Permanenti

139	Ft. 41	-113815.6	2023.9	74.1	-491.9
	Fc. 41	-113815.6	2023.9	74.1	-694.9
	ClsMax 41	-113815.6	2023.9	74.1	-47.7
	ClsMed 41	-113815.6	2023.9	74.1	-39.6
239	Ft. 41	-111271.9	-1974.2	15.0	-483.9
	Fc. 41	-111271.9	-1974.2	15.0	-676.4
	ClsMax 41	-111271.9	-1974.2	15.0	-46.4
	ClsMed 41	-111271.9	-1974.2	15.0	-38.7

- Pilastro: 239/339 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
239	8	-87129.0	-22782.6	-2504.6	11.89	1.00	0.44
339	30	-82724.4	-20780.2	-873.6	3.08	1.00	0.39

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31462.2	73445.6	2698.0	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31462.2	36722.8	2698.0	36722.8	$\varnothing 12/20.0'$
3.26	3.88	31462.2	73445.6	2698.0	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
239	Ft. 38	-91447.6	2018.3	78.2	-357.6
	Fc. 36	-98303.1	2222.5	84.6	-587.1
	ClsMax 36	-98303.1	2222.5	84.6	-40.6
	ClsMed 36	-98303.1	2222.5	84.6	-32.3
339	Ft. 38	-88916.4	-2047.4	-13.9	-346.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-95771.9	-2256.9	-15.0	-573.1
	ClsMax 36	-95771.9	-2256.9	-15.0	-39.7
	ClsMed 36	-95771.9	-2256.9	-15.0	-31.5

Combinazioni Frequenti

239	Ft. 40	-86874.9	1949.0	74.4	-338.3
	Fc. 39	-88588.2	2016.7	76.1	-529.7
	ClsMax 39	-88588.2	2016.7	76.1	-36.7
	ClsMed 39	-88588.2	2016.7	76.1	-29.1
339	Ft. 40	-84343.6	-1976.4	-13.7	-327.3
	Fc. 39	-86056.9	-2045.9	-14.0	-515.8
	ClsMax 39	-86056.9	-2045.9	-14.0	-35.7
	ClsMed 39	-86056.9	-2045.9	-14.0	-28.3

Combinazioni Quasi Permanenti

239	Ft. 41	-86303.0	1948.7	74.0	-335.5
	Fc. 41	-86303.0	1948.7	74.0	-515.3
	ClsMax 41	-86303.0	1948.7	74.0	-35.7
	ClsMed 41	-86303.0	1948.7	74.0	-28.4
339	Ft. 41	-83771.8	-1976.1	-13.7	-324.5
	Fc. 41	-83771.8	-1976.1	-13.7	-501.4
	ClsMax 41	-83771.8	-1976.1	-13.7	-34.7
	ClsMed 41	-83771.8	-1976.1	-13.7	-27.5

- Pilastro: 339/439 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
339	24	-58600.5	20780.2	2111.8	7.35	1.00	0.43
439	27	-55771.5	-20780.2	-1685.3	4.41	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29071.4	73445.6	2251.9	73445.6	$\varnothing 12/10.0'$
0.79	3.26	29071.4	36722.8	2251.9	36722.8	$\varnothing 12/20.0'$
3.26	3.88	29071.4	73445.6	2251.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

339	Ft. 38	-63171.3	1987.9	67.7	-220.1
	Fc. 36	-67717.5	2193.1	73.2	-434.5
	ClsMax 36	-67717.5	2193.1	73.2	-30.4
	ClsMed 36	-67717.5	2193.1	73.2	-22.3
439	Ft. 38	-60640.0	-1934.6	-7.1	-212.6
	Fc. 36	-65186.2	-2134.2	-8.2	-416.5
	ClsMax 36	-65186.2	-2134.2	-8.2	-29.2
	ClsMed 36	-65186.2	-2134.2	-8.2	-21.4

Combinazioni Frequenti

339	Ft. 40	-59367.0	1916.8	64.2	-204.6
	Fc. 39	-60310.2	1984.6	65.5	-388.4
	ClsMax 39	-60310.2	1984.6	65.5	-27.2
	ClsMed 39	-60310.2	1984.6	65.5	-19.8
439	Ft. 40	-56835.8	-1863.7	-7.6	-197.0
	Fc. 39	-57778.9	-1929.1	-8.2	-370.9
	ClsMax 39	-57778.9	-1929.1	-8.2	-26.0
	ClsMed 39	-57778.9	-1929.1	-8.2	-19.0

Combinazioni Quasi Permanenti

339	Ft. 41	-58794.8	1916.2	63.7	-201.8
	Fc. 41	-58794.8	1916.2	63.7	-377.8
	ClsMax 41	-58794.8	1916.2	63.7	-26.5
	ClsMed 41	-58794.8	1916.2	63.7	-19.3
439	Ft. 41	-56263.5	-1862.6	-7.8	-194.2
	Fc. 41	-56263.5	-1862.6	-7.8	-360.5
	ClsMax 41	-56263.5	-1862.6	-7.8	-25.2
	ClsMed 41	-56263.5	-1862.6	-7.8	-18.5

- Pilastro: 439/539 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \phi 24$ Af=36.19 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 1\phi 24 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
439	15	-31540.0	21019.3	929.1	96.42	1.00	0.51
539	17	-29195.1	16016.3	-626.4	5.48	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25616.8	73445.6	1521.1	73445.6	$\phi 12/10.0'$
0.79	3.26	25616.8	36722.8	1521.1	36722.8	$\phi 12/20.0'$

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3.26	3.88	25616.8	73445.6	1521.1	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

439	Ft. 37	-35721.2	2383.7	96.7	-65.9
	Fc. 36	-37153.6	2385.1	98.8	-293.5
	ClsMax 36	-37153.6	2385.1	98.8	-21.2
	ClsMed 36	-37153.6	2385.1	98.8	-12.2
539	Ft. 37	-33189.9	-2729.5	-111.5	-37.4
	Fc. 36	-34622.4	-2727.8	-113.2	-296.9
	ClsMax 36	-34622.4	-2727.8	-113.2	-21.6
	ClsMed 36	-34622.4	-2727.8	-113.2	-11.4

Combinazioni Frequenti

439	Ft. 39	-32048.4	2155.2	87.9	-58.3
	Fc. 39	-32048.4	2155.2	87.9	-257.7
	ClsMax 39	-32048.4	2155.2	87.9	-18.6
	ClsMed 39	-32048.4	2155.2	87.9	-10.5
539	Ft. 39	-29517.1	-2466.5	-101.7	-31.4
	Fc. 39	-29517.1	-2466.5	-101.7	-259.6
	ClsMax 39	-29517.1	-2466.5	-101.7	-19.0
	ClsMed 39	-29517.1	-2466.5	-101.7	-9.7

Combinazioni Quasi Permanenti

439	Ft. 41	-31301.6	2079.5	85.7	-58.1
	Fc. 41	-31301.6	2079.5	85.7	-250.5
	ClsMax 41	-31301.6	2079.5	85.7	-18.1
	ClsMed 41	-31301.6	2079.5	85.7	-10.3
539	Ft. 41	-28770.3	-2378.2	-99.0	-31.7
	Fc. 41	-28770.3	-2378.2	-99.0	-251.9
	ClsMax 41	-28770.3	-2378.2	-99.0	-18.4
	ClsMed 41	-28770.3	-2378.2	-99.0	-9.5

- Pilastro: 539/639 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ø 18 Af=20.36 [cm²] < 1φ18 x 4 V + 1φ18 x 2 B + 1φ18 x 2 H >

Staffe: ø 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
539	7	-3768.1	1486.1	-2882.3	1.00	1.00	0.15
639	1	-6845.8	-1671.8	0.1	1.00	1.00	0.05

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1335.4	25501.9	1066.6	25501.9	ø 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
539	Ft. 37	-5053.6	1421.1	-0.1	163.2
	Fc. 36	-6482.6	1420.1	-0.1	-123.8
	ClsMax 37	-5053.6	1421.1	-0.1	-10.0
	ClsMed 37	-5053.6	1421.1	-0.1	-5.0
639	Ft. 36	-4795.1	-1184.2	0.0	114.6
	Fc. 36	-4795.1	-1184.2	0.0	-102.2
	ClsMax 36	-4795.1	-1184.2	0.0	-8.3
	ClsMed 36	-4795.1	-1184.2	0.0	-4.1
Combinazioni Frequenti					
539	Ft. 39	-3692.0	1282.4	-0.1	182.3
	Fc. 39	-3692.0	1282.4	-0.1	-107.2
	ClsMax 39	-3692.0	1282.4	-0.1	-9.1
	ClsMed 39	-3692.0	1282.4	-0.1	-4.5
639	Ft. 40	-2598.7	-671.2	0.0	69.2
	Fc. 40	-2598.7	-671.2	0.0	-57.7
	ClsMax 40	-2598.7	-671.2	0.0	-4.7
	ClsMed 40	-2598.7	-671.2	0.0	-2.4
Combinazioni Quasi Permanenti					
539	Ft. 41	-3714.5	1235.9	-0.1	169.1
	Fc. 41	-3714.5	1235.9	-0.1	-103.7
	ClsMax 41	-3714.5	1235.9	-0.1	-8.8
	ClsMed 41	-3714.5	1235.9	-0.1	-4.4
639	Ft. 41	-2027.0	-545.1	0.0	59.3
	Fc. 41	-2027.0	-545.1	0.0	-46.7
	ClsMax 41	-2027.0	-545.1	0.0	-3.8
	ClsMed 41	-2027.0	-545.1	0.0	-1.9

- Pilastro: 40/140 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

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Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
40	17	-142361.9	-23634.3	5396.9	24.00	8.71	0.54
140	17	-140330.7	-23634.3	-5396.9	25.21	3.32	0.54

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	31511.5	73445.6	7645.8	73445.6	ø 12/10.0'
0.51	2.57	31511.5	36722.8	7645.8	36722.8	ø 12/20.0'
2.57	3.08	31511.5	73445.6	7645.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
40	Ft. 38	-148498.5	849.4	73.1	-729.6
	Fc. 36	-160080.5	931.4	77.3	-883.4
	ClsMax 36	-160080.5	931.4	77.3	-59.6
	ClsMed 36	-160080.5	931.4	77.3	-55.6
140	Ft. 38	-146467.3	-1820.0	74.0	-672.0
	Fc. 36	-158049.3	-1995.8	81.6	-924.5
	ClsMax 36	-158049.3	-1995.8	81.6	-63.0
	ClsMed 36	-158049.3	-1995.8	81.6	-54.9
Combinazioni Frequenti					
40	Ft. 40	-142332.0	821.9	70.7	-698.9
	Fc. 39	-145616.3	849.2	71.9	-803.8
	ClsMax 39	-145616.3	849.2	71.9	-54.2
	ClsMed 39	-145616.3	849.2	71.9	-50.6
140	Ft. 40	-140300.8	-1760.9	69.9	-643.0
	Fc. 39	-143585.0	-1819.4	72.1	-840.1
	ClsMax 39	-143585.0	-1819.4	72.1	-57.3
	ClsMed 39	-143585.0	-1819.4	72.1	-49.9
Combinazioni Quasi Permanenti					
40	Ft. 41	-141755.6	821.9	70.5	-695.9
	Fc. 41	-141755.6	821.9	70.5	-782.2
	ClsMax 41	-141755.6	821.9	70.5	-52.7
	ClsMed 41	-141755.6	821.9	70.5	-49.3
140	Ft. 41	-139724.3	-1760.8	69.5	-640.0
	Fc. 41	-139724.3	-1760.8	69.5	-817.0
	ClsMax 41	-139724.3	-1760.8	69.5	-55.7
	ClsMed 41	-139724.3	-1760.8	69.5	-48.6

- Pilastro: 140/240 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
140	5	-113707.3	-19577.6	-3955.3	72.76	1.38	0.44
240	17	-112395.0	-21340.9	-356.1	22.79	1.00	0.45

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26976.7	73445.6	3186.3	73445.6	$\varnothing 12/10.0'$
0.79	3.28	26976.7	36722.8	3186.3	36722.8	$\varnothing 12/20.0'$
3.28	3.90	26976.7	73445.6	3186.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
140	Ft. 38	-120392.9	2138.1	18.2	-523.4
	Fc. 36	-129624.0	2346.3	18.0	-790.2
	ClsMax 36	-129624.0	2346.3	18.0	-54.3
	ClsMed 36	-129624.0	2346.3	18.0	-45.1
240	Ft. 38	-117849.1	-2089.2	103.9	-508.4
	Fc. 36	-127080.3	-2296.1	114.0	-779.1
	ClsMax 36	-127080.3	-2296.1	114.0	-53.6
	ClsMed 36	-127080.3	-2296.1	114.0	-44.2
Combinazioni Frequenti					
140	Ft. 40	-115008.5	2067.7	18.3	-498.7
	Fc. 39	-117508.7	2136.8	18.3	-716.9
	ClsMax 39	-117508.7	2136.8	18.3	-49.2
	ClsMed 39	-117508.7	2136.8	18.3	-40.8
240	Ft. 40	-112464.7	-2018.6	98.1	-484.0
	Fc. 39	-114964.9	-2087.1	100.8	-705.2
	ClsMax 39	-114964.9	-2087.1	100.8	-48.5
	ClsMed 39	-114964.9	-2087.1	100.8	-40.0
Combinazioni Quasi Permanenti					
140	Ft. 41	-114431.6	2067.5	18.4	-495.7
	Fc. 41	-114431.6	2067.5	18.4	-697.5
	ClsMax 41	-114431.6	2067.5	18.4	-47.9
	ClsMed 41	-114431.6	2067.5	18.4	-39.8
240	Ft. 41	-111887.9	-2018.2	97.4	-481.0
	Fc. 41	-111887.9	-2018.2	97.4	-685.7

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-111887.9	-2018.2	97.4	-47.1
	ClsMed 41	-111887.9	-2018.2	97.4	-38.9

- Pilastro: 240/340 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ϕ 24 Af=36.19 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 1 ϕ 24 x 2 H >

Staffe: ϕ 12/10.0' x 61.8+ ϕ 12/20.0' x 247.3+ ϕ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
240	8	-86120.6	-22521.8	-2785.5	51.03	1.00	0.44
340	4	-83622.9	20988.9	1179.3	114.52	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31464.1	73445.6	2822.5	73445.6	ϕ 12/10.0'
0.79	3.26	31464.1	36722.8	2822.5	36722.8	ϕ 12/20.0'
3.26	3.88	31464.1	73445.6	2822.5	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
240	Ft. 38	-91917.0	2060.1	-54.5	-359.1
	Fc. 36	-98815.1	2268.5	-60.3	-590.6
	ClsMax 36	-98815.1	2268.5	-60.3	-40.9
	ClsMed 36	-98815.1	2268.5	-60.3	-32.5
340	Ft. 38	-89385.8	-2093.0	138.0	-341.5
	Fc. 36	-96283.8	-2307.1	150.8	-583.9
	ClsMax 36	-96283.8	-2307.1	150.8	-40.5
	ClsMed 36	-96283.8	-2307.1	150.8	-31.6
Combinazioni Frequenti					
240	Ft. 40	-87306.7	1988.9	-51.2	-339.7
	Fc. 39	-89028.4	2057.9	-52.8	-532.7
	ClsMax 39	-89028.4	2057.9	-52.8	-36.9
	ClsMed 39	-89028.4	2057.9	-52.8	-29.3
340	Ft. 40	-84775.5	-2019.9	129.9	-322.4
	Fc. 39	-86497.1	-2090.8	133.2	-525.2
	ClsMax 39	-86497.1	-2090.8	133.2	-36.5
	ClsMed 39	-86497.1	-2090.8	133.2	-28.4
Combinazioni Quasi Permanenti					

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240	Ft. 41	-86729.0	1988.5	-50.8	-336.9
	Fc. 41	-86729.0	1988.5	-50.8	-518.2
	ClsMax 41	-86729.0	1988.5	-50.8	-35.9
	ClsMed 41	-86729.0	1988.5	-50.8	-28.5
340	Ft. 41	-84197.7	-2019.5	129.0	-319.6
	Fc. 41	-84197.7	-2019.5	129.0	-510.5
	ClsMax 41	-84197.7	-2019.5	129.0	-35.4
	ClsMed 41	-84197.7	-2019.5	129.0	-27.7

- Pilastro: 340/440 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
340	9	-58661.5	21060.0	-1590.9	248.22	1.00	0.43
440	5	-56154.0	21174.5	2008.8	904.60	1.00	0.44

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29143.4	73445.6	2991.6	73445.6	ø 12/10.0'
0.79	3.26	29143.4	36722.8	2991.6	36722.8	ø 12/20.0'
3.26	3.88	29143.4	73445.6	2991.6	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
340	Ft. 38	-63489.1	2035.9	-89.8	-218.5
	Fc. 36	-68061.5	2245.8	-98.5	-439.7
	ClsMax 36	-68061.5	2245.8	-98.5	-30.8
	ClsMed 36	-68061.5	2245.8	-98.5	-22.4
440	Ft. 38	-60957.9	-1985.7	137.2	-206.2
	Fc. 36	-65530.2	-2190.2	148.8	-427.0
	ClsMax 36	-65530.2	-2190.2	148.8	-30.0
	ClsMed 36	-65530.2	-2190.2	148.8	-21.5
Combinazioni Frequenti					
340	Ft. 40	-59648.8	1962.3	-84.7	-203.1
	Fc. 39	-60593.8	2031.4	-87.1	-392.8
	ClsMax 39	-60593.8	2031.4	-87.1	-27.6

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	ClsMed 39	-60593.8	2031.4	-87.1	-19.9
440	Ft. 40	-57117.5	-1911.7	128.9	-190.9
	Fc. 39	-58062.6	-1978.4	131.7	-380.0
	ClsMax 39	-58062.6	-1978.4	131.7	-26.7
	ClsMed 39	-58062.6	-1978.4	131.7	-19.1

Combinazioni Quasi Permanenti

340	Ft. 41	-59069.7	1961.4	-84.2	-200.3
	Fc. 41	-59069.7	1961.4	-84.2	-382.1
	ClsMax 41	-59069.7	1961.4	-84.2	-26.8
	ClsMed 41	-59069.7	1961.4	-84.2	-19.4
440	Ft. 41	-56538.5	-1910.3	127.8	-188.1
	Fc. 41	-56538.5	-1910.3	127.8	-369.3
	ClsMax 41	-56538.5	-1910.3	127.8	-25.9
	ClsMed 41	-56538.5	-1910.3	127.8	-18.6

- Pilastro: 440/540 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
440	17	-31625.7	21149.6	187.6	157.94	1.00	0.51
540	8	-28697.6	15447.5	850.2	425.75	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25789.4	73445.6	1941.9	73445.6	$\varnothing 12/10.0'$
0.79	3.26	25789.4	36722.8	1941.9	36722.8	$\varnothing 12/20.0'$
3.26	3.88	25789.4	73445.6	1941.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
440	Ft. 37	-35913.8	2434.5	-167.9	-61.4
	Fc. 36	-37366.6	2435.6	-170.3	-300.0
	ClsMax 36	-37366.6	2435.6	-170.3	-21.7
	ClsMed 36	-37366.6	2435.6	-170.3	-12.3
540	Ft. 37	-33382.6	-2778.7	284.1	-28.4
	Fc. 36	-34835.4	-2775.5	289.6	-307.9

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-34835.4	-2775.5	289.6	-22.5
	ClsMed 36	-34835.4	-2775.5	289.6	-11.4

Combinazioni Frequenti

440	Ft. 39	-32208.2	2201.3	-150.5	-54.3
	Fc. 39	-32208.2	2201.3	-150.5	-263.3
	ClsMax 39	-32208.2	2201.3	-150.5	-19.1
	ClsMed 39	-32208.2	2201.3	-150.5	-10.6
540	Ft. 39	-29677.0	-2512.0	254.0	-23.4
	Fc. 39	-29677.0	-2512.0	254.0	-269.2
	ClsMax 39	-29677.0	-2512.0	254.0	-19.7
	ClsMed 39	-29677.0	-2512.0	254.0	-9.8

Combinazioni Quasi Permanenti

440	Ft. 41	-31457.3	2123.9	-145.5	-54.2
	Fc. 41	-31457.3	2123.9	-145.5	-255.9
	ClsMax 41	-31457.3	2123.9	-145.5	-18.5
	ClsMed 41	-31457.3	2123.9	-145.5	-10.3
540	Ft. 41	-28926.0	-2422.0	245.8	-24.0
	Fc. 41	-28926.0	-2422.0	245.8	-261.2
	ClsMax 41	-28926.0	-2422.0	245.8	-19.1
	ClsMed 41	-28926.0	-2422.0	245.8	-9.5

- Pilastro: 540/640 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
540	6	-3676.0	1911.6	-2901.4	1.00	1.00	0.16
640	1	-7002.4	-1716.7	0.4	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1392.9	25501.9	1077.2	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
540	Ft. 37	-5138.0	1495.0	-1.2	178.7
	Fc. 36	-6592.8	1499.4	-1.3	-130.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 37	-5138.0	1495.0	-1.2	-10.5
	ClsMed 37	-5138.0	1495.0	-1.2	-5.3
640	Ft. 36	-4905.3	-1216.0	0.3	118.4
	Fc. 36	-4905.3	-1216.0	0.3	-104.9
	ClsMax 36	-4905.3	-1216.0	0.3	-8.5
	ClsMed 36	-4905.3	-1216.0	0.3	-4.2

Combinazioni Frequenti

540	Ft. 39	-3750.3	1346.0	-1.0	196.7
	Fc. 39	-3750.3	1346.0	-1.0	-112.2
	ClsMax 39	-3750.3	1346.0	-1.0	-9.6
	ClsMed 39	-3750.3	1346.0	-1.0	-4.8
640	Ft. 40	-2667.0	-692.0	0.2	71.8
	Fc. 40	-2667.0	-692.0	0.2	-59.5
	ClsMax 40	-2667.0	-692.0	0.2	-4.8
	ClsMed 40	-2667.0	-692.0	0.2	-2.4

Combinazioni Quasi Permanenti

540	Ft. 41	-3772.6	1297.8	-1.0	183.0
	Fc. 41	-3772.6	1297.8	-1.0	-108.7
	ClsMax 41	-3772.6	1297.8	-1.0	-9.2
	ClsMed 41	-3772.6	1297.8	-1.0	-4.6
640	Ft. 41	-2085.1	-563.3	0.2	61.6
	Fc. 41	-2085.1	-563.3	0.2	-48.2
	ClsMax 41	-2085.1	-563.3	0.2	-4.0
	ClsMed 41	-2085.1	-563.3	0.2	-2.0

- Pilastro: 41/141 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
41	9	-72406.3	21457.0	-2794.4	2.52	1.36	0.52
141	9	-70375.0	-21457.0	-2794.4	9.96	1.00	0.52

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	33105.0	73445.6	7528.5	73445.6	$\phi 12/10.0'$
0.51	2.57	33105.0	36722.8	7528.5	36722.8	$\phi 12/20.0'$
2.57	3.08	33105.0	73445.6	7528.5	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
41	Ft. 38	-82092.9	-469.6	158.3	-397.6
	Fc. 36	-87470.4	-508.9	165.3	-488.7
	ClsMax 36	-87470.4	-508.9	165.3	-33.0
	ClsMed 36	-87470.4	-508.9	165.3	-30.4
141	Ft. 38	-80061.7	918.7	-111.1	-367.6
	Fc. 36	-85439.1	998.7	-109.0	-499.0
	ClsMax 36	-85439.1	998.7	-109.0	-34.0
	ClsMed 36	-85439.1	998.7	-109.0	-29.7
Combinazioni Frequenti					
41	Ft. 40	-79230.1	-456.7	154.4	-383.5
	Fc. 39	-80755.0	-469.9	156.3	-451.3
	ClsMax 39	-80755.0	-469.9	156.3	-30.5
	ClsMed 39	-80755.0	-469.9	156.3	-28.1
141	Ft. 40	-77198.9	892.1	-112.2	-353.9
	Fc. 39	-78723.8	918.9	-111.5	-460.3
	ClsMax 39	-78723.8	918.9	-111.5	-31.4
	ClsMed 39	-78723.8	918.9	-111.5	-27.4
Combinazioni Quasi Permanenti					
41	Ft. 41	-78962.5	-456.8	154.0	-382.2
	Fc. 41	-78962.5	-456.8	154.0	-441.2
	ClsMax 41	-78962.5	-456.8	154.0	-29.8
	ClsMed 41	-78962.5	-456.8	154.0	-27.4
141	Ft. 41	-76931.3	892.2	-112.3	-352.5
	Fc. 41	-76931.3	892.2	-112.3	-449.7
	ClsMax 41	-76931.3	892.2	-112.3	-30.7
	ClsMed 41	-76931.3	892.2	-112.3	-26.7

- Pilastro: 141/241 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
141	17	-56749.2	-17691.9	-3141.6	1.00	1.00	0.44
241	5	-56021.7	-25567.5	-1881.1	7.28	1.00	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	26236.3	73445.6	4581.5	73445.6	ø 12/10.0'
0.79	3.28	26236.3	36722.8	4581.5	36722.8	ø 12/20.0'
3.28	3.90	26236.3	73445.6	4581.5	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
141	Ft. 38	-66911.4	-1080.3	268.7	-283.6
	Fc. 36	-71206.9	-1173.8	278.8	-441.5
	ClsMax 36	-71206.9	-1173.8	278.8	-30.4
	ClsMed 36	-71206.9	-1173.8	278.8	-24.8
241	Ft. 38	-64367.7	1062.7	-171.4	-275.9
	Fc. 36	-68663.1	1156.4	-174.0	-422.3
	ClsMax 36	-68663.1	1156.4	-174.0	-29.0
	ClsMed 36	-68663.1	1156.4	-174.0	-23.9
Combinazioni Frequenti					
141	Ft. 40	-64409.9	-1048.8	263.4	-272.4
	Fc. 39	-65574.3	-1079.9	266.2	-407.0
	ClsMax 39	-65574.3	-1079.9	266.2	-28.0
	ClsMed 39	-65574.3	-1079.9	266.2	-22.8
241	Ft. 40	-61866.2	1031.2	-170.1	-264.5
	Fc. 39	-63030.6	1062.4	-170.9	-388.3
	ClsMax 39	-63030.6	1062.4	-170.9	-26.7
	ClsMed 39	-63030.6	1062.4	-170.9	-21.9
Combinazioni Quasi Permanenti					
141	Ft. 41	-64142.5	-1048.7	262.9	-271.0
	Fc. 41	-64142.5	-1048.7	262.9	-397.9
	ClsMax 41	-64142.5	-1048.7	262.9	-27.4
	ClsMed 41	-64142.5	-1048.7	262.9	-22.3
241	Ft. 41	-61598.8	1031.1	-170.0	-263.1
	Fc. 41	-61598.8	1031.1	-170.0	-379.3
	ClsMax 41	-61598.8	1031.1	-170.0	-26.1
	ClsMed 41	-61598.8	1031.1	-170.0	-21.4

- Pilastro: 241/341 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
241	25	-50465.9	23639.5	1811.2	8.69	1.00	0.52

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

341	17	-40429.2	18469.7	1337.3	1.00	1.00	0.40
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28922.9	73445.6	3999.1	73445.6	∅ 12/10.0'
0.79	3.26	28922.9	36722.8	3999.1	36722.8	∅ 12/20.0'
3.26	3.88	28922.9	73445.6	3999.1	73445.6	∅ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
241	Ft. 38	-51218.9	-1021.9	296.2	-193.9
	Fc. 36	-54434.3	-1113.9	309.6	-331.6
	ClsMax 36	-54434.3	-1113.9	309.6	-23.0
	ClsMed 36	-54434.3	-1113.9	309.6	-17.9
341	Ft. 38	-48687.7	1037.4	-251.3	-182.7
	Fc. 36	-51903.1	1131.8	-260.1	-317.7
	ClsMax 36	-51903.1	1131.8	-260.1	-22.1
	ClsMed 36	-51903.1	1131.8	-260.1	-17.1
Combinazioni Frequenti					
241	Ft. 40	-49079.0	-990.6	288.4	-185.1
	Fc. 39	-49883.7	-1021.1	292.1	-304.3
	ClsMax 39	-49883.7	-1021.1	292.1	-21.1
	ClsMed 39	-49883.7	-1021.1	292.1	-16.4
341	Ft. 40	-46547.7	1005.5	-246.4	-173.8
	Fc. 39	-47352.4	1036.9	-248.8	-290.6
	ClsMax 39	-47352.4	1036.9	-248.8	-20.2
	ClsMed 39	-47352.4	1036.9	-248.8	-15.6
Combinazioni Quasi Permanenti					
241	Ft. 41	-48811.9	-990.4	287.6	-183.8
	Fc. 41	-48811.9	-990.4	287.6	-297.4
	ClsMax 41	-48811.9	-990.4	287.6	-20.7
	ClsMed 41	-48811.9	-990.4	287.6	-16.0
341	Ft. 41	-46280.7	1005.4	-245.9	-172.5
	Fc. 41	-46280.7	1005.4	-245.9	-283.8
	ClsMax 41	-46280.7	1005.4	-245.9	-19.7
	ClsMed 41	-46280.7	1005.4	-245.9	-15.2

- Pilastro: 341/441 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: \varnothing 12/10.0' x 61.8+ \varnothing 12/20.0' x 247.3+ \varnothing 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
341	19	-30864.8	-17878.3	1944.0	1.67	1.00	0.42
441	17	-26967.8	17878.3	1094.1	1.13	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	26766.9	73445.6	1970.9	73445.6	\varnothing 12/10.0'
0.79	3.26	26766.9	36722.8	1970.9	36722.8	\varnothing 12/20.0'
3.26	3.88	26766.9	73445.6	1970.9	73445.6	\varnothing 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
341	Ft. 38	-35504.3	-1030.3	284.9	-116.6
	Fc. 36	-37638.2	-1124.6	298.1	-248.8
	ClSMax 36	-37638.2	-1124.6	298.1	-17.5
	ClSMed 36	-37638.2	-1124.6	298.1	-12.4
441	Ft. 38	-32973.0	998.0	-176.1	-110.4
	Fc. 36	-35106.9	1088.7	-183.2	-229.6
	ClSMax 36	-35106.9	1088.7	-183.2	-16.1
	ClSMed 36	-35106.9	1088.7	-183.2	-11.5
Combinazioni Frequenti					
341	Ft. 40	-33727.1	-997.7	276.9	-109.6
	Fc. 39	-34172.0	-1028.9	280.3	-226.6
	ClSMax 39	-34172.0	-1028.9	280.3	-16.0
	ClSMed 39	-34172.0	-1028.9	280.3	-11.2
441	Ft. 40	-31195.9	965.2	-173.5	-103.2
	Fc. 39	-31640.7	994.8	-175.8	-208.0
	ClSMax 39	-31640.7	994.8	-175.8	-14.6
	ClSMed 39	-31640.7	994.8	-175.8	-10.4
Combinazioni Quasi Permanenti					
341	Ft. 41	-33460.7	-997.5	276.0	-108.4
	Fc. 41	-33460.7	-997.5	276.0	-221.5
	ClSMax 41	-33460.7	-997.5	276.0	-15.6
	ClSMed 41	-33460.7	-997.5	276.0	-11.0
441	Ft. 41	-30929.4	964.6	-173.4	-101.9
	Fc. 41	-30929.4	964.6	-173.4	-203.0
	ClSMax 41	-30929.4	964.6	-173.4	-14.3
	ClSMed 41	-30929.4	964.6	-173.4	-10.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 441/541 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
441	17	-15816.0	-17878.3	638.2	1.34	1.00	0.50
541	17	-13284.8	21008.9	453.7	1.00	1.00	0.62

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	23456.4	73445.6	2027.4	73445.6	$\varnothing 12/10.0'$
0.79	3.26	23456.4	36722.8	2027.4	36722.8	$\varnothing 12/20.0'$
3.26	3.88	23456.4	73445.6	2027.4	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
441	Ft. 37	-20160.8	-1210.2	425.2	-26.7
	Fc. 36	-20825.4	-1209.5	429.9	-175.5
	ClsMax 36	-20825.4	-1209.5	429.9	-12.8
	ClsMed 36	-20825.4	-1209.5	429.9	-6.8
541	Ft. 37	-17629.6	1400.7	-643.4	4.9
	Fc. 36	-18294.1	1399.2	-649.7	-181.6
	ClsMax 36	-18294.1	1399.2	-649.7	-13.4
	ClsMed 36	-18294.1	1399.2	-649.7	-6.1
Combinazioni Frequenti					
441	Ft. 39	-18444.4	-1106.2	401.6	-23.9
	Fc. 39	-18444.4	-1106.2	401.6	-157.9
	ClsMax 39	-18444.4	-1106.2	401.6	-11.5
	ClsMed 39	-18444.4	-1106.2	401.6	-6.1
541	Ft. 39	-15913.2	1280.0	-608.9	6.7
	Fc. 39	-15913.2	1280.0	-608.9	-163.1
	ClsMax 39	-15913.2	1280.0	-608.9	-12.1
	ClsMed 39	-15913.2	1280.0	-608.9	-5.4
Combinazioni Quasi Permanenti					
441	Ft. 41	-18093.8	-1071.3	395.3	-24.0
	Fc. 41	-18093.8	-1071.3	395.3	-154.4
	ClsMax 41	-18093.8	-1071.3	395.3	-11.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-18093.8	-1071.3	395.3	-5.9
541	Ft. 41	-15562.6	1239.3	-599.6	6.1
	Fc. 41	-15562.6	1239.3	-599.6	-159.1
	ClsMax 41	-15562.6	1239.3	-599.6	-11.8
	ClsMed 41	-15562.6	1239.3	-599.6	-5.3

- Pilastro: 541/641 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
541	30	-3417.9	-5543.1	-359.8	1.00	1.00	0.28
641	17	-257.7	1243.2	0.9	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1808.1	25501.9	628.6	25501.9	$\varnothing 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
541	Ft. 37	-3299.0	-691.4	-0.5	50.9
	Fc. 36	-3958.5	-689.0	-0.5	-61.4
	ClsMax 37	-3299.0	-691.4	-0.5	-4.8
	ClsMed 37	-3299.0	-691.4	-0.5	-2.4
641	Ft. 36	-2271.0	565.1	0.2	55.3
	Fc. 36	-2271.0	565.1	0.2	-48.7
	ClsMax 36	-2271.0	565.1	0.2	-3.9
	ClsMed 36	-2271.0	565.1	0.2	-2.0
Combinazioni Frequenti					
541	Ft. 39	-2671.0	-631.5	-0.5	57.3
	Fc. 39	-2671.0	-631.5	-0.5	-54.7
	ClsMax 39	-2671.0	-631.5	-0.5	-4.4
	ClsMed 39	-2671.0	-631.5	-0.5	-2.2
641	Ft. 40	-1257.8	329.7	0.2	34.7
	Fc. 40	-1257.8	329.7	0.2	-28.3
	ClsMax 40	-1257.8	329.7	0.2	-2.3
	ClsMed 40	-1257.8	329.7	0.2	-1.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

541	Ft. 41	-2681.5	-610.7	-0.5	52.2
	Fc. 41	-2681.5	-610.7	-0.5	-53.1
	ClSMax 41	-2681.5	-610.7	-0.5	-4.2
	ClSMed 41	-2681.5	-610.7	-0.5	-2.1
641	Ft. 41	-994.0	271.8	0.2	30.2
	Fc. 41	-994.0	271.8	0.2	-23.3
	ClSMax 41	-994.0	271.8	0.2	-1.9
	ClSMed 41	-994.0	271.8	0.2	-1.0

- Pilastro: 42/142 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
42	9	-128379.5	31860.0	-2533.2	4.35	1.16	0.72
142	9	-126348.3	-31860.0	-2533.2	28.55	1.00	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	33474.3	73445.6	3911.8	73445.6	$\varnothing 12/10.0'$
0.51	2.57	33474.3	36722.8	3911.8	36722.8	$\varnothing 12/20.0'$
2.57	3.08	33474.3	73445.6	3911.8	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
42	Ft. 38	-138750.8	-839.8	98.3	-678.0
	Fc. 36	-149420.3	-918.4	105.6	-828.6
	ClSMax 36	-149420.3	-918.4	105.6	-55.9
	ClSMed 36	-149420.3	-918.4	105.6	-51.9
142	Ft. 38	-136719.6	1699.0	14.8	-629.9
	Fc. 36	-147389.0	1861.2	16.1	-859.3
	ClSMax 36	-147389.0	1861.2	16.1	-58.5
	ClSMed 36	-147389.0	1861.2	16.1	-51.2
Combinazioni Frequenti					
42	Ft. 40	-133072.0	-813.7	94.2	-649.9
	Fc. 39	-136098.0	-839.9	96.2	-754.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-136098.0	-839.9	96.2	-51.0
	ClsMed 39	-136098.0	-839.9	96.2	-47.3
142	Ft. 40	-131040.8	1644.7	14.2	-603.0
	Fc. 39	-134066.7	1698.7	14.6	-781.9
	ClsMax 39	-134066.7	1698.7	14.6	-53.3
	ClsMed 39	-134066.7	1698.7	14.6	-46.6

Combinazioni Quasi Permanenti

42	Ft. 41	-132541.5	-813.7	93.8	-647.2
	Fc. 41	-132541.5	-813.7	93.8	-734.9
	ClsMax 41	-132541.5	-813.7	93.8	-49.6
	ClsMed 41	-132541.5	-813.7	93.8	-46.1
142	Ft. 41	-130510.2	1644.7	14.2	-600.2
	Fc. 41	-130510.2	1644.7	14.2	-760.7
	ClsMax 41	-130510.2	1644.7	14.2	-51.8
	ClsMed 41	-130510.2	1644.7	14.2	-45.4

- Pilastro: 142/242 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
142	24	-108174.4	22059.0	1844.7	8.97	1.00	0.47
242	9	-100905.2	-29018.8	-775.6	11.63	1.00	0.67

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27491.2	73445.6	3206.7	73445.6	$\varnothing 12/10.0'$
0.79	3.28	27491.2	36722.8	3206.7	36722.8	$\varnothing 12/20.0'$
3.28	3.90	27491.2	73445.6	3206.7	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
142	Ft. 38	-112551.2	-2001.0	133.0	-483.6
	Fc. 36	-121057.2	-2193.0	144.5	-744.2
	ClsMax 36	-121057.2	-2193.0	144.5	-51.2
	ClsMed 36	-121057.2	-2193.0	144.5	-42.1
242	Ft. 38	-110007.4	1960.0	-52.7	-476.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-118513.5	2151.1	-57.3	-724.7
	ClsMax 36	-118513.5	2151.1	-57.3	-49.8
	ClsMed 36	-118513.5	2151.1	-57.3	-41.2

Combinazioni Frequenti

142	Ft. 40	-107592.5	-1935.9	126.9	-461.2
	Fc. 39	-109897.0	-1999.6	130.1	-676.0
	ClsMax 39	-109897.0	-1999.6	130.1	-46.5
	ClsMed 39	-109897.0	-1999.6	130.1	-38.2
242	Ft. 40	-105048.7	1894.9	-50.4	-453.6
	Fc. 39	-107353.2	1958.3	-51.7	-656.9
	ClsMax 39	-107353.2	1958.3	-51.7	-45.1
	ClsMed 39	-107353.2	1958.3	-51.7	-37.3

Combinazioni Quasi Permanenti

142	Ft. 41	-107061.6	-1935.6	126.3	-458.5
	Fc. 41	-107061.6	-1935.6	126.3	-657.9
	ClsMax 41	-107061.6	-1935.6	126.3	-45.2
	ClsMed 41	-107061.6	-1935.6	126.3	-37.2
242	Ft. 41	-104517.9	1894.6	-50.2	-450.9
	Fc. 41	-104517.9	1894.6	-50.2	-639.0
	ClsMax 41	-104517.9	1894.6	-50.2	-43.9
	ClsMed 41	-104517.9	1894.6	-50.2	-36.3

- Pilastro: 242/342 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \phi 24$ Af=36.19 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 1\phi 24 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
242	21	-82207.0	26677.2	2065.5	8.97	1.00	0.54
342	17	-75117.7	20780.2	1949.6	1.18	1.00	0.41

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31015.0	73445.6	4345.1	73445.6	$\phi 12/10.0'$
0.79	3.26	31015.0	36722.8	4345.1	36722.8	$\phi 12/20.0'$
3.26	3.88	31015.0	73445.6	4345.1	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

242	Ft. 38	-85950.2	-1918.2	187.4	-330.1
	Fc. 36	-92307.6	-2110.0	203.4	-557.8
	ClsMax 36	-92307.6	-2110.0	203.4	-38.7
	ClsMed 36	-92307.6	-2110.0	203.4	-30.3
342	Ft. 38	-83418.9	1943.8	-136.4	-318.8
	Fc. 36	-89776.4	2140.0	-148.1	-544.2
	ClsMax 36	-89776.4	2140.0	-148.1	-37.8
	ClsMed 36	-89776.4	2140.0	-148.1	-29.5

Combinazioni Frequenti

242	Ft. 40	-81705.3	-1852.3	178.1	-312.5
	Fc. 39	-83293.0	-1915.8	182.5	-503.8
	ClsMax 39	-83293.0	-1915.8	182.5	-35.0
	ClsMed 39	-83293.0	-1915.8	182.5	-27.4
342	Ft. 40	-79174.1	1876.6	-129.9	-301.1
	Fc. 39	-80761.8	1941.6	-133.1	-490.3
	ClsMax 39	-80761.8	1941.6	-133.1	-34.0
	ClsMed 39	-80761.8	1941.6	-133.1	-26.5

Combinazioni Quasi Permanenti

242	Ft. 41	-81173.9	-1851.9	177.2	-310.0
	Fc. 41	-81173.9	-1851.9	177.2	-490.3
	ClsMax 41	-81173.9	-1851.9	177.2	-34.0
	ClsMed 41	-81173.9	-1851.9	177.2	-26.7
342	Ft. 41	-78642.6	1876.2	-129.2	-298.6
	Fc. 41	-78642.6	1876.2	-129.2	-476.8
	ClsMax 41	-78642.6	1876.2	-129.2	-33.1
	ClsMed 41	-78642.6	1876.2	-129.2	-25.8

- Pilastro: 342/442 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
342	19	-53620.5	-20780.2	2398.8	1.97	1.00	0.44
442	17	-50367.0	20780.2	1880.6	1.37	1.00	0.44

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28684.4	73445.6	2529.8	73445.6	$\varnothing 12/10.0'$
0.79	3.26	28684.4	36722.8	2529.8	36722.8	$\varnothing 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	28684.4	73445.6	2529.8	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

342	Ft. 38	-59382.4	-1924.7	189.1	-198.8
	Fc. 36	-63596.8	-2120.2	205.4	-416.9
	ClsMax 36	-63596.8	-2120.2	205.4	-29.3
	ClsMed 36	-63596.8	-2120.2	205.4	-20.9
442	Ft. 38	-56851.2	1865.7	-106.6	-192.6
	Fc. 36	-61065.6	2054.3	-117.0	-397.5
	ClsMax 36	-61065.6	2054.3	-117.0	-27.9
	ClsMed 36	-61065.6	2054.3	-117.0	-20.1

Combinazioni Frequenti

342	Ft. 40	-55848.4	-1856.0	179.1	-184.9
	Fc. 39	-56720.8	-1920.3	183.4	-373.1
	ClsMax 39	-56720.8	-1920.3	183.4	-26.2
	ClsMed 39	-56720.8	-1920.3	183.4	-18.6
442	Ft. 40	-53317.1	1796.7	-101.9	-178.5
	Fc. 39	-54189.6	1858.1	-105.0	-354.4
	ClsMax 39	-54189.6	1858.1	-105.0	-24.9
	ClsMed 39	-54189.6	1858.1	-105.0	-17.8

Combinazioni Quasi Permanenti

342	Ft. 41	-55316.0	-1855.1	178.0	-182.3
	Fc. 41	-55316.0	-1855.1	178.0	-363.0
	ClsMax 41	-55316.0	-1855.1	178.0	-25.5
	ClsMed 41	-55316.0	-1855.1	178.0	-18.2
442	Ft. 41	-52784.8	1795.2	-101.6	-175.9
	Fc. 41	-52784.8	1795.2	-101.6	-344.5
	ClsMax 41	-52784.8	1795.2	-101.6	-24.2
	ClsMed 41	-52784.8	1795.2	-101.6	-17.3

- Pilastro: 442/542 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
442	19	-28422.0	-20780.2	1489.2	2.19	1.00	0.52
542	17	-25434.0	19725.9	1381.2	1.00	1.00	0.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25027.2	73445.6	2220.8	73445.6	ø 12/10.0'
0.79	3.26	25027.2	36722.8	2220.8	36722.8	ø 12/20.0'
3.26	3.88	25027.2	73445.6	2220.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

442	Ft. 37	-33592.0	-2295.1	308.0	-49.9
	Fc. 36	-34926.5	-2295.3	313.6	-288.1
	ClsMax 36	-34926.5	-2295.3	313.6	-20.9
	ClsMed 36	-34926.5	-2295.3	313.6	-11.5
542	Ft. 37	-31060.8	2639.9	-446.1	-15.8
	Fc. 36	-32395.2	2637.1	-453.5	-297.1
	ClsMax 36	-32395.2	2637.1	-453.5	-21.8
	ClsMed 36	-32395.2	2637.1	-453.5	-10.7

Combinazioni Frequenti

442	Ft. 39	-30181.4	-2077.4	278.9	-44.1
	Fc. 39	-30181.4	-2077.4	278.9	-253.5
	ClsMax 39	-30181.4	-2077.4	278.9	-18.4
	ClsMed 39	-30181.4	-2077.4	278.9	-9.9
542	Ft. 39	-27650.2	2389.0	-404.8	-11.9
	Fc. 39	-27650.2	2389.0	-404.8	-260.6
	ClsMax 39	-27650.2	2389.0	-404.8	-19.2
	ClsMed 39	-27650.2	2389.0	-404.8	-9.2

Combinazioni Quasi Permanenti

442	Ft. 41	-29489.3	-2004.9	271.1	-44.2
	Fc. 41	-29489.3	-2004.9	271.1	-246.5
	ClsMax 41	-29489.3	-2004.9	271.1	-17.9
	ClsMed 41	-29489.3	-2004.9	271.1	-9.7
542	Ft. 41	-26958.1	2304.4	-393.6	-12.8
	Fc. 41	-26958.1	2304.4	-393.6	-252.9
	ClsMax 41	-26958.1	2304.4	-393.6	-18.6
	ClsMed 41	-26958.1	2304.4	-393.6	-8.9

- Pilastro: 542/642 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af} = 20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
542	30	-4243.4	-5221.5	-541.9	1.00	1.00	0.26
642	17	-1245.3	1464.3	0.9	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1815.3	25501.9	982.9	25501.9	ø 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
542	Ft. 37	-4838.5	-1347.8	-0.6	153.1
	Fc. 36	-6172.6	-1349.4	-0.5	-117.7
	ClsMax 37	-4838.5	-1347.8	-0.6	-9.5
	ClsMed 37	-4838.5	-1347.8	-0.6	-4.7
642	Ft. 36	-4485.1	1119.3	0.2	110.0
	Fc. 36	-4485.1	1119.3	0.2	-96.5
	ClsMax 36	-4485.1	1119.3	0.2	-7.8
	ClsMed 36	-4485.1	1119.3	0.2	-3.9
Combinazioni Frequenti					
542	Ft. 39	-3567.1	-1216.2	-0.6	170.1
	Fc. 39	-3567.1	-1216.2	-0.6	-101.9
	ClsMax 39	-3567.1	-1216.2	-0.6	-8.6
	ClsMed 39	-3567.1	-1216.2	-0.6	-4.3
642	Ft. 40	-2434.2	639.1	0.2	67.4
	Fc. 40	-2434.2	639.1	0.2	-54.9
	ClsMax 40	-2434.2	639.1	0.2	-4.5
	ClsMed 40	-2434.2	639.1	0.2	-2.2
Combinazioni Quasi Permanenti					
542	Ft. 41	-3588.1	-1172.9	-0.6	157.9
	Fc. 41	-3588.1	-1172.9	-0.6	-98.7
	ClsMax 41	-3588.1	-1172.9	-0.6	-8.3
	ClsMed 41	-3588.1	-1172.9	-0.6	-4.2
642	Ft. 41	-1900.6	521.3	0.2	58.1
	Fc. 41	-1900.6	521.3	0.2	-44.6
	ClsMax 41	-1900.6	521.3	0.2	-3.7
	ClsMed 41	-1900.6	521.3	0.2	-1.8

- Pilastro: 43/143 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4$ V + $1\varnothing 20 \times 2$ B + $1\varnothing 20 \times 2$ H >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
43	9	-138486.5	31136.7	-2569.7	4.85	1.18	0.68
143	9	-136455.2	-31136.7	-2569.7	44.55	1.00	0.68

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	33552.3	73445.6	3922.0	73445.6	$\varnothing 12/10.0'$
0.51	2.57	33552.3	36722.8	3922.0	36722.8	$\varnothing 12/20.0'$
2.57	3.08	33552.3	73445.6	3922.0	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
43	Ft. 38	-148839.6	-896.4	107.0	-727.5
	Fc. 36	-160451.2	-981.3	113.2	-889.5
	ClSMax 36	-160451.2	-981.3	113.2	-60.0
	ClSMed 36	-160451.2	-981.3	113.2	-55.8
143	Ft. 38	-146808.3	1821.3	-3.5	-677.2
	Fc. 36	-158419.9	1996.5	0.2	-922.5
	ClSMax 36	-158419.9	1996.5	0.2	-62.8
	ClSMed 36	-158419.9	1996.5	0.2	-55.1
Combinazioni Frequenti					
43	Ft. 40	-142659.5	-868.2	103.5	-696.8
	Fc. 39	-145952.6	-896.4	105.3	-809.4
	ClSMax 39	-145952.6	-896.4	105.3	-54.6
	ClSMed 39	-145952.6	-896.4	105.3	-50.7
143	Ft. 40	-140628.2	1762.7	-5.4	-647.7
	Fc. 39	-143921.3	1821.0	-4.3	-838.7
	ClSMax 39	-143921.3	1821.0	-4.3	-57.1
	ClSMed 39	-143921.3	1821.0	-4.3	-50.0
Combinazioni Quasi Permanenti					
43	Ft. 41	-142082.0	-868.2	103.2	-693.8
	Fc. 41	-142082.0	-868.2	103.2	-787.8
	ClSMax 41	-142082.0	-868.2	103.2	-53.2
	ClSMed 41	-142082.0	-868.2	103.2	-49.4
143	Ft. 41	-140050.8	1762.6	-5.6	-644.7
	Fc. 41	-140050.8	1762.6	-5.6	-815.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-140050.8	1762.6	-5.6	-55.6
	ClsMed 41	-140050.8	1762.6	-5.6	-48.7

- Pilastro: 143/243 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 62.2+ø 12/20.0' x 248.7+ø 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
143	24	-115855.6	21822.7	1828.0	11.69	1.00	0.47
243	9	-109152.6	-28295.2	-788.9	14.79	1.00	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27541.5	73445.6	3162.2	73445.6	ø 12/10.0'
0.79	3.28	27541.5	36722.8	3162.2	36722.8	ø 12/20.0'
3.28	3.90	27541.5	73445.6	3162.2	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
143	Ft. 38	-120732.7	-2144.5	137.5	-519.1
	Fc. 36	-129993.8	-2352.5	145.0	-798.6
	ClsMax 36	-129993.8	-2352.5	145.0	-54.9
	ClsMed 36	-129993.8	-2352.5	145.0	-45.2
243	Ft. 38	-118188.9	2097.0	-38.6	-512.9
	Fc. 36	-127450.1	2303.6	-37.8	-777.7
	ClsMax 36	-127450.1	2303.6	-37.8	-53.4
	ClsMed 36	-127450.1	2303.6	-37.8	-44.3
Combinazioni Frequenti					
143	Ft. 40	-115335.5	-2074.2	133.6	-494.6
	Fc. 39	-117845.0	-2143.2	135.7	-724.6
	ClsMax 39	-117845.0	-2143.2	135.7	-49.8
	ClsMed 39	-117845.0	-2143.2	135.7	-41.0
243	Ft. 40	-112791.7	2026.8	-39.2	-488.1
	Fc. 39	-115301.2	2095.4	-39.0	-704.4
	ClsMax 39	-115301.2	2095.4	-39.0	-48.4
	ClsMed 39	-115301.2	2095.4	-39.0	-40.1
Combinazioni Quasi Permanenti					

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

143	Ft. 41	-114757.9	-2073.9	133.3	-491.6
	Fc. 41	-114757.9	-2073.9	133.3	-705.1
	ClsMax 41	-114757.9	-2073.9	133.3	-48.5
	ClsMed 41	-114757.9	-2073.9	133.3	-39.9
243	Ft. 41	-112214.2	2026.5	-39.3	-485.1
	Fc. 41	-112214.2	2026.5	-39.3	-685.0
	ClsMax 41	-112214.2	2026.5	-39.3	-47.0
	ClsMed 41	-112214.2	2026.5	-39.3	-39.0

- Pilastro: 243/343 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
243	21	-87947.6	26247.6	1979.5	11.30	1.00	0.52
343	17	-81645.0	20780.2	1917.5	1.30	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31325.4	73445.6	4192.6	73445.6	ø 12/10.0'
0.79	3.26	31325.4	36722.8	4192.6	36722.8	ø 12/20.0'
3.26	3.88	31325.4	73445.6	4192.6	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
243	Ft. 38	-92204.3	-2055.9	145.7	-356.7
	Fc. 36	-99128.5	-2263.8	154.2	-596.1
	ClsMax 36	-99128.5	-2263.8	154.2	-41.3
	ClsMed 36	-99128.5	-2263.8	154.2	-32.6
343	Ft. 38	-89673.0	2079.5	-84.4	-345.9
	Fc. 36	-96597.2	2292.0	-87.3	-581.9
	ClsMax 36	-96597.2	2292.0	-87.3	-40.3
	ClsMed 36	-96597.2	2292.0	-87.3	-31.7
Combinazioni Frequenti					
243	Ft. 40	-87584.7	-1984.7	140.9	-337.3
	Fc. 39	-89314.9	-2053.6	143.2	-537.9
	ClsMax 39	-89314.9	-2053.6	143.2	-37.3

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
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	ClsMed 39	-89314.9	-2053.6	143.2	-29.4
343	Ft. 40	-85053.5	2007.1	-83.0	-326.4
	Fc. 39	-86783.7	2077.6	-83.9	-523.9
	ClsMax 39	-86783.7	2077.6	-83.9	-36.3
	ClsMed 39	-86783.7	2077.6	-83.9	-28.5

Combinazioni Quasi Permanenti

243	Ft. 41	-87006.9	-1984.3	140.4	-334.5
	Fc. 41	-87006.9	-1984.3	140.4	-523.3
	ClsMax 41	-87006.9	-1984.3	140.4	-36.3
	ClsMed 41	-87006.9	-1984.3	140.4	-28.6
343	Ft. 41	-84475.6	2006.7	-82.9	-323.6
	Fc. 41	-84475.6	2006.7	-82.9	-509.3
	ClsMax 41	-84475.6	2006.7	-82.9	-35.3
	ClsMed 41	-84475.6	2006.7	-82.9	-27.8

- Pilastro: 343/443 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
343	19	-57934.8	-20780.2	2275.9	2.14	1.00	0.43
443	17	-54786.6	20780.2	1856.0	1.50	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29101.2	73445.6	2427.3	73445.6	$\varnothing 12/10.0'$
0.79	3.26	29101.2	36722.8	2427.3	36722.8	$\varnothing 12/20.0'$
3.26	3.88	29101.2	73445.6	2427.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
343	Ft. 38	-63687.4	-2058.2	131.3	-216.7
	Fc. 36	-68278.7	-2269.7	138.7	-443.6
	ClsMax 36	-68278.7	-2269.7	138.7	-31.1
	ClsMed 36	-68278.7	-2269.7	138.7	-22.4
443	Ft. 38	-61156.2	1994.6	-53.1	-210.5
	Fc. 36	-65747.5	2198.6	-55.5	-424.3

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-65747.5	2198.6	-55.5	-29.8
	ClsMed 36	-65747.5	2198.6	-55.5	-21.6

Combinazioni Frequenti

343	Ft. 40	-59843.7	-1984.2	126.7	-201.2
	Fc. 39	-60795.8	-2053.9	128.6	-396.7
	ClsMax 39	-60795.8	-2053.9	128.6	-27.9
	ClsMed 39	-60795.8	-2053.9	128.6	-20.0
443	Ft. 40	-57312.4	1920.6	-53.1	-194.8
	Fc. 39	-58264.5	1987.1	-54.1	-377.9
	ClsMax 39	-58264.5	1987.1	-54.1	-26.5
	ClsMed 39	-58264.5	1987.1	-54.1	-19.1

Combinazioni Quasi Permanenti

343	Ft. 41	-59265.3	-1983.4	126.1	-198.4
	Fc. 41	-59265.3	-1983.4	126.1	-385.9
	ClsMax 41	-59265.3	-1983.4	126.1	-27.1
	ClsMed 41	-59265.3	-1983.4	126.1	-19.5
443	Ft. 41	-56734.1	1919.1	-53.3	-192.0
	Fc. 41	-56734.1	1919.1	-53.3	-367.3
	ClsMax 41	-56734.1	1919.1	-53.3	-25.8
	ClsMed 41	-56734.1	1919.1	-53.3	-18.6

- Pilastro: 443/543 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
443	19	-30677.1	-20780.2	1267.5	2.37	1.00	0.51
543	17	-27751.2	17875.4	1347.1	1.00	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25611.0	73445.6	1931.7	73445.6	$\varnothing 12/10.0'$
0.79	3.26	25611.0	36722.8	1931.7	36722.8	$\varnothing 12/20.0'$
3.26	3.88	25611.0	73445.6	1931.7	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

443	Ft. 37	-36007.1	-2450.6	196.3	-59.9
	Fc. 36	-37455.2	-2450.9	199.1	-302.4
	ClsMax 36	-37455.2	-2450.9	199.1	-21.9
	ClsMed 36	-37455.2	-2450.9	199.1	-12.3
543	Ft. 37	-33475.9	2807.1	-274.7	-28.1
	Fc. 36	-34924.0	2804.3	-277.7	-309.1
	ClsMax 36	-34924.0	2804.3	-277.7	-22.6
	ClsMed 36	-34924.0	2804.3	-277.7	-11.5

Combinazioni Frequenti

443	Ft. 39	-32296.6	-2214.8	183.6	-52.6
	Fc. 39	-32296.6	-2214.8	183.6	-265.8
	ClsMax 39	-32296.6	-2214.8	183.6	-19.3
	ClsMed 39	-32296.6	-2214.8	183.6	-10.6
543	Ft. 39	-29765.4	2535.0	-258.3	-22.6
	Fc. 39	-29765.4	2535.0	-258.3	-270.9
	ClsMax 39	-29765.4	2535.0	-258.3	-19.9
	ClsMed 39	-29765.4	2535.0	-258.3	-9.8

Combinazioni Quasi Permanenti

443	Ft. 41	-31542.5	-2136.4	180.3	-52.5
	Fc. 41	-31542.5	-2136.4	180.3	-258.4
	ClsMax 41	-31542.5	-2136.4	180.3	-18.7
	ClsMed 41	-31542.5	-2136.4	180.3	-10.4
543	Ft. 41	-29011.2	2443.4	-253.8	-23.1
	Fc. 41	-29011.2	2443.4	-253.8	-262.9
	ClsMax 41	-29011.2	2443.4	-253.8	-19.3
	ClsMed 41	-29011.2	2443.4	-253.8	-9.5

- Pilastro: 543/643 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
543	30	-4307.8	-4803.9	-573.0	1.00	1.00	0.23
643	17	-1466.2	1413.2	1.0	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1707.0	25501.9	1047.9	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
543	Ft. 37	-5085.0	-1473.9	-0.9	175.4
	Fc. 36	-6530.4	-1474.2	-0.9	-128.2
	ClsMax 37	-5085.0	-1473.9	-0.9	-10.4
	ClsMed 37	-5085.0	-1473.9	-0.9	-5.2
643	Ft. 36	-4842.9	1209.8	0.3	119.1
	Fc. 36	-4842.9	1209.8	0.3	-104.3
	ClsMax 36	-4842.9	1209.8	0.3	-8.5
	ClsMed 36	-4842.9	1209.8	0.3	-4.2
Combinazioni Frequenti					
543	Ft. 39	-3708.0	-1333.6	-0.8	195.2
	Fc. 39	-3708.0	-1333.6	-0.8	-111.1
	ClsMax 39	-3708.0	-1333.6	-0.8	-9.5
	ClsMed 39	-3708.0	-1333.6	-0.8	-4.7
643	Ft. 40	-2621.4	690.3	0.2	73.0
	Fc. 40	-2621.4	690.3	0.2	-59.2
	ClsMax 40	-2621.4	690.3	0.2	-4.8
	ClsMed 40	-2621.4	690.3	0.2	-2.4
Combinazioni Quasi Permanenti					
543	Ft. 41	-3730.8	-1286.9	-0.8	181.9
	Fc. 41	-3730.8	-1286.9	-0.8	-107.7
	ClsMax 41	-3730.8	-1286.9	-0.8	-9.1
	ClsMed 41	-3730.8	-1286.9	-0.8	-4.6
643	Ft. 41	-2043.3	562.7	0.2	63.0
	Fc. 41	-2043.3	562.7	0.2	-48.1
	ClsMax 41	-2043.3	562.7	0.2	-4.0
	ClsMed 41	-2043.3	562.7	0.2	-2.0

- Pilastro: 44/144 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
44	9	-142268.1	30245.5	-2500.6	5.59	1.14	0.65
144	9	-140236.9	-30245.5	-2500.6	102.17	1.00	0.66

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.00	0.51	33549.6	73445.6	3947.2	73445.6	ø 12/10.0'
0.51	2.57	33549.6	36722.8	3947.2	36722.8	ø 12/20.0'
2.57	3.08	33549.6	73445.6	3947.2	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
44	Ft. 38	-152641.9	-919.4	70.0	-748.0
	Fc. 36	-164609.8	-1006.8	75.9	-910.6
	ClsMax 36	-164609.8	-1006.8	75.9	-61.4
	ClsMed 36	-164609.8	-1006.8	75.9	-57.2
144	Ft. 38	-150610.6	1873.4	74.2	-691.1
	Fc. 36	-162578.6	2054.0	78.4	-950.8
	ClsMax 36	-162578.6	2054.0	78.4	-64.8
	ClsMed 36	-162578.6	2054.0	78.4	-56.5
Combinazioni Frequenti					
44	Ft. 40	-146272.8	-890.1	66.7	-716.4
	Fc. 39	-149667.2	-919.3	68.3	-828.1
	ClsMax 39	-149667.2	-919.3	68.3	-55.9
	ClsMed 39	-149667.2	-919.3	68.3	-52.0
144	Ft. 40	-144241.6	1812.9	72.0	-660.9
	Fc. 39	-147636.0	1873.0	73.2	-863.9
	ClsMax 39	-147636.0	1873.0	73.2	-58.9
	ClsMed 39	-147636.0	1873.0	73.2	-51.3
Combinazioni Quasi Permanenti					
44	Ft. 41	-145677.9	-890.1	66.3	-713.3
	Fc. 41	-145677.9	-890.1	66.3	-805.8
	ClsMax 41	-145677.9	-890.1	66.3	-54.4
	ClsMed 41	-145677.9	-890.1	66.3	-50.6
144	Ft. 41	-143646.6	1812.8	71.8	-657.8
	Fc. 41	-143646.6	1812.8	71.8	-840.1
	ClsMax 41	-143646.6	1812.8	71.8	-57.3
	ClsMed 41	-143646.6	1812.8	71.8	-49.9

- Pilastro: 144/244 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
144	24	-118529.8	21502.8	1726.3	16.85	1.00	0.46

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

244	9	-112094.6	-27424.4	-710.2	20.64	1.00	0.61
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27463.1	73445.6	3072.8	73445.6	ø 12/10.0'
0.79	3.28	27463.1	36722.8	3072.8	36722.8	ø 12/20.0'
3.28	3.90	27463.1	73445.6	3072.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
144	Ft. 38	-123794.6	-2207.3	45.6	-536.5
	Fc. 36	-133339.6	-2422.2	52.0	-814.9
	ClSMax 36	-133339.6	-2422.2	52.0	-56.0
	ClSMed 36	-133339.6	-2422.2	52.0	-46.3
244	Ft. 38	-121250.8	2156.9	51.6	-525.4
	Fc. 36	-130795.9	2370.1	53.7	-799.2
	ClSMax 36	-130795.9	2370.1	53.7	-54.9
	ClSMed 36	-130795.9	2370.1	53.7	-45.5
Combinazioni Frequenti					
144	Ft. 40	-118232.7	-2134.5	42.2	-511.2
	Fc. 39	-120819.3	-2205.9	44.1	-738.7
	ClSMax 39	-120819.3	-2205.9	44.1	-50.8
	ClSMed 39	-120819.3	-2205.9	44.1	-42.0
244	Ft. 40	-115688.9	2084.4	50.3	-499.9
	Fc. 39	-118275.5	2155.1	50.8	-723.4
	ClSMax 39	-118275.5	2155.1	50.8	-49.7
	ClSMed 39	-118275.5	2155.1	50.8	-41.1
Combinazioni Quasi Permanenti					
144	Ft. 41	-117637.6	-2134.2	41.9	-508.1
	Fc. 41	-117637.6	-2134.2	41.9	-718.6
	ClSMax 41	-117637.6	-2134.2	41.9	-49.4
	ClSMed 41	-117637.6	-2134.2	41.9	-40.9
244	Ft. 41	-115093.9	2084.1	50.1	-496.9
	Fc. 41	-115093.9	2084.1	50.1	-703.3
	ClSMax 41	-115093.9	2084.1	50.1	-48.3
	ClSMed 41	-115093.9	2084.1	50.1	-40.0

- Pilastro: 244/344 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: \emptyset 12/10.0' x 61.8+ \emptyset 12/20.0' x 247.3+ \emptyset 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
244	21	-90021.9	25698.8	1863.4	15.40	1.00	0.50
344	17	-83674.4	20780.2	1987.0	1.48	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31431.5	73445.6	4014.2	73445.6	\emptyset 12/10.0'
0.79	3.26	31431.5	36722.8	4014.2	36722.8	\emptyset 12/20.0'
3.26	3.88	31431.5	73445.6	4014.2	73445.6	\emptyset 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
244	Ft. 38	-94522.6	-2119.1	50.4	-369.5
	Fc. 36	-101658.3	-2334.3	56.9	-607.4
	ClsMax 36	-101658.3	-2334.3	56.9	-42.0
	ClsMed 36	-101658.3	-2334.3	56.9	-33.4
344	Ft. 38	-91991.4	2139.2	17.8	-357.6
	Fc. 36	-99127.1	2358.7	17.0	-594.2
	ClsMax 36	-99127.1	2358.7	17.0	-41.2
	ClsMed 36	-99127.1	2358.7	17.0	-32.6
Combinazioni Frequenti					
244	Ft. 40	-89762.7	-2045.5	46.6	-349.5
	Fc. 39	-91546.0	-2116.7	48.4	-547.5
	ClsMax 39	-91546.0	-2116.7	48.4	-37.9
	ClsMed 39	-91546.0	-2116.7	48.4	-30.1
344	Ft. 40	-87231.5	2064.4	17.9	-337.5
	Fc. 39	-89014.7	2137.2	17.6	-534.6
	ClsMax 39	-89014.7	2137.2	17.6	-37.0
	ClsMed 39	-89014.7	2137.2	17.6	-29.3
Combinazioni Quasi Permanenti					
244	Ft. 41	-89167.4	-2045.0	46.2	-346.6
	Fc. 41	-89167.4	-2045.0	46.2	-532.5
	ClsMax 41	-89167.4	-2045.0	46.2	-36.9
	ClsMed 41	-89167.4	-2045.0	46.2	-29.3
344	Ft. 41	-86636.1	2064.0	17.9	-334.6
	Fc. 41	-86636.1	2064.0	17.9	-519.6
	ClsMax 41	-86636.1	2064.0	17.9	-36.0
	ClsMed 41	-86636.1	2064.0	17.9	-28.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 344/444 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
344	25	-61127.5	-21186.5	2430.0	104.77	1.00	0.44
444	17	-56152.5	20780.2	1910.9	1.70	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29268.6	73445.6	2289.7	73445.6	ø 12/10.0'
0.79	3.26	29268.6	36722.8	2289.7	36722.8	ø 12/20.0'
3.26	3.88	29268.6	73445.6	2289.7	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
344	Ft. 38	-65257.7	-2129.2	34.7	-225.5
	Fc. 36	-69988.0	-2348.5	39.9	-451.2
	ClsMax 36	-69988.0	-2348.5	39.9	-31.6
	ClsMed 36	-69988.0	-2348.5	39.9	-23.0
444	Ft. 38	-62726.4	2076.7	30.6	-215.6
	Fc. 36	-67456.7	2288.8	30.3	-435.6
	ClsMax 36	-67456.7	2288.8	30.3	-30.5
	ClsMed 36	-67456.7	2288.8	30.3	-22.2
Combinazioni Frequenti					
344	Ft. 40	-61298.1	-2052.4	31.5	-209.6
	Fc. 39	-62279.1	-2124.5	32.8	-402.9
	ClsMax 39	-62279.1	-2124.5	32.8	-28.3
	ClsMed 39	-62279.1	-2124.5	32.8	-20.5
444	Ft. 40	-58766.8	1999.3	29.3	-199.5
	Fc. 39	-59747.9	2068.3	28.8	-387.7
	ClsMax 39	-59747.9	2068.3	28.8	-27.2
	ClsMed 39	-59747.9	2068.3	28.8	-19.6
Combinazioni Quasi Permanenti					
344	Ft. 41	-60702.4	-2051.4	31.1	-206.7
	Fc. 41	-60702.4	-2051.4	31.1	-391.8
	ClsMax 41	-60702.4	-2051.4	31.1	-27.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-60702.4	-2051.4	31.1	-19.9
444	Ft. 41	-58171.1	1997.6	29.0	-196.7
	Fc. 41	-58171.1	1997.6	29.0	-376.8
	ClsMax 41	-58171.1	1997.6	29.0	-26.4
	ClsMed 41	-58171.1	1997.6	29.0	-19.1

- Pilastro: 444/544 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
444	24	-32550.5	-21107.2	1361.0	511.28	1.00	0.51
544	30	-30964.0	-16914.9	-1585.3	1.55	1.00	0.39

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25774.4	73445.6	1643.1	73445.6	$\varnothing 12/10.0'$
0.79	3.26	25774.4	36722.8	1643.1	36722.8	$\varnothing 12/20.0'$
3.26	3.88	25774.4	73445.6	1643.1	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
444	Ft. 37	-36847.7	-2477.7	62.7	-68.7
	Fc. 36	-38339.0	-2477.5	64.8	-302.0
	ClsMax 36	-38339.0	-2477.5	64.8	-21.8
	ClsMed 36	-38339.0	-2477.5	64.8	-12.6
544	Ft. 37	-34316.4	2750.1	-76.8	-43.5
	Fc. 36	-35807.7	2745.0	-78.8	-302.0
	ClsMax 36	-35807.7	2745.0	-78.8	-22.0
	ClsMed 36	-35807.7	2745.0	-78.8	-11.8
Combinazioni Frequenti					
444	Ft. 39	-33027.9	-2237.0	53.9	-61.0
	Fc. 39	-33027.9	-2237.0	53.9	-264.6
	ClsMax 39	-33027.9	-2237.0	53.9	-19.1
	ClsMed 39	-33027.9	-2237.0	53.9	-10.9
544	Ft. 39	-30496.6	2478.2	-66.2	-37.3
	Fc. 39	-30496.6	2478.2	-66.2	-263.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-30496.6	2478.2	-66.2	-19.2
	ClsMed 39	-30496.6	2478.2	-66.2	-10.0

Combinazioni Quasi Permanenti

444	Ft. 41	-32251.7	-2156.7	51.7	-60.8
	Fc. 41	-32251.7	-2156.7	51.7	-257.1
	ClsMax 41	-32251.7	-2156.7	51.7	-18.6
	ClsMed 41	-32251.7	-2156.7	51.7	-10.6
544	Ft. 41	-29720.4	2385.9	-63.4	-37.7
	Fc. 41	-29720.4	2385.9	-63.4	-255.4
	ClsMax 41	-29720.4	2385.9	-63.4	-18.6
	ClsMed 41	-29720.4	2385.9	-63.4	-9.8

- Pilastro: 544/644 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ø 18 Af=20.36 [cm²] < 1ø18 x 4 V + 1ø18 x 2 B + 1ø18 x 2 H >

Staffe: ø 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
544	30	-4230.3	-4709.2	-585.0	1.00	1.00	0.23
644	17	-1537.0	1353.5	1.0	1.00	1.00	0.06

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1734.5	25501.9	1074.0	25501.9	ø 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
544	Ft. 37	-5117.2	-1855.0	-0.9	273.2
	Fc. 36	-6605.6	-1861.1	-0.9	-158.8
	ClsMax 37	-5117.2	-1855.0	-0.9	-13.2
	ClsMed 37	-5117.2	-1855.0	-0.9	-6.6
644	Ft. 36	-4918.1	1297.9	0.2	137.7
	Fc. 36	-4918.1	1297.9	0.2	-111.4
	ClsMax 36	-4918.1	1297.9	0.2	-9.1
	ClsMed 36	-4918.1	1297.9	0.2	-4.5
Combinazioni Frequenti					
544	Ft. 39	-3702.7	-1687.3	-0.8	290.6
	Fc. 39	-3702.7	-1687.3	-0.8	-137.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-3702.7	-1687.3	-0.8	-12.0
	ClsMed 39	-3702.7	-1687.3	-0.8	-6.0
644	Ft. 40	-2635.2	757.5	0.2	89.3
	Fc. 40	-2635.2	757.5	0.2	-64.5
	ClsMax 40	-2635.2	757.5	0.2	-5.3
	ClsMed 40	-2635.2	757.5	0.2	-2.7

Combinazioni Quasi Permanenti

544	Ft. 41	-3727.4	-1633.5	-0.8	274.8
	Fc. 41	-3727.4	-1633.5	-0.8	-133.3
	ClsMax 41	-3727.4	-1633.5	-0.8	-11.6
	ClsMed 41	-3727.4	-1633.5	-0.8	-5.8
644	Ft. 41	-2039.9	625.7	0.2	79.1
	Fc. 41	-2039.9	625.7	0.2	-53.0
	ClsMax 41	-2039.9	625.7	0.2	-4.4
	ClsMed 41	-2039.9	625.7	0.2	-2.2

- Pilastro: 45/145 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
45	9	-138136.6	29335.0	-2516.9	6.46	1.15	0.64
145	9	-136105.3	-29335.0	-2516.9	592.58	1.00	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	33550.1	73445.6	3937.0	73445.6	$\varnothing 12/10.0'$
0.51	2.57	33550.1	36722.8	3937.0	36722.8	$\varnothing 12/20.0'$
2.57	3.08	33550.1	73445.6	3937.0	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
45	Ft. 38	-147589.9	-881.9	82.1	-722.9
	Fc. 36	-159084.4	-965.7	88.0	-880.4
	ClsMax 36	-159084.4	-965.7	88.0	-59.4
	ClsMed 36	-159084.4	-965.7	88.0	-55.3
145	Ft. 38	-145558.6	1798.4	48.8	-669.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-157053.1	1971.2	53.2	-916.8
	ClsMax 36	-157053.1	1971.2	53.2	-62.5
	ClsMed 36	-157053.1	1971.2	53.2	-54.6

Combinazioni Frequenti

45	Ft. 40	-141471.9	-853.8	78.8	-692.5
	Fc. 39	-144731.7	-881.7	80.4	-801.1
	ClsMax 39	-144731.7	-881.7	80.4	-54.1
	ClsMed 39	-144731.7	-881.7	80.4	-50.3
145	Ft. 40	-139440.6	1740.5	46.5	-640.6
	Fc. 39	-142700.5	1798.0	47.8	-833.3
	ClsMax 39	-142700.5	1798.0	47.8	-56.8
	ClsMed 39	-142700.5	1798.0	47.8	-49.6

Combinazioni Quasi Permanenti

45	Ft. 41	-140900.2	-853.8	78.4	-689.5
	Fc. 41	-140900.2	-853.8	78.4	-779.7
	ClsMax 41	-140900.2	-853.8	78.4	-52.6
	ClsMed 41	-140900.2	-853.8	78.4	-49.0
145	Ft. 41	-138869.0	1740.4	46.3	-637.6
	Fc. 41	-138869.0	1740.4	46.3	-810.4
	ClsMax 41	-138869.0	1740.4	46.3	-55.2
	ClsMed 41	-138869.0	1740.4	46.3	-48.3

- Pilastro: 145/245 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
145	24	-114567.7	21154.8	1766.6	24.13	1.00	0.46
245	9	-108884.9	-26539.2	-723.6	28.43	1.00	0.59

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27498.1	73445.6	3088.6	73445.6	$\phi 12/10.0'$
0.79	3.28	27498.1	36722.8	3088.6	36722.8	$\phi 12/20.0'$
3.28	3.90	27498.1	73445.6	3088.6	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

145	Ft. 38	-119735.9	-2119.2	73.8	-518.2
	Fc. 36	-128904.7	-2325.3	80.1	-788.4
	ClsMax 36	-128904.7	-2325.3	80.1	-54.2
	ClsMed 36	-128904.7	-2325.3	80.1	-44.8
245	Ft. 38	-117192.1	2068.8	25.8	-509.7
	Fc. 36	-126360.9	2272.8	28.1	-770.1
	ClsMax 36	-126360.9	2272.8	28.1	-52.9
	ClsMed 36	-126360.9	2272.8	28.1	-43.9

Combinazioni Frequenti

145	Ft. 40	-114392.7	-2049.6	70.6	-493.9
	Fc. 39	-116877.2	-2118.0	72.3	-715.3
	ClsMax 39	-116877.2	-2118.0	72.3	-49.2
	ClsMed 39	-116877.2	-2118.0	72.3	-40.6
245	Ft. 40	-111848.9	1999.5	24.3	-485.3
	Fc. 39	-114333.4	2067.2	24.9	-697.3
	ClsMax 39	-114333.4	2067.2	24.9	-47.9
	ClsMed 39	-114333.4	2067.2	24.9	-39.7

Combinazioni Quasi Permanenti

145	Ft. 41	-113820.9	-2049.3	70.3	-490.9
	Fc. 41	-113820.9	-2049.3	70.3	-696.0
	ClsMax 41	-113820.9	-2049.3	70.3	-47.8
	ClsMed 41	-113820.9	-2049.3	70.3	-39.6
245	Ft. 41	-111277.2	1999.2	24.1	-482.3
	Fc. 41	-111277.2	1999.2	24.1	-678.0
	ClsMax 41	-111277.2	1999.2	24.1	-46.6
	ClsMed 41	-111277.2	1999.2	24.1	-38.7

- Pilastro: 245/345 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
245	21	-86998.0	25118.0	1912.5	21.00	1.00	0.49
345	17	-81467.6	20780.2	1999.2	1.71	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31312.5	73445.6	4095.4	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31312.5	36722.8	4095.4	36722.8	$\varnothing 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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3.26	3.88	31312.5	73445.6	4095.4	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

245	Ft. 38	-91451.3	-2038.6	74.1	-356.9
	Fc. 36	-98307.1	-2245.2	80.3	-588.0
	ClsMax 36	-98307.1	-2245.2	80.3	-40.7
	ClsMed 36	-98307.1	-2245.2	80.3	-32.3
345	Ft. 38	-88920.1	2058.4	-5.9	-346.6
	Fc. 36	-95775.9	2269.1	-6.3	-573.3
	ClsMax 36	-95775.9	2269.1	-6.3	-39.7
	ClsMed 36	-95775.9	2269.1	-6.3	-31.5

Combinazioni Frequenti

245	Ft. 40	-86878.3	-1968.0	70.5	-337.7
	Fc. 39	-88591.6	-2036.4	72.2	-530.4
	ClsMax 39	-88591.6	-2036.4	72.2	-36.7
	ClsMed 39	-88591.6	-2036.4	72.2	-29.1
345	Ft. 40	-84347.0	1986.7	-6.1	-327.2
	Fc. 39	-86060.3	2056.5	-6.3	-515.9
	ClsMax 39	-86060.3	2056.5	-6.3	-35.7
	ClsMed 39	-86060.3	2056.5	-6.3	-28.3

Combinazioni Quasi Permanenti

245	Ft. 41	-86306.3	-1967.6	70.1	-334.9
	Fc. 41	-86306.3	-1967.6	70.1	-516.0
	ClsMax 41	-86306.3	-1967.6	70.1	-35.7
	ClsMed 41	-86306.3	-1967.6	70.1	-28.4
345	Ft. 41	-83775.0	1986.3	-6.2	-324.4
	Fc. 41	-83775.0	1986.3	-6.2	-501.5
	ClsMax 41	-83775.0	1986.3	-6.2	-34.7
	ClsMed 41	-83775.0	1986.3	-6.2	-27.5

- Pilastro: 345/445 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
345	24	-59177.0	-21199.7	2488.9	196.07	1.00	0.44
445	17	-54696.8	20780.2	1926.1	1.96	1.00	0.44

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	29010.5	73445.6	2315.7	73445.6	ø 12/10.0'
0.79	3.26	29010.5	36722.8	2315.7	36722.8	ø 12/20.0'
3.26	3.88	29010.5	73445.6	2315.7	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

345	Ft. 38	-63172.3	-2037.8	58.0	-218.3
	Fc. 36	-67718.5	-2247.8	62.9	-436.5
	ClsMax 36	-67718.5	-2247.8	62.9	-30.6
	ClsMed 36	-67718.5	-2247.8	62.9	-22.3
445	Ft. 38	-60641.1	1970.0	7.9	-211.0
	Fc. 36	-65187.3	2172.3	7.7	-418.2
	ClsMax 36	-65187.3	2172.3	7.7	-29.3
	ClsMed 36	-65187.3	2172.3	7.7	-21.4

Combinazioni Frequenti

345	Ft. 40	-59367.8	-1964.6	55.0	-202.9
	Fc. 39	-60311.0	-2033.8	56.2	-390.2
	ClsMax 39	-60311.0	-2033.8	56.2	-27.4
	ClsMed 39	-60311.0	-2033.8	56.2	-19.8
445	Ft. 40	-56836.6	1897.1	6.5	-195.6
	Fc. 39	-57779.7	1963.1	6.1	-372.3
	ClsMax 39	-57779.7	1963.1	6.1	-26.1
	ClsMed 39	-57779.7	1963.1	6.1	-19.0

Combinazioni Quasi Permanenti

345	Ft. 41	-58795.6	-1963.8	54.6	-200.1
	Fc. 41	-58795.6	-1963.8	54.6	-379.5
	ClsMax 41	-58795.6	-1963.8	54.6	-26.6
	ClsMed 41	-58795.6	-1963.8	54.6	-19.3
445	Ft. 41	-56264.3	1895.7	6.2	-192.8
	Fc. 41	-56264.3	1895.7	6.2	-361.9
	ClsMax 41	-56264.3	1895.7	6.2	-25.4
	ClsMed 41	-56264.3	1895.7	6.2	-18.5

- Pilastro: 445/545 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
445	21	-31598.9	-21196.2	1403.1	417.40	1.00	0.52
545	30	-29741.4	-16536.6	-1690.5	1.87	1.00	0.39

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25554.7	73445.6	1779.1	73445.6	ø 12/10.0'
0.79	3.26	25554.7	36722.8	1779.1	36722.8	ø 12/20.0'
3.26	3.88	25554.7	73445.6	1779.1	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

445	Ft. 37	-35717.7	-2438.3	87.7	-63.8
	Fc. 36	-37150.1	-2439.0	89.7	-295.5
	ClsMax 36	-37150.1	-2439.0	89.7	-21.3
	ClsMed 36	-37150.1	-2439.0	89.7	-12.2
545	Ft. 37	-33186.4	2801.6	-104.8	-34.4
	Fc. 36	-34618.9	2799.3	-106.4	-299.8
	ClsMax 36	-34618.9	2799.3	-106.4	-21.9
	ClsMed 36	-34618.9	2799.3	-106.4	-11.4

Combinazioni Frequenti

445	Ft. 39	-32045.1	-2203.8	79.8	-56.5
	Fc. 39	-32045.1	-2203.8	79.8	-259.5
	ClsMax 39	-32045.1	-2203.8	79.8	-18.8
	ClsMed 39	-32045.1	-2203.8	79.8	-10.5
545	Ft. 39	-29513.9	2530.6	-96.1	-28.8
	Fc. 39	-29513.9	2530.6	-96.1	-262.2
	ClsMax 39	-29513.9	2530.6	-96.1	-19.2
	ClsMed 39	-29513.9	2530.6	-96.1	-9.7

Combinazioni Quasi Permanenti

445	Ft. 41	-31298.5	-2125.8	77.8	-56.4
	Fc. 41	-31298.5	-2125.8	77.8	-252.2
	ClsMax 41	-31298.5	-2125.8	77.8	-18.2
	ClsMed 41	-31298.5	-2125.8	77.8	-10.3
545	Ft. 41	-28767.2	2439.5	-93.7	-29.2
	Fc. 41	-28767.2	2439.5	-93.7	-254.4
	ClsMax 41	-28767.2	2439.5	-93.7	-18.6
	ClsMed 41	-28767.2	2439.5	-93.7	-9.5

- Pilastro: 545/645 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
545	30	-4127.9	-3879.9	-568.6	1.00	1.00	0.18
645	17	-1612.5	1151.8	0.8	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1434.7	25501.9	1039.3	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
545	Ft. 37	-5052.7	-1421.2	-0.5	163.3
	Fc. 36	-6481.8	-1420.8	-0.5	-123.8
	ClsMax 37	-5052.7	-1421.2	-0.5	-10.0
	ClsMed 37	-5052.7	-1421.2	-0.5	-5.0
645	Ft. 36	-4794.3	1191.8	0.1	116.5
	Fc. 36	-4794.3	1191.8	0.1	-102.8
	ClsMax 36	-4794.3	1191.8	0.1	-8.3
	ClsMed 36	-4794.3	1191.8	0.1	-4.2
Combinazioni Frequenti					
545	Ft. 39	-3691.4	-1283.6	-0.4	182.6
	Fc. 39	-3691.4	-1283.6	-0.4	-107.3
	ClsMax 39	-3691.4	-1283.6	-0.4	-9.1
	ClsMed 39	-3691.4	-1283.6	-0.4	-4.6
645	Ft. 40	-2598.1	678.1	0.1	70.9
	Fc. 40	-2598.1	678.1	0.1	-58.2
	ClsMax 40	-2598.1	678.1	0.1	-4.8
	ClsMed 40	-2598.1	678.1	0.1	-2.4
Combinazioni Quasi Permanenti					
545	Ft. 41	-3713.9	-1237.6	-0.4	169.6
	Fc. 41	-3713.9	-1237.6	-0.4	-103.9
	ClsMax 41	-3713.9	-1237.6	-0.4	-8.8
	ClsMed 41	-3713.9	-1237.6	-0.4	-4.4
645	Ft. 41	-2026.4	552.0	0.1	61.0
	Fc. 41	-2026.4	552.0	0.1	-47.2
	ClsMax 41	-2026.4	552.0	0.1	-3.9
	ClsMed 41	-2026.4	552.0	0.1	-1.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 46/146 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 51.3+ø 12/20.0' x 205.3+ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
46	22	-143148.3	-25970.5	2608.1	4.86	1.11	0.56
146	22	-141117.0	25970.5	2608.1	8.09	1.00	0.56

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	33533.9	73445.6	3939.0	73445.6	ø 12/10.0'
0.51	2.57	33533.9	36722.8	3939.0	36722.8	ø 12/20.0'
2.57	3.08	33533.9	73445.6	3939.0	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
46	Ft. 38	-147551.0	-879.8	82.8	-722.7
	Fc. 36	-159041.6	-963.7	88.8	-880.1
	ClSMax 36	-159041.6	-963.7	88.8	-59.4
	ClSMed 36	-159041.6	-963.7	88.8	-55.3
146	Ft. 38	-145519.8	1797.7	47.3	-669.5
	Fc. 36	-157010.3	1970.4	51.5	-916.4
	ClSMax 36	-157010.3	1970.4	51.5	-62.4
	ClSMed 36	-157010.3	1970.4	51.5	-54.6
Combinazioni Frequenti					
46	Ft. 40	-141435.0	-851.7	79.5	-692.4
	Fc. 39	-144693.8	-879.6	81.1	-800.9
	ClSMax 39	-144693.8	-879.6	81.1	-54.0
	ClSMed 39	-144693.8	-879.6	81.1	-50.3
146	Ft. 40	-139403.8	1739.8	45.1	-640.5
	Fc. 39	-142662.5	1797.3	46.3	-833.0
	ClSMax 39	-142662.5	1797.3	46.3	-56.8
	ClSMed 39	-142662.5	1797.3	46.3	-49.6
Combinazioni Quasi Permanenti					
46	Ft. 41	-140863.6	-851.7	79.1	-689.4
	Fc. 41	-140863.6	-851.7	79.1	-779.4
	ClSMax 41	-140863.6	-851.7	79.1	-52.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClMed 41	-140863.6	-851.7	79.1	-49.0
146	Ft. 41	-138832.3	1739.7	44.9	-637.5
	Fc. 41	-138832.3	1739.7	44.9	-810.2
	ClMax 41	-138832.3	1739.7	44.9	-55.2
	ClMed 41	-138832.3	1739.7	44.9	-48.3

- Pilastro: 146/246 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 62.2+ø 12/20.0' x 248.7+ø 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
146	24	-114411.2	20840.3	1769.8	53.33	1.00	0.45
246	9	-109272.8	-25700.9	-727.2	56.78	1.00	0.56

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27464.7	73445.6	3096.1	73445.6	ø 12/10.0'
0.79	3.28	27464.7	36722.8	3096.1	36722.8	ø 12/20.0'
3.28	3.90	27464.7	73445.6	3096.1	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
146	Ft. 38	-119700.5	-2119.4	76.9	-517.9
	Fc. 36	-128865.8	-2325.8	83.4	-788.4
	ClMax 36	-128865.8	-2325.8	83.4	-54.2
	ClMed 36	-128865.8	-2325.8	83.4	-44.8
246	Ft. 38	-117156.8	2067.4	21.4	-509.8
	Fc. 36	-126322.0	2271.5	23.4	-769.6
	ClMax 36	-126322.0	2271.5	23.4	-52.8
	ClMed 36	-126322.0	2271.5	23.4	-43.9
Combinazioni Frequenti					
146	Ft. 40	-114359.2	-2049.6	73.4	-493.6
	Fc. 39	-116842.7	-2118.2	75.3	-715.3
	ClMax 39	-116842.7	-2118.2	75.3	-49.2
	ClMed 39	-116842.7	-2118.2	75.3	-40.6
246	Ft. 40	-111815.4	1998.0	20.2	-485.4
	Fc. 39	-114298.9	2065.8	20.7	-696.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-114298.9	2065.8	20.7	-47.9
	ClsMed 39	-114298.9	2065.8	20.7	-39.7

Combinazioni Quasi Permanenti

146	Ft. 41	-113787.6	-2049.4	73.1	-490.6
	Fc. 41	-113787.6	-2049.4	73.1	-695.9
	ClsMax 41	-113787.6	-2049.4	73.1	-47.8
	ClsMed 41	-113787.6	-2049.4	73.1	-39.6
246	Ft. 41	-111243.9	1997.7	20.1	-482.4
	Fc. 41	-111243.9	1997.7	20.1	-677.6
	ClsMax 41	-111243.9	1997.7	20.1	-46.5
	ClsMed 41	-111243.9	1997.7	20.1	-38.7

- Pilastro: 246/346 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
246	21	-86853.3	24582.6	1917.8	38.24	1.00	0.48
346	25	-84155.9	-21145.0	-532.9	1180.95	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31297.0	73445.6	4100.2	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31297.0	36722.8	4100.2	36722.8	$\varnothing 12/20.0'$
3.26	3.88	31297.0	73445.6	4100.2	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

246	Ft. 38	-91422.4	-2042.7	80.1	-356.3
	Fc. 36	-98275.3	-2250.1	86.8	-588.3
	ClsMax 36	-98275.3	-2250.1	86.8	-40.7
	ClsMed 36	-98275.3	-2250.1	86.8	-32.3
346	Ft. 38	-88891.2	2061.1	-12.4	-346.0
	Fc. 36	-95744.1	2272.3	-13.4	-573.6
	ClsMax 36	-95744.1	2272.3	-13.4	-39.7
	ClsMed 36	-95744.1	2272.3	-13.4	-31.5

Combinazioni Frequenti

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

246	Ft. 40	-86850.8	-1971.9	76.2	-337.1
	Fc. 39	-88563.3	-2040.5	78.0	-530.7
	ClsMax 39	-88563.3	-2040.5	78.0	-36.8
	ClsMed 39	-88563.3	-2040.5	78.0	-29.1
346	Ft. 40	-84319.6	1989.2	-12.2	-326.7
	Fc. 39	-86032.1	2059.2	-12.5	-516.2
	ClsMax 39	-86032.1	2059.2	-12.5	-35.8
	ClsMed 39	-86032.1	2059.2	-12.5	-28.3

Combinazioni Quasi Permanenti

246	Ft. 41	-86279.0	-1971.4	75.8	-334.3
	Fc. 41	-86279.0	-1971.4	75.8	-516.3
	ClsMax 41	-86279.0	-1971.4	75.8	-35.8
	ClsMed 41	-86279.0	-1971.4	75.8	-28.4
346	Ft. 41	-83747.8	1988.8	-12.2	-323.9
	Fc. 41	-83747.8	1988.8	-12.2	-501.8
	ClsMax 41	-83747.8	1988.8	-12.2	-34.8
	ClsMed 41	-83747.8	1988.8	-12.2	-27.5

- Pilastro: 346/446 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
346	21	-59166.0	-21161.6	2418.3	180.83	1.00	0.44
446	17	-54973.5	20780.2	1927.1	2.29	1.00	0.43

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28977.6	73445.6	2342.1	73445.6	$\varnothing 12/10.0'$
0.79	3.26	28977.6	36722.8	2342.1	36722.8	$\varnothing 12/20.0'$
3.26	3.88	28977.6	73445.6	2342.1	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
346	Ft. 38	-63152.2	-2040.8	65.9	-217.7
	Fc. 36	-67696.3	-2251.4	71.4	-436.9
	ClsMax 36	-67696.3	-2251.4	71.4	-30.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 36	-67696.3	-2251.4	71.4	-22.2
446	Ft. 38	-60620.9	1970.4	-1.1	-211.2
	Fc. 36	-65165.1	2173.1	-2.0	-417.9
	ClsMax 36	-65165.1	2173.1	-2.0	-29.3
	ClsMed 36	-65165.1	2173.1	-2.0	-21.4

Combinazioni Frequenti

346	Ft. 40	-59348.7	-1967.3	62.4	-202.4
	Fc. 39	-60291.2	-2036.7	63.9	-390.6
	ClsMax 39	-60291.2	-2036.7	63.9	-27.4
	ClsMed 39	-60291.2	-2036.7	63.9	-19.8
446	Ft. 40	-56817.4	1897.4	-2.0	-195.7
	Fc. 39	-57760.0	1963.6	-2.6	-372.1
	ClsMax 39	-57760.0	1963.6	-2.6	-26.1
	ClsMed 39	-57760.0	1963.6	-2.6	-19.0

Combinazioni Quasi Permanenti

346	Ft. 41	-58776.5	-1966.5	62.0	-199.6
	Fc. 41	-58776.5	-1966.5	62.0	-379.9
	ClsMax 41	-58776.5	-1966.5	62.0	-26.6
	ClsMed 41	-58776.5	-1966.5	62.0	-19.3
446	Ft. 41	-56245.3	1896.0	-2.3	-192.9
	Fc. 41	-56245.3	1896.0	-2.3	-361.6
	ClsMax 41	-56245.3	1896.0	-2.3	-25.3
	ClsMed 41	-56245.3	1896.0	-2.3	-18.5

- Pilastro: 446/546 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
446	20	-31560.0	-21093.1	1418.3	79.37	1.00	0.51
546	30	-29543.0	-16338.4	-1674.4	2.39	1.00	0.38

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25545.9	73445.6	1784.6	73445.6	$\varnothing 12/10.0'$
0.79	3.26	25545.9	36722.8	1784.6	36722.8	$\varnothing 12/20.0'$
3.26	3.88	25545.9	73445.6	1784.6	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
446	Ft. 37	-35707.3	-2450.0	98.2	-62.8
	Fc. 36	-37139.8	-2450.9	100.4	-296.5
	ClsMax 36	-37139.8	-2450.9	100.4	-21.4
	ClsMed 36	-37139.8	-2450.9	100.4	-12.2
546	Ft. 37	-33176.1	2821.5	-115.3	-33.0
	Fc. 36	-34608.5	2819.6	-117.1	-301.1
	ClsMax 36	-34608.5	2819.6	-117.1	-22.0
	ClsMed 36	-34608.5	2819.6	-117.1	-11.4
Combinazioni Frequenti					
446	Ft. 39	-32035.9	-2214.2	89.2	-55.6
	Fc. 39	-32035.9	-2214.2	89.2	-260.3
	ClsMax 39	-32035.9	-2214.2	89.2	-18.9
	ClsMed 39	-32035.9	-2214.2	89.2	-10.5
546	Ft. 39	-29504.6	2548.6	-105.2	-27.5
	Fc. 39	-29504.6	2548.6	-105.2	-263.4
	ClsMax 39	-29504.6	2548.6	-105.2	-19.3
	ClsMed 39	-29504.6	2548.6	-105.2	-9.7
Combinazioni Quasi Permanenti					
446	Ft. 41	-31289.6	-2135.9	86.9	-55.5
	Fc. 41	-31289.6	-2135.9	86.9	-253.0
	ClsMax 41	-31289.6	-2135.9	86.9	-18.3
	ClsMed 41	-31289.6	-2135.9	86.9	-10.3
546	Ft. 41	-28758.3	2456.9	-102.4	-28.0
	Fc. 41	-28758.3	2456.9	-102.4	-255.5
	ClsMax 41	-28758.3	2456.9	-102.4	-18.7
	ClsMed 41	-28758.3	2456.9	-102.4	-9.5

- Pilastro: 546/646 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
546	22	-3985.5	-2962.1	1886.3	1.00	1.00	0.16
646	1	-6843.7	1677.9	0.1	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	2.58	1324.7	25501.9	1040.0	25501.9	∅ 10/20.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
546	Ft. 37	-5051.9	-1396.4	-0.4	157.1
	Fc. 36	-6481.1	-1395.8	-0.4	-121.8
	ClsMax 37	-5051.9	-1396.4	-0.4	-9.8
	ClsMed 37	-5051.9	-1396.4	-0.4	-4.9
646	Ft. 36	-4793.6	1188.4	0.1	115.7
	Fc. 36	-4793.6	1188.4	0.1	-102.5
	ClsMax 36	-4793.6	1188.4	0.1	-8.3
	ClsMed 36	-4793.6	1188.4	0.1	-4.2
Combinazioni Frequenti					
546	Ft. 39	-3690.4	-1260.4	-0.4	176.6
	Fc. 39	-3690.4	-1260.4	-0.4	-105.5
	ClsMax 39	-3690.4	-1260.4	-0.4	-8.9
	ClsMed 39	-3690.4	-1260.4	-0.4	-4.5
646	Ft. 40	-2597.2	674.9	0.1	70.2
	Fc. 40	-2597.2	674.9	0.1	-58.0
	ClsMax 40	-2597.2	674.9	0.1	-4.7
	ClsMed 40	-2597.2	674.9	0.1	-2.4
Combinazioni Quasi Permanenti					
546	Ft. 41	-3713.0	-1214.8	-0.4	163.7
	Fc. 41	-3713.0	-1214.8	-0.4	-102.2
	ClsMax 41	-3713.0	-1214.8	-0.4	-8.6
	ClsMed 41	-3713.0	-1214.8	-0.4	-4.3
646	Ft. 41	-2025.5	548.8	0.1	60.2
	Fc. 41	-2025.5	548.8	0.1	-47.0
	ClsMax 41	-2025.5	548.8	0.1	-3.9
	ClsMed 41	-2025.5	548.8	0.1	-1.9

- Pilastro: 47/147 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af} = 25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
47	30	-143043.7	25735.8	2833.8	11.81	1.67	0.56
147	30	-141012.5	25735.8	2833.8	89.55	1.00	0.56

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	33500.6	73445.6	3848.6	73445.6	ø 12/10.0'
0.51	2.57	33500.6	36722.8	3848.6	36722.8	ø 12/20.0'
2.57	3.08	33500.6	73445.6	3848.6	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

47	Ft. 38	-147550.5	-877.6	82.8	-722.8
	Fc. 36	-159040.9	-961.4	88.8	-880.0
	ClSMax 36	-159040.9	-961.4	88.8	-59.4
	ClSMed 36	-159040.9	-961.4	88.8	-55.3
147	Ft. 38	-145519.2	1796.7	47.3	-669.5
	Fc. 36	-157009.6	1969.2	51.5	-916.3
	ClSMax 36	-157009.6	1969.2	51.5	-62.4
	ClSMed 36	-157009.6	1969.2	51.5	-54.6

Combinazioni Frequenti

47	Ft. 40	-141434.5	-849.4	79.5	-692.5
	Fc. 39	-144693.2	-877.3	81.1	-800.8
	ClSMax 39	-144693.2	-877.3	81.1	-54.0
	ClSMed 39	-144693.2	-877.3	81.1	-50.3
147	Ft. 40	-139403.3	1738.8	45.1	-640.5
	Fc. 39	-142662.0	1796.2	46.3	-832.9
	ClSMax 39	-142662.0	1796.2	46.3	-56.8
	ClSMed 39	-142662.0	1796.2	46.3	-49.6

Combinazioni Quasi Permanenti

47	Ft. 41	-140863.1	-849.3	79.1	-689.5
	Fc. 41	-140863.1	-849.3	79.1	-779.3
	ClSMax 41	-140863.1	-849.3	79.1	-52.6
	ClSMed 41	-140863.1	-849.3	79.1	-49.0
147	Ft. 41	-138831.8	1738.7	44.9	-637.6
	Fc. 41	-138831.8	1738.7	44.9	-810.1
	ClSMax 41	-138831.8	1738.7	44.9	-55.2
	ClSMed 41	-138831.8	1738.7	44.9	-48.3

- Pilastro: 147/247 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 62.2+ø 12/20.0' x 248.7+ø 12/10.0' x 62.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
147	26	-115170.8	19899.7	3451.9	7.03	1.00	0.45
247	8	-109752.8	-24730.9	-754.3	275.78	1.00	0.54

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27421.8	73445.6	3084.4	73445.6	ø 12/10.0'
0.79	3.28	27421.8	36722.8	3084.4	36722.8	ø 12/20.0'
3.28	3.90	27421.8	73445.6	3084.4	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

147	Ft. 38	-119699.9	-2119.0	77.0	-517.9
	Fc. 36	-128865.0	-2325.7	83.5	-788.4
	ClsMax 36	-128865.0	-2325.7	83.5	-54.2
	ClsMed 36	-128865.0	-2325.7	83.5	-44.8
247	Ft. 38	-117156.2	2065.3	21.3	-509.9
	Fc. 36	-126321.3	2269.5	23.2	-769.5
	ClsMax 36	-126321.3	2269.5	23.2	-52.8
	ClsMed 36	-126321.3	2269.5	23.2	-43.9

Combinazioni Frequenti

147	Ft. 40	-114358.6	-2049.1	73.5	-493.6
	Fc. 39	-116842.1	-2117.8	75.4	-715.3
	ClsMax 39	-116842.1	-2117.8	75.4	-49.2
	ClsMed 39	-116842.1	-2117.8	75.4	-40.6
247	Ft. 40	-111814.9	1996.0	20.1	-485.5
	Fc. 39	-114298.3	2063.7	20.5	-696.7
	ClsMax 39	-114298.3	2063.7	20.5	-47.8
	ClsMed 39	-114298.3	2063.7	20.5	-39.7

Combinazioni Quasi Permanenti

147	Ft. 41	-113787.1	-2048.9	73.2	-490.6
	Fc. 41	-113787.1	-2048.9	73.2	-695.9
	ClsMax 41	-113787.1	-2048.9	73.2	-47.8
	ClsMed 41	-113787.1	-2048.9	73.2	-39.6
247	Ft. 41	-111243.3	1995.7	19.9	-482.5
	Fc. 41	-111243.3	1995.7	19.9	-677.5
	ClsMax 41	-111243.3	1995.7	19.9	-46.5
	ClsMed 41	-111243.3	1995.7	19.9	-38.7

- Pilastro: 247/347 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
247	21	-86736.2	24047.2	1917.1	261.14	1.00	0.47
347	21	-84204.9	-21059.4	-670.7	142.54	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31302.5	73445.6	4095.5	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31302.5	36722.8	4095.5	36722.8	$\varnothing 12/20.0'$
3.26	3.88	31302.5	73445.6	4095.5	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
247	Ft. 38	-91421.9	-2045.9	79.9	-356.2
	Fc. 36	-98274.6	-2253.9	86.7	-588.5
	ClsMax 36	-98274.6	-2253.9	86.7	-40.8
	ClsMed 36	-98274.6	-2253.9	86.7	-32.3
347	Ft. 38	-88890.6	2062.6	-11.9	-346.0
	Fc. 36	-95743.4	2274.2	-12.8	-573.6
	ClsMax 36	-95743.4	2274.2	-12.8	-39.7
	ClsMed 36	-95743.4	2274.2	-12.8	-31.5
Combinazioni Frequenti					
247	Ft. 40	-86850.3	-1974.9	76.0	-337.0
	Fc. 39	-88562.8	-2043.7	77.9	-530.9
	ClsMax 39	-88562.8	-2043.7	77.9	-36.8
	ClsMed 39	-88562.8	-2043.7	77.9	-29.1
347	Ft. 40	-84319.1	1990.5	-11.7	-326.7
	Fc. 39	-86031.5	2060.7	-12.0	-516.2
	ClsMax 39	-86031.5	2060.7	-12.0	-35.8
	ClsMed 39	-86031.5	2060.7	-12.0	-28.3
Combinazioni Quasi Permanenti					
247	Ft. 41	-86278.5	-1974.4	75.6	-334.2
	Fc. 41	-86278.5	-1974.4	75.6	-516.4
	ClsMax 41	-86278.5	-1974.4	75.6	-35.8
	ClsMed 41	-86278.5	-1974.4	75.6	-28.4
347	Ft. 41	-83747.3	1990.1	-11.7	-323.9
	Fc. 41	-83747.3	1990.1	-11.7	-501.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-83747.3	1990.1	-11.7	-34.8
	ClsMed 41	-83747.3	1990.1	-11.7	-27.5

- Pilastro: 347/447 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ϕ 24 Af=36.19 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 1 ϕ 24 x 2 H >

Staffe: ϕ 12/10.0' x 61.8+ ϕ 12/20.0' x 247.3+ ϕ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
347	20	-59116.5	-20979.8	2417.0	65.92	1.00	0.44
447	20	-56585.3	-21157.9	-952.5	320.33	1.00	0.44

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28946.8	73445.6	2367.8	73445.6	ϕ 12/10.0'
0.79	3.26	28946.8	36722.8	2367.8	36722.8	ϕ 12/20.0'
3.26	3.88	28946.8	73445.6	2367.8	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
347	Ft. 38	-63151.8	-2043.2	66.4	-217.6
	Fc. 36	-67695.9	-2254.4	72.0	-437.1
	ClsMax 36	-67695.9	-2254.4	72.0	-30.7
	ClsMed 36	-67695.9	-2254.4	72.0	-22.2
447	Ft. 38	-60620.6	1971.1	-3.1	-211.1
	Fc. 36	-65164.6	2174.2	-4.1	-418.0
	ClsMax 36	-65164.6	2174.2	-4.1	-29.3
	ClsMed 36	-65164.6	2174.2	-4.1	-21.4
Combinazioni Frequenti					
347	Ft. 40	-59348.4	-1969.5	62.9	-202.2
	Fc. 39	-60290.9	-2039.1	64.4	-390.7
	ClsMax 39	-60290.9	-2039.1	64.4	-27.4
	ClsMed 39	-60290.9	-2039.1	64.4	-19.8
447	Ft. 40	-56817.1	1898.1	-3.9	-195.6
	Fc. 39	-57759.6	1964.4	-4.5	-372.2
	ClsMax 39	-57759.6	1964.4	-4.5	-26.1
	ClsMed 39	-57759.6	1964.4	-4.5	-19.0
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

347	Ft. 41	-58776.2	-1968.7	62.5	-199.5
	Fc. 41	-58776.2	-1968.7	62.5	-380.0
	ClsMax 41	-58776.2	-1968.7	62.5	-26.7
	ClsMed 41	-58776.2	-1968.7	62.5	-19.3
447	Ft. 41	-56244.9	1896.7	-4.2	-192.8
	Fc. 41	-56244.9	1896.7	-4.2	-361.7
	ClsMax 41	-56244.9	1896.7	-4.2	-25.4
	ClsMed 41	-56244.9	1896.7	-4.2	-18.5

- Pilastro: 447/547 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/10.0' x 61.8+ø 12/20.0' x 247.3+ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
447	19	-30881.1	-20780.2	1166.6	3.95	1.00	0.51
547	30	-29360.4	-16160.3	-1629.2	3.35	1.00	0.38

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25553.5	73445.6	1760.6	73445.6	ø 12/10.0'
0.79	3.26	25553.5	36722.8	1760.6	36722.8	ø 12/20.0'
3.26	3.88	25553.5	73445.6	1760.6	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
447	Ft. 37	-35707.2	-2456.5	96.9	-62.5
	Fc. 36	-37139.6	-2457.5	99.1	-296.7
	ClsMax 36	-37139.6	-2457.5	99.1	-21.4
	ClsMed 36	-37139.6	-2457.5	99.1	-12.2
547	Ft. 37	-33175.9	2829.5	-108.9	-33.0
	Fc. 36	-34608.4	2827.7	-110.6	-301.2
	ClsMax 36	-34608.4	2827.7	-110.6	-22.0
	ClsMed 36	-34608.4	2827.7	-110.6	-11.4
Combinazioni Frequenti					
447	Ft. 39	-32035.8	-2219.7	88.0	-55.4
	Fc. 39	-32035.8	-2219.7	88.0	-260.5
	ClsMax 39	-32035.8	-2219.7	88.0	-18.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-32035.8	-2219.7	88.0	-10.5
547	Ft. 39	-29504.5	2555.3	-99.2	-27.5
	Fc. 39	-29504.5	2555.3	-99.2	-263.4
	ClsMax 39	-29504.5	2555.3	-99.2	-19.3
	ClsMed 39	-29504.5	2555.3	-99.2	-9.7

Combinazioni Quasi Permanenti

447	Ft. 41	-31289.5	-2141.1	85.8	-55.3
	Fc. 41	-31289.5	-2141.1	85.8	-253.2
	ClsMax 41	-31289.5	-2141.1	85.8	-18.3
	ClsMed 41	-31289.5	-2141.1	85.8	-10.3
547	Ft. 41	-28758.2	2463.3	-96.6	-28.0
	Fc. 41	-28758.2	2463.3	-96.6	-255.5
	ClsMax 41	-28758.2	2463.3	-96.6	-18.7
	ClsMed 41	-28758.2	2463.3	-96.6	-9.5

- Pilastro: 547/647 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
547	24	-3783.6	-1609.6	2813.0	1.00	1.00	0.15
647	1	-6843.9	1678.3	0.1	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1323.5	25501.9	1041.1	25501.9	$\phi 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
547	Ft. 37	-5052.0	-1394.0	-0.3	156.5
	Fc. 36	-6481.3	-1393.2	-0.3	-121.6
	ClsMax 37	-5052.0	-1394.0	-0.3	-9.8
	ClsMed 37	-5052.0	-1394.0	-0.3	-4.9
647	Ft. 36	-4793.8	1188.7	0.1	115.8
	Fc. 36	-4793.8	1188.7	0.1	-102.5
	ClsMax 36	-4793.8	1188.7	0.1	-8.3
	ClsMed 36	-4793.8	1188.7	0.1	-4.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Frequenti

547	Ft. 39	-3690.5	-1258.3	-0.3	176.0
	Fc. 39	-3690.5	-1258.3	-0.3	-105.4
	ClsMax 39	-3690.5	-1258.3	-0.3	-8.9
	ClsMed 39	-3690.5	-1258.3	-0.3	-4.5
647	Ft. 40	-2597.4	675.1	0.1	70.2
	Fc. 40	-2597.4	675.1	0.1	-58.0
	ClsMax 40	-2597.4	675.1	0.1	-4.7
	ClsMed 40	-2597.4	675.1	0.1	-2.4

Combinazioni Quasi Permanenti

547	Ft. 41	-3713.1	-1212.8	-0.2	163.1
	Fc. 41	-3713.1	-1212.8	-0.2	-102.0
	ClsMax 41	-3713.1	-1212.8	-0.2	-8.6
	ClsMed 41	-3713.1	-1212.8	-0.2	-4.3
647	Ft. 41	-2025.6	549.0	0.1	60.3
	Fc. 41	-2025.6	549.0	0.1	-47.0
	ClsMax 41	-2025.6	549.0	0.1	-3.9
	ClsMed 41	-2025.6	549.0	0.1	-1.9

- Pilastro: 48/148 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
48	11	-140270.7	25461.5	-1548.1	6.45	1.00	0.55
148	11	-138239.4	-25461.5	-1244.5	350.85	1.00	0.54

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	33446.0	73445.6	3844.6	73445.6	$\varnothing 12/10.0'$
0.51	2.57	33446.0	36722.8	3844.6	36722.8	$\varnothing 12/20.0'$
2.57	3.08	33446.0	73445.6	3844.6	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
48	Ft. 38	-147563.6	-875.5	82.9	-723.0
	Fc. 36	-159055.1	-959.4	88.9	-880.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-159055.1	-959.4	88.9	-59.4
	ClsMed 36	-159055.1	-959.4	88.9	-55.3
148	Ft. 38	-145532.4	1796.0	47.1	-669.6
	Fc. 36	-157023.8	1968.5	51.3	-916.4
	ClsMax 36	-157023.8	1968.5	51.3	-62.4
	ClsMed 36	-157023.8	1968.5	51.3	-54.6

Combinazioni Frequenti

48	Ft. 40	-141447.1	-847.2	79.5	-692.7
	Fc. 39	-144706.1	-875.1	81.2	-800.7
	ClsMax 39	-144706.1	-875.1	81.2	-54.0
	ClsMed 39	-144706.1	-875.1	81.2	-50.3
148	Ft. 40	-139415.8	1738.1	45.0	-640.6
	Fc. 39	-142674.8	1795.5	46.2	-832.9
	ClsMax 39	-142674.8	1795.5	46.2	-56.8
	ClsMed 39	-142674.8	1795.5	46.2	-49.6

Combinazioni Quasi Permanenti

48	Ft. 41	-140875.6	-847.2	79.2	-689.7
	Fc. 41	-140875.6	-847.2	79.2	-779.3
	ClsMax 41	-140875.6	-847.2	79.2	-52.6
	ClsMed 41	-140875.6	-847.2	79.2	-49.0
148	Ft. 41	-138844.3	1738.0	44.8	-637.7
	Fc. 41	-138844.3	1738.0	44.8	-810.1
	ClsMax 41	-138844.3	1738.0	44.8	-55.2
	ClsMed 41	-138844.3	1738.0	44.8	-48.3

- Pilastro: 148/248 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4$ V + $1\phi 20 \times 2$ B + $1\phi 20 \times 2$ H >

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
148	22	-114940.3	19704.7	3525.5	10.47	1.00	0.44
248	11	-110752.6	-22744.0	-1314.4	28.60	1.00	0.49

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27201.2	73445.6	3041.6	73445.6	$\phi 12/10.0'$
0.79	3.28	27201.2	36722.8	3041.6	36722.8	$\phi 12/20.0'$
3.28	3.90	27201.2	73445.6	3041.6	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
148	Ft. 38	-119712.5	-2118.9	77.8	-517.9
	Fc. 36	-128878.6	-2325.9	84.5	-788.5
	ClsMax 36	-128878.6	-2325.9	84.5	-54.2
	ClsMed 36	-128878.6	-2325.9	84.5	-44.8
248	Ft. 38	-117168.8	2063.3	19.7	-510.1
	Fc. 36	-126334.9	2267.5	21.5	-769.4
	ClsMax 36	-126334.9	2267.5	21.5	-52.8
	ClsMed 36	-126334.9	2267.5	21.5	-43.9
Combinazioni Frequenti					
148	Ft. 40	-114370.7	-2048.9	74.3	-493.6
	Fc. 39	-116854.4	-2117.7	76.2	-715.4
	ClsMax 39	-116854.4	-2117.7	76.2	-49.2
	ClsMed 39	-116854.4	-2117.7	76.2	-40.6
248	Ft. 40	-111826.9	1994.0	18.5	-485.7
	Fc. 39	-114310.6	2061.7	19.0	-696.6
	ClsMax 39	-114310.6	2061.7	19.0	-47.8
	ClsMed 39	-114310.6	2061.7	19.0	-39.7
Combinazioni Quasi Permanenti					
148	Ft. 41	-113799.0	-2048.6	74.0	-490.7
	Fc. 41	-113799.0	-2048.6	74.0	-696.0
	ClsMax 41	-113799.0	-2048.6	74.0	-47.8
	ClsMed 41	-113799.0	-2048.6	74.0	-39.6
248	Ft. 41	-111255.3	1993.7	18.4	-482.7
	Fc. 41	-111255.3	1993.7	18.4	-677.4
	ClsMax 41	-111255.3	1993.7	18.4	-46.5
	ClsMed 41	-111255.3	1993.7	18.4	-38.7

- Pilastro: 248/348 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
248	23	-87119.0	22792.8	3476.7	12.08	1.00	0.45
348	17	-82700.9	20780.2	1985.3	3.07	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	31298.6	73445.6	4069.7	73445.6	ø 12/10.0'
0.79	3.26	31298.6	36722.8	4069.7	36722.8	ø 12/20.0'
3.26	3.88	31298.6	73445.6	4069.7	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
248	Ft. 38	-91432.5	-2049.0	82.2	-356.0
	Fc. 36	-98286.1	-2257.5	89.2	-588.8
	ClsMax 36	-98286.1	-2257.5	89.2	-40.8
	ClsMed 36	-98286.1	-2257.5	89.2	-32.3
348	Ft. 38	-88901.3	2063.9	-14.1	-345.9
	Fc. 36	-95754.9	2276.0	-15.3	-573.9
	ClsMax 36	-95754.9	2276.0	-15.3	-39.7
	ClsMed 36	-95754.9	2276.0	-15.3	-31.5
Combinazioni Frequenti					
248	Ft. 40	-86860.5	-1977.7	78.2	-336.8
	Fc. 39	-88573.2	-2046.8	80.1	-531.1
	ClsMax 39	-88573.2	-2046.8	80.1	-36.8
	ClsMed 39	-88573.2	-2046.8	80.1	-29.1
348	Ft. 40	-84329.3	1991.7	-13.8	-326.6
	Fc. 39	-86041.9	2062.1	-14.2	-516.4
	ClsMax 39	-86041.9	2062.1	-14.2	-35.8
	ClsMed 39	-86041.9	2062.1	-14.2	-28.3
Combinazioni Quasi Permanenti					
248	Ft. 41	-86288.6	-1977.3	77.8	-334.0
	Fc. 41	-86288.6	-1977.3	77.8	-516.7
	ClsMax 41	-86288.6	-1977.3	77.8	-35.8
	ClsMed 41	-86288.6	-1977.3	77.8	-28.4
348	Ft. 41	-83757.4	1991.4	-13.8	-323.8
	Fc. 41	-83757.4	1991.4	-13.8	-502.0
	ClsMax 41	-83757.4	1991.4	-13.8	-34.8
	ClsMed 41	-83757.4	1991.4	-13.8	-27.5

- Pilastro: 348/448 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
348	25	-58954.6	-20780.2	2516.6	17.25	1.00	0.43

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

448	17	-55550.5	20780.2	1955.0	3.47	1.00	0.43
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28916.4	73445.6	2384.1	73445.6	ø 12/10.0'
0.79	3.26	28916.4	36722.8	2384.1	36722.8	ø 12/20.0'
3.26	3.88	28916.4	73445.6	2384.1	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
348	Ft. 38	-63159.5	-2045.3	69.4	-217.4
	Fc. 36	-67704.2	-2257.1	75.2	-437.4
	ClsMax 36	-67704.2	-2257.1	75.2	-30.7
	ClsMed 36	-67704.2	-2257.1	75.2	-22.3
448	Ft. 38	-60628.3	1971.5	-6.9	-210.9
	Fc. 36	-65173.0	2175.0	-8.1	-418.3
	ClsMax 36	-65173.0	2175.0	-8.1	-29.3
	ClsMed 36	-65173.0	2175.0	-8.1	-21.4
Combinazioni Frequenti					
348	Ft. 40	-59355.8	-1971.5	65.8	-202.1
	Fc. 39	-60298.5	-2041.2	67.3	-390.9
	ClsMax 39	-60298.5	-2041.2	67.3	-27.4
	ClsMed 39	-60298.5	-2041.2	67.3	-19.8
448	Ft. 40	-56824.5	1898.5	-7.5	-195.4
	Fc. 39	-57767.2	1965.0	-8.2	-372.5
	ClsMax 39	-57767.2	1965.0	-8.2	-26.1
	ClsMed 39	-57767.2	1965.0	-8.2	-19.0
Combinazioni Quasi Permanenti					
348	Ft. 41	-58783.6	-1970.7	65.3	-199.3
	Fc. 41	-58783.6	-1970.7	65.3	-380.3
	ClsMax 41	-58783.6	-1970.7	65.3	-26.7
	ClsMed 41	-58783.6	-1970.7	65.3	-19.3
448	Ft. 41	-56252.3	1897.2	-7.8	-192.6
	Fc. 41	-56252.3	1897.2	-7.8	-362.0
	ClsMax 41	-56252.3	1897.2	-7.8	-25.4
	ClsMed 41	-56252.3	1897.2	-7.8	-18.5

- Pilastro: 448/548 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: \varnothing 12/10.0' x 61.8+ \varnothing 12/20.0' x 247.3+ \varnothing 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
448	32	-31537.9	-21001.1	-1018.8	74.34	1.00	0.51
548	30	-29195.1	-16003.1	-1570.2	5.65	1.00	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25571.0	73445.6	1727.1	73445.6	\varnothing 12/10.0'
0.79	3.26	25571.0	36722.8	1727.1	36722.8	\varnothing 12/20.0'
3.26	3.88	25571.0	73445.6	1727.1	73445.6	\varnothing 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
448	Ft. 37	-35712.8	-2462.5	100.3	-62.2
	Fc. 36	-37145.2	-2463.8	102.5	-297.2
	ClsMax 36	-37145.2	-2463.8	102.5	-21.5
	ClsMed 36	-37145.2	-2463.8	102.5	-12.2
548	Ft. 37	-33181.5	2837.0	-110.9	-32.6
	Fc. 36	-34613.9	2835.4	-112.6	-301.6
	ClsMax 36	-34613.9	2835.4	-112.6	-22.0
	ClsMed 36	-34613.9	2835.4	-112.6	-11.4
Combinazioni Frequenti					
448	Ft. 39	-32040.9	-2224.8	91.0	-55.0
	Fc. 39	-32040.9	-2224.8	91.0	-260.9
	ClsMax 39	-32040.9	-2224.8	91.0	-18.9
	ClsMed 39	-32040.9	-2224.8	91.0	-10.5
548	Ft. 39	-29509.7	2561.6	-100.8	-27.2
	Fc. 39	-29509.7	2561.6	-100.8	-263.8
	ClsMax 39	-29509.7	2561.6	-100.8	-19.3
	ClsMed 39	-29509.7	2561.6	-100.8	-9.7
Combinazioni Quasi Permanenti					
448	Ft. 41	-31294.4	-2146.0	88.6	-55.0
	Fc. 41	-31294.4	-2146.0	88.6	-253.6
	ClsMax 41	-31294.4	-2146.0	88.6	-18.4
	ClsMed 41	-31294.4	-2146.0	88.6	-10.3
548	Ft. 41	-28763.2	2469.3	-98.0	-27.7
	Fc. 41	-28763.2	2469.3	-98.0	-255.9
	ClsMax 41	-28763.2	2469.3	-98.0	-18.7
	ClsMed 41	-28763.2	2469.3	-98.0	-9.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 548/648 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
548	24	-3765.0	-1457.9	2817.4	1.00	1.00	0.14
648	1	-6841.1	1677.9	0.0	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1321.2	25501.9	1042.8	25501.9	$\varnothing 10/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
548	Ft. 37	-5050.2	-1389.9	-0.0	155.5
	Fc. 36	-6479.3	-1388.9	-0.0	-121.2
	ClsMax 37	-5050.2	-1389.9	-0.0	-9.8
	ClsMed 37	-5050.2	-1389.9	-0.0	-4.9
648	Ft. 36	-4791.8	1188.5	0.0	115.8
	Fc. 36	-4791.8	1188.5	0.0	-102.5
	ClsMax 36	-4791.8	1188.5	0.0	-8.3
	ClsMed 36	-4791.8	1188.5	0.0	-4.2
Combinazioni Frequenti					
548	Ft. 39	-3689.1	-1254.8	-0.0	175.1
	Fc. 39	-3689.1	-1254.8	-0.0	-105.1
	ClsMax 39	-3689.1	-1254.8	-0.0	-8.9
	ClsMed 39	-3689.1	-1254.8	-0.0	-4.4
648	Ft. 40	-2595.8	674.9	0.0	70.2
	Fc. 40	-2595.8	674.9	0.0	-58.0
	ClsMax 40	-2595.8	674.9	0.0	-4.7
	ClsMed 40	-2595.8	674.9	0.0	-2.4
Combinazioni Quasi Permanenti					
548	Ft. 41	-3711.7	-1209.5	-0.0	162.3
	Fc. 41	-3711.7	-1209.5	-0.0	-101.7
	ClsMax 41	-3711.7	-1209.5	-0.0	-8.6
	ClsMed 41	-3711.7	-1209.5	-0.0	-4.3
648	Ft. 41	-2024.2	548.8	0.0	60.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 41	-2024.2	548.8	0.0	-47.0
	ClsMax 41	-2024.2	548.8	0.0	-3.9
	ClsMed 41	-2024.2	548.8	0.0	-1.9

- Pilastro: 49/149 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
49	30	-142978.6	23616.6	2867.9	25.01	1.70	0.52
149	30	-140947.3	23616.6	2867.9	24.88	1.00	0.52

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	32753.2	73445.6	3925.3	73445.6	$\varnothing 12/10.0'$
0.51	2.57	32753.2	36722.8	3925.3	36722.8	$\varnothing 12/20.0'$
2.57	3.08	32753.2	73445.6	3925.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
49	Ft. 38	-148527.7	-891.0	69.6	-727.9
	Fc. 36	-160112.0	-976.7	73.8	-885.6
	ClsMax 36	-160112.0	-976.7	73.8	-59.7
	ClsMed 36	-160112.0	-976.7	73.8	-55.7
149	Ft. 38	-146496.5	1832.1	75.1	-671.6
	Fc. 36	-158080.8	2008.3	82.9	-925.3
	ClsMax 36	-158080.8	2008.3	82.9	-63.1
	ClsMed 36	-158080.8	2008.3	82.9	-54.9
Combinazioni Frequenti					
49	Ft. 40	-142358.9	-862.0	67.1	-697.3
	Fc. 39	-145643.5	-890.5	68.3	-805.7
	ClsMax 39	-145643.5	-890.5	68.3	-54.4
	ClsMed 39	-145643.5	-890.5	68.3	-50.6
149	Ft. 40	-140327.6	1772.8	71.0	-642.5
	Fc. 39	-143612.2	1831.4	73.2	-840.9
	ClsMax 39	-143612.2	1831.4	73.2	-57.3
	ClsMed 39	-143612.2	1831.4	73.2	-49.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

49	Ft. 41	-141782.0	-861.9	66.9	-694.3
	Fc. 41	-141782.0	-861.9	66.9	-784.1
	ClsMax 41	-141782.0	-861.9	66.9	-52.9
	ClsMed 41	-141782.0	-861.9	66.9	-49.3
149	Ft. 41	-139750.8	1772.7	70.6	-639.5
	Fc. 41	-139750.8	1772.7	70.6	-817.8
	ClsMax 41	-139750.8	1772.7	70.6	-55.8
	ClsMed 41	-139750.8	1772.7	70.6	-48.6

- Pilastro: 149/249 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
149	22	-115311.1	19566.3	3492.8	43.45	1.00	0.44
249	30	-112953.8	21315.1	-593.8	22.29	1.00	0.45

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	27184.5	73445.6	3123.1	73445.6	$\phi 12/10.0'$
0.79	3.28	27184.5	36722.8	3123.1	36722.8	$\phi 12/20.0'$
3.28	3.90	27184.5	73445.6	3123.1	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
149	Ft. 38	-120423.5	-2162.2	22.4	-522.2
	Fc. 36	-129657.0	-2374.1	23.0	-791.9
	ClsMax 36	-129657.0	-2374.1	23.0	-54.4
	ClsMed 36	-129657.0	-2374.1	23.0	-45.1
249	Ft. 38	-117879.8	2103.7	98.3	-508.1
	Fc. 36	-127113.2	2312.4	107.7	-779.8
	ClsMax 36	-127113.2	2312.4	107.7	-53.6
	ClsMed 36	-127113.2	2312.4	107.7	-44.2
Combinazioni Frequenti					
149	Ft. 40	-115036.8	-2090.3	22.1	-497.6
	Fc. 39	-117537.4	-2160.7	22.4	-718.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-117537.4	-2160.7	22.4	-49.4
	ClsMed 39	-117537.4	-2160.7	22.4	-40.9
249	Ft. 40	-112493.0	2032.6	92.9	-483.7
	Fc. 39	-114993.6	2101.7	95.4	-705.8
	ClsMax 39	-114993.6	2101.7	95.4	-48.5
	ClsMed 39	-114993.6	2101.7	95.4	-40.0

Combinazioni Quasi Permanenti

149	Ft. 41	-114459.6	-2090.0	22.1	-494.6
	Fc. 41	-114459.6	-2090.0	22.1	-698.9
	ClsMax 41	-114459.6	-2090.0	22.1	-48.0
	ClsMed 41	-114459.6	-2090.0	22.1	-39.8
249	Ft. 41	-111915.8	2032.1	92.3	-480.8
	Fc. 41	-111915.8	2032.1	92.3	-686.3
	ClsMax 41	-111915.8	2032.1	92.3	-47.2
	ClsMed 41	-111915.8	2032.1	92.3	-38.9

- Pilastro: 249/349 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
249	22	-87378.3	22502.4	3474.0	44.90	1.00	0.44
349	27	-84746.5	-21026.6	-1375.1	135.54	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	31343.3	73445.6	4200.7	73445.6	$\varnothing 12/10.0'$
0.79	3.26	31343.3	36722.8	4200.7	36722.8	$\varnothing 12/20.0'$
3.26	3.88	31343.3	73445.6	4200.7	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
249	Ft. 38	-91938.1	-2095.3	-39.3	-358.4
	Fc. 36	-98837.6	-2309.1	-43.4	-591.8
	ClsMax 36	-98837.6	-2309.1	-43.4	-41.0
	ClsMed 36	-98837.6	-2309.1	-43.4	-32.5
349	Ft. 38	-89406.8	2110.3	129.3	-341.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-96306.4	2327.5	141.1	-584.5
	ClsMax 36	-96306.4	2327.5	141.1	-40.6
	ClsMed 36	-96306.4	2327.5	141.1	-31.6

Combinazioni Frequenti

249	Ft. 40	-87326.0	-2021.8	-36.9	-339.0
	Fc. 39	-89047.8	-2092.6	-37.9	-533.6
	ClsMax 39	-89047.8	-2092.6	-37.9	-37.0
	ClsMed 39	-89047.8	-2092.6	-37.9	-29.3
349	Ft. 40	-84794.8	2035.9	121.9	-322.1
	Fc. 39	-86516.5	2107.8	124.9	-525.7
	ClsMax 39	-86516.5	2107.8	124.9	-36.5
	ClsMed 39	-86516.5	2107.8	124.9	-28.4

Combinazioni Quasi Permanenti

249	Ft. 41	-86748.0	-2021.3	-36.6	-336.2
	Fc. 41	-86748.0	-2021.3	-36.6	-519.1
	ClsMax 41	-86748.0	-2021.3	-36.6	-35.9
	ClsMed 41	-86748.0	-2021.3	-36.6	-28.5
349	Ft. 41	-84216.7	2035.4	121.0	-319.3
	Fc. 41	-84216.7	2035.4	121.0	-511.0
	ClsMax 41	-84216.7	2035.4	121.0	-35.5
	ClsMed 41	-84216.7	2035.4	121.0	-27.7

- Pilastro: 349/449 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
349	6	-58974.2	-20780.2	-2566.2	8.23	1.00	0.43
449	23	-56949.8	-21179.6	-1778.9	206.35	1.00	0.44

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	28867.5	73445.6	2521.7	73445.6	$\phi 12/10.0'$
0.79	3.26	28867.5	36722.8	2521.7	36722.8	$\phi 12/20.0'$
3.26	3.88	28867.5	73445.6	2521.7	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

Combinazioni Rare

349	Ft. 38	-63507.6	-2095.8	-77.3	-216.5
	Fc. 36	-68081.2	-2313.1	-84.6	-442.2
	ClsMax 36	-68081.2	-2313.1	-84.6	-31.0
	ClsMed 36	-68081.2	-2313.1	-84.6	-22.4
449	Ft. 38	-60976.4	2022.0	121.5	-205.3
	Fc. 36	-65550.0	2231.0	131.3	-428.1
	ClsMax 36	-65550.0	2231.0	131.3	-30.1
	ClsMed 36	-65550.0	2231.0	131.3	-21.5

Combinazioni Frequenti

349	Ft. 40	-59665.8	-2019.3	-73.0	-201.1
	Fc. 39	-60611.0	-2090.7	-75.0	-395.0
	ClsMax 39	-60611.0	-2090.7	-75.0	-27.7
	ClsMed 39	-60611.0	-2090.7	-75.0	-19.9
449	Ft. 40	-57134.6	1946.0	114.0	-190.1
	Fc. 39	-58079.8	2014.1	116.2	-381.0
	ClsMax 39	-58079.8	2014.1	116.2	-26.8
	ClsMed 39	-58079.8	2014.1	116.2	-19.1

Combinazioni Quasi Permanenti

349	Ft. 41	-59086.5	-2018.2	-72.6	-198.4
	Fc. 41	-59086.5	-2018.2	-72.6	-384.2
	ClsMax 41	-59086.5	-2018.2	-72.6	-27.0
	ClsMed 41	-59086.5	-2018.2	-72.6	-19.4
449	Ft. 41	-56555.3	1944.4	113.0	-187.4
	Fc. 41	-56555.3	1944.4	113.0	-370.2
	ClsMax 41	-56555.3	1944.4	113.0	-26.0
	ClsMed 41	-56555.3	1944.4	113.0	-18.6

- Pilastro: 449/549 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \phi 24$ Af=36.19 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 1\phi 24 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
449	30	-31776.1	-21123.5	-543.6	95.38	1.00	0.51
549	22	-29180.5	-15396.7	-1102.4	230.46	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	25682.0	73445.6	1940.0	73445.6	$\phi 12/10.0'$
0.79	3.26	25682.0	36722.8	1940.0	36722.8	$\phi 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	25682.0	73445.6	1940.0	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

449	Ft. 37	-35915.9	-2521.0	-140.0	-58.8
	Fc. 36	-37369.1	-2522.3	-141.9	-302.6
	ClsMax 36	-37369.1	-2522.3	-141.9	-21.9
	ClsMed 36	-37369.1	-2522.3	-141.9	-12.3
549	Ft. 37	-33384.7	2893.3	258.8	-24.5
	Fc. 36	-34837.8	2890.5	263.7	-311.9
	ClsMax 36	-34837.8	2890.5	263.7	-22.8
	ClsMed 36	-34837.8	2890.5	263.7	-11.4

Combinazioni Frequenti

449	Ft. 39	-32210.1	-2277.3	-125.7	-52.0
	Fc. 39	-32210.1	-2277.3	-125.7	-265.6
	ClsMax 39	-32210.1	-2277.3	-125.7	-19.3
	ClsMed 39	-32210.1	-2277.3	-125.7	-10.6
549	Ft. 39	-29678.8	2612.8	231.8	-19.8
	Fc. 39	-29678.8	2612.8	231.8	-272.7
	ClsMax 39	-29678.8	2612.8	231.8	-20.0
	ClsMed 39	-29678.8	2612.8	231.8	-9.8

Combinazioni Quasi Permanenti

449	Ft. 41	-31459.2	-2196.5	-121.5	-52.1
	Fc. 41	-31459.2	-2196.5	-121.5	-258.1
	ClsMax 41	-31459.2	-2196.5	-121.5	-18.7
	ClsMed 41	-31459.2	-2196.5	-121.5	-10.3
549	Ft. 41	-28927.9	2518.3	224.5	-20.7
	Fc. 41	-28927.9	2518.3	224.5	-264.5
	ClsMax 41	-28927.9	2518.3	224.5	-19.4
	ClsMed 41	-28927.9	2518.3	224.5	-9.5

- Pilastro: 549/649 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ø 18 Af=20.36 [cm²] < 1φ18 x 4 V + 1φ18 x 2 B + 1φ18 x 2 H >

Staffe: ø 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
549	25	-3794.8	-1888.5	2822.4	1.00	1.00	0.15
649	1	-6998.1	1723.5	0.4	1.00	1.00	0.05

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1378.7	25501.9	1058.5	25501.9	ø 10/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
549	Ft. 37	-5135.0	-1463.4	-1.1	170.8
	Fc. 36	-6589.7	-1467.6	-1.2	-127.8
	ClsMax 37	-5135.0	-1463.4	-1.1	-10.3
	ClsMed 37	-5135.0	-1463.4	-1.1	-5.2
649	Ft. 36	-4902.2	1220.8	0.3	119.6
	Fc. 36	-4902.2	1220.8	0.3	-105.3
	ClsMax 36	-4902.2	1220.8	0.3	-8.5
	ClsMed 36	-4902.2	1220.8	0.3	-4.3
Combinazioni Frequenti					
549	Ft. 39	-3747.6	-1318.3	-0.9	189.4
	Fc. 39	-3747.6	-1318.3	-0.9	-110.1
	ClsMax 39	-3747.6	-1318.3	-0.9	-9.4
	ClsMed 39	-3747.6	-1318.3	-0.9	-4.7
649	Ft. 40	-2664.4	696.0	0.2	72.9
	Fc. 40	-2664.4	696.0	0.2	-59.8
	ClsMax 40	-2664.4	696.0	0.2	-4.9
	ClsMed 40	-2664.4	696.0	0.2	-2.4
Combinazioni Quasi Permanenti					
549	Ft. 41	-3770.1	-1271.3	-0.9	176.1
	Fc. 41	-3770.1	-1271.3	-0.9	-106.6
	ClsMax 41	-3770.1	-1271.3	-0.9	-9.0
	ClsMed 41	-3770.1	-1271.3	-0.9	-4.5
649	Ft. 41	-2082.6	567.3	0.2	62.7
	Fc. 41	-2082.6	567.3	0.2	-48.6
	ClsMax 41	-2082.6	567.3	0.2	-4.0
	ClsMed 41	-2082.6	567.3	0.2	-2.0

- Pilastro: 50/150 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4$ V + $1\phi 20 \times 2$ B + $0\phi 20 \times 2$ H >

Staffe: $\phi 12/15.0' \times 53.0 + \phi 8/12.5' \times 202.0 + \phi 12/15.0' \times 53.0$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
50	30	-39482.0	9252.6	6340.2	7.61	3.40	0.70
150	30	-38263.2	9252.6	6340.2	29.89	5.54	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.53	10920.1	27721.3	11785.9	48963.7	ø 12/15.0'
0.53	2.55	10920.1	14784.7	11785.9	26114.0	ø 8/12.5'
2.55	3.08	10920.1	27721.3	11785.9	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
50	Ft. 38	-47333.7	-697.0	363.9	-292.3
	Fc. 36	-49558.6	-757.0	370.5	-530.1
	ClsMax 36	-49558.6	-757.0	370.5	-38.0
	ClsMed 36	-49558.6	-757.0	370.5	-27.8
150	Ft. 38	-46115.0	1404.2	-633.9	-182.4
	Fc. 36	-48339.9	1525.7	-637.5	-626.1
	ClsMax 36	-48339.9	1525.7	-637.5	-47.0
	ClsMed 36	-48339.9	1525.7	-637.5	-27.1
Combinazioni Frequenti					
50	Ft. 40	-45987.4	-677.1	360.1	-283.5
	Fc. 39	-46577.9	-697.1	361.9	-497.7
	ClsMax 39	-46577.9	-697.1	361.9	-35.6
	ClsMed 39	-46577.9	-697.1	361.9	-26.1
150	Ft. 40	-44768.7	1363.6	-631.6	-175.7
	Fc. 39	-45359.1	1404.1	-632.5	-587.2
	ClsMax 39	-45359.1	1404.1	-632.5	-44.0
	ClsMed 39	-45359.1	1404.1	-632.5	-25.4
Combinazioni Quasi Permanenti					
50	Ft. 41	-45836.3	-677.1	359.7	-282.3
	Fc. 41	-45836.3	-677.1	359.7	-489.1
	ClsMax 41	-45836.3	-677.1	359.7	-35.0
	ClsMed 41	-45836.3	-677.1	359.7	-25.7
150	Ft. 41	-44617.5	1363.6	-631.3	-174.5
	Fc. 41	-44617.5	1363.6	-631.3	-576.3
	ClsMax 41	-44617.5	1363.6	-631.3	-43.2
	ClsMed 41	-44617.5	1363.6	-631.3	-25.0

- Pilastro: 150/250 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/15.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
150	17	-43028.7	-7609.0	-3906.1	1.00	1.28	0.49
250	10	-23752.5	10195.2	-5405.5	2.79	13.65	0.90

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8865.9	27721.3	7910.7	48963.7	$\varnothing 12/15.0'$
0.79	3.28	8865.9	12320.6	7910.7	21761.7	$\varnothing 8/15.0'$
3.28	3.90	8865.9	27721.3	7910.7	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
150	Ft. 37	-40355.9	-1789.1	878.7	-71.9
	Fc. 36	-40732.3	-1789.2	880.8	-610.5
	ClsMax 36	-40732.3	-1789.2	880.8	-47.0
	ClsMed 36	-40732.3	-1789.2	880.8	-22.9
250	Ft. 37	-38829.7	1748.6	-838.8	-66.6
	Fc. 36	-39206.0	1748.7	-840.8	-590.1
	ClsMax 36	-39206.0	1748.7	-840.8	-45.4
	ClsMed 36	-39206.0	1748.7	-840.8	-22.1
Combinazioni Frequenti					
150	Ft. 39	-38171.8	-1645.8	861.7	-70.8
	Fc. 39	-38171.8	-1645.8	861.7	-571.6
	ClsMax 39	-38171.8	-1645.8	861.7	-43.9
	ClsMed 39	-38171.8	-1645.8	861.7	-21.4
250	Ft. 39	-36645.6	1607.4	-824.0	-65.1
	Fc. 39	-36645.6	1607.4	-824.0	-551.5
	ClsMax 39	-36645.6	1607.4	-824.0	-42.4
	ClsMed 39	-36645.6	1607.4	-824.0	-20.6
Combinazioni Quasi Permanenti					
150	Ft. 41	-37569.2	-1598.1	856.8	-71.4
	Fc. 41	-37569.2	-1598.1	856.8	-560.8
	ClsMax 41	-37569.2	-1598.1	856.8	-43.1
	ClsMed 41	-37569.2	-1598.1	856.8	-21.1
250	Ft. 41	-36043.0	1560.4	-819.8	-65.6
	Fc. 41	-36043.0	1560.4	-819.8	-540.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-36043.0	1560.4	-819.8	-41.6
	ClsMed 41	-36043.0	1560.4	-819.8	-20.3

- Pilastro: 250/350 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/15.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
250	10	-19807.0	-10245.5	-3300.5	2.70	3.24	0.68
350	10	-18288.3	10220.4	3074.6	2.69	11.54	0.69

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10726.4	27721.3	7821.2	48963.7	ϕ 12/15.0'
0.79	3.26	10726.4	12320.6	7821.2	21761.7	ϕ 8/15.0'
3.26	3.88	10726.4	27721.3	7821.2	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
250	Ft. 37	-31020.0	-1713.7	980.7	3.7
	Fc. 36	-31392.8	-1714.0	984.7	-492.1
	ClsMax 36	-31392.8	-1714.0	984.7	-38.8
	ClsMed 36	-31392.8	-1714.0	984.7	-17.3
350	Ft. 37	-29501.3	1721.2	-983.0	19.6
	Fc. 36	-29874.0	1721.6	-987.0	-482.6
	ClsMax 36	-29874.0	1721.6	-987.0	-38.3
	ClsMed 36	-29874.0	1721.6	-987.0	-16.8
Combinazioni Frequenti					
250	Ft. 39	-29272.0	-1573.6	952.9	0.4
	Fc. 39	-29272.0	-1573.6	952.9	-458.9
	ClsMax 39	-29272.0	-1573.6	952.9	-36.2
	ClsMed 39	-29272.0	-1573.6	952.9	-16.1
350	Ft. 39	-27753.2	1579.9	-956.5	16.0
	Fc. 39	-27753.2	1579.9	-956.5	-449.2
	ClsMax 39	-27753.2	1579.9	-956.5	-35.6
	ClsMed 39	-27753.2	1579.9	-956.5	-15.6
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

250	Ft. 41	-28813.5	-1527.1	945.0	-1.7
	Fc. 41	-28813.5	-1527.1	945.0	-449.8
	ClsMax 41	-28813.5	-1527.1	945.0	-35.4
	ClsMed 41	-28813.5	-1527.1	945.0	-15.8
350	Ft. 41	-27294.8	1532.9	-949.0	13.7
	Fc. 41	-27294.8	1532.9	-949.0	-440.0
	ClsMax 41	-27294.8	1532.9	-949.0	-34.8
	ClsMed 41	-27294.8	1532.9	-949.0	-15.3

- Pilastro: 350/450 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

Staffe: ø 12/15.0' x 61.8+ø 8/15.0' x 247.3+ø 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
350	10	-14312.6	-10220.4	-3074.6	3.00	4.80	0.72
450	10	-12793.9	10220.4	3074.6	2.90	14.97	0.73

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9458.0	27721.3	7272.5	48963.7	ø 12/15.0'
0.79	3.26	9458.0	12320.6	7272.5	21761.7	ø 8/15.0'
3.26	3.88	9458.0	27721.3	7272.5	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
350	Ft. 37	-21578.7	-1729.9	1043.8	124.9
	Fc. 36	-21946.1	-1730.0	1049.2	-441.1
	ClsMax 36	-21946.1	-1730.0	1049.2	-36.2
	ClsMed 36	-21946.1	-1730.0	1049.2	-14.8
450	Ft. 37	-20060.0	1729.1	-982.2	142.7
	Fc. 36	-20427.3	1728.7	-986.5	-427.6
	ClsMax 36	-20427.3	1728.7	-986.5	-35.4
	ClsMed 36	-20427.3	1728.7	-986.5	-14.5
Combinazioni Frequenti					
350	Ft. 39	-20277.1	-1586.8	1011.3	112.9
	Fc. 39	-20277.1	-1586.8	1011.3	-409.7
	ClsMax 39	-20277.1	-1586.8	1011.3	-33.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-20277.1	-1586.8	1011.3	-13.6
450	Ft. 39	-18758.4	1585.6	-953.9	130.6
	Fc. 39	-18758.4	1585.6	-953.9	-396.8
	ClsMax 39	-18758.4	1585.6	-953.9	-32.8
	ClsMed 39	-18758.4	1585.6	-953.9	-13.3

Combinazioni Quasi Permanenti

350	Ft. 41	-19965.7	-1539.1	1002.3	107.3
	Fc. 41	-19965.7	-1539.1	1002.3	-400.8
	ClsMax 41	-19965.7	-1539.1	1002.3	-32.8
	ClsMed 41	-19965.7	-1539.1	1002.3	-13.3
450	Ft. 41	-18447.0	1537.6	-945.9	124.7
	Fc. 41	-18447.0	1537.6	-945.9	-388.0
	ClsMax 41	-18447.0	1537.6	-945.9	-32.0
	ClsMed 41	-18447.0	1537.6	-945.9	-13.0

- Pilastro: 450/550 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
450	10	-8423.6	-10220.4	-3074.6	3.35	3.19	0.77
550	17	-10631.0	7146.4	4248.7	1.00	1.00	0.51

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8847.3	27721.3	10160.4	48963.7	$\phi 12/15.0'$
0.79	3.26	8847.3	12320.6	10160.4	21761.7	$\phi 8/15.0'$
3.26	3.88	8847.3	27721.3	10160.4	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
450	Ft. 37	-12021.7	-1744.9	1245.2	363.5
	Fc. 36	-12381.0	-1747.4	1254.5	-423.0
	ClsMax 36	-12381.0	-1747.4	1254.5	-37.4
	ClsMed 36	-12381.0	-1747.4	1254.5	-14.0
550	Ft. 37	-10502.9	1766.7	-1490.6	451.9
	Fc. 36	-10862.2	1773.1	-1502.7	-447.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-10862.2	1773.1	-1502.7	-40.2
	ClsMed 36	-10862.2	1773.1	-1502.7	-14.4

Combinazioni Frequenti

450	Ft. 39	-11176.7	-1599.2	1199.2	336.8
	Fc. 39	-11176.7	-1599.2	1199.2	-392.0
	ClsMax 39	-11176.7	-1599.2	1199.2	-34.7
	ClsMed 39	-11176.7	-1599.2	1199.2	-12.8
550	Ft. 39	-9657.9	1618.9	-1430.7	422.9
	Fc. 39	-9657.9	1618.9	-1430.7	-413.9
	ClsMax 39	-9657.9	1618.9	-1430.7	-37.3
	ClsMed 39	-9657.9	1618.9	-1430.7	-13.2

Combinazioni Quasi Permanenti

450	Ft. 41	-11014.7	-1551.5	1186.9	325.2
	Fc. 41	-11014.7	-1551.5	1186.9	-383.4
	ClsMax 41	-11014.7	-1551.5	1186.9	-33.9
	ClsMed 41	-11014.7	-1551.5	1186.9	-12.5
550	Ft. 41	-9496.0	1571.7	-1414.8	410.8
	Fc. 41	-9496.0	1571.7	-1414.8	-405.1
	ClsMax 41	-9496.0	1571.7	-1414.8	-36.4
	ClsMed 41	-9496.0	1571.7	-1414.8	-12.9

- Pilastro: 550/650 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
550	17	-2191.8	-3894.8	2866.6	1.00	1.00	0.32
650	17	-1704.3	1313.7	532.2	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4003.8	9240.4	1804.5	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
550	Ft. 37	-2324.9	-1580.5	721.0	553.9
	Fc. 36	-2678.4	-1565.6	723.0	-286.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 37	-2324.9	-1580.5	721.0	-29.6
	ClsMed 37	-2324.9	-1580.5	721.0	-11.3
650	Ft. 36	-2190.9	999.9	-478.1	327.7
	Fc. 36	-2190.9	999.9	-478.1	-188.4
	ClsMax 36	-2190.9	999.9	-478.1	-19.0
	ClsMed 36	-2190.9	999.9	-478.1	-7.3

Combinazioni Frequenti

550	Ft. 39	-1930.2	-1449.0	713.7	523.4
	Fc. 39	-1930.2	-1449.0	713.7	-266.3
	ClsMax 39	-1930.2	-1449.0	713.7	-27.7
	ClsMed 39	-1930.2	-1449.0	713.7	-10.4
650	Ft. 40	-1570.5	586.0	-445.8	207.5
	Fc. 40	-1570.5	586.0	-445.8	-132.5
	ClsMax 40	-1570.5	586.0	-445.8	-12.9
	ClsMed 40	-1570.5	586.0	-445.8	-4.5

Combinazioni Quasi Permanenti

550	Ft. 41	-1916.6	-1400.2	712.0	507.3
	Fc. 41	-1916.6	-1400.2	712.0	-260.6
	ClsMax 41	-1916.6	-1400.2	712.0	-27.0
	ClsMed 41	-1916.6	-1400.2	712.0	-10.1
650	Ft. 41	-1429.1	483.4	-443.7	178.8
	Fc. 41	-1429.1	483.4	-443.7	-119.0
	ClsMax 41	-1429.1	483.4	-443.7	-11.4
	ClsMed 41	-1429.1	483.4	-443.7	-3.9

- Pilastro: 51/151 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $10 \varnothing 20$ Af=31.42 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/12.5' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
51	22	-60213.4	-13597.3	9295.2	4.04	5.39	0.76
151	22	-58994.7	13597.3	9295.2	3.56	16.66	0.77

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	14204.1	27721.3	11108.1	48963.7	$\varnothing 12/15.0'$
0.51	2.57	14204.1	14784.7	11108.1	26114.0	$\varnothing 8/12.5'$
2.57	3.08	14204.1	27721.3	11108.1	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
51	Ft. 38	-78606.4	-1226.0	96.9	-468.2
	Fc. 36	-82760.2	-1341.0	104.4	-771.8
	ClsMax 36	-82760.2	-1341.0	104.4	-55.2
	ClsMed 36	-82760.2	-1341.0	104.4	-42.0
151	Ft. 38	-77387.6	2481.1	-73.6	-333.8
	Fc. 36	-81541.4	2714.6	-79.2	-899.5
	ClsMax 36	-81541.4	2714.6	-79.2	-67.4
	ClsMed 36	-81541.4	2714.6	-79.2	-41.4
Combinazioni Frequenti					
51	Ft. 40	-76132.7	-1187.5	92.6	-453.5
	Fc. 39	-77245.0	-1225.8	94.6	-717.6
	ClsMax 39	-77245.0	-1225.8	94.6	-51.2
	ClsMed 39	-77245.0	-1225.8	94.6	-39.2
151	Ft. 40	-74913.9	2402.9	-70.1	-323.1
	Fc. 39	-76026.3	2480.6	-71.6	-833.4
	ClsMax 39	-76026.3	2480.6	-71.6	-62.3
	ClsMed 39	-76026.3	2480.6	-71.6	-38.6
Combinazioni Quasi Permanenti					
51	Ft. 41	-75860.4	-1187.4	92.1	-451.5
	Fc. 41	-75860.4	-1187.4	92.1	-703.0
	ClsMax 41	-75860.4	-1187.4	92.1	-50.2
	ClsMed 41	-75860.4	-1187.4	92.1	-38.5
151	Ft. 41	-74641.7	2402.8	-69.8	-321.1
	Fc. 41	-74641.7	2402.8	-69.8	-814.9
	ClsMax 41	-74641.7	2402.8	-69.8	-60.9
	ClsMed 41	-74641.7	2402.8	-69.8	-37.9

- Pilastro: 151/251 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
151	20	-55854.2	-9971.9	5742.7	15.69	2.57	0.67
251	32	-50059.1	11871.5	-5807.7	26.56	3.35	0.84

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	9564.2	27721.3	9062.9	48963.7	ø 12/15.0'
0.79	3.28	9564.2	12320.6	9062.9	21761.7	ø 8/15.0'
3.28	3.90	9564.2	27721.3	9062.9	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
151	Ft. 37	-66605.1	-3190.6	247.9	-187.4
	Fc. 36	-67286.5	-3191.1	250.6	-939.5
	ClsMax 36	-67286.5	-3191.1	250.6	-72.4
	ClsMed 36	-67286.5	-3191.1	250.6	-37.7
251	Ft. 37	-65078.8	3123.2	-253.0	-181.6
	Fc. 36	-65760.2	3123.8	-255.8	-919.6
	ClsMax 36	-65760.2	3123.8	-255.8	-70.9
	ClsMed 36	-65760.2	3123.8	-255.8	-36.9
Combinazioni Frequenti					
151	Ft. 39	-62586.7	-2913.9	227.0	-185.9
	Fc. 39	-62586.7	-2913.9	227.0	-867.4
	ClsMax 39	-62586.7	-2913.9	227.0	-66.7
	ClsMed 39	-62586.7	-2913.9	227.0	-35.1
251	Ft. 39	-61060.5	2850.0	-233.1	-179.6
	Fc. 39	-61060.5	2850.0	-233.1	-847.9
	ClsMax 39	-61060.5	2850.0	-233.1	-65.2
	ClsMed 39	-61060.5	2850.0	-233.1	-34.3
Combinazioni Quasi Permanenti					
151	Ft. 41	-61474.4	-2821.9	220.9	-187.2
	Fc. 41	-61474.4	-2821.9	220.9	-847.3
	ClsMax 41	-61474.4	-2821.9	220.9	-65.1
	ClsMed 41	-61474.4	-2821.9	220.9	-34.5
251	Ft. 41	-59948.2	2759.2	-227.3	-180.8
	Fc. 41	-59948.2	2759.2	-227.3	-828.0
	ClsMax 41	-59948.2	2759.2	-227.3	-63.6
	ClsMed 41	-59948.2	2759.2	-227.3	-33.6

- Pilastro: 251/351 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
251	20	-42747.0	-11257.5	5836.4	26.06	1.66	0.65

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

351	20	-41228.3	11229.9	-7932.5	24.81	2.84	0.71
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10326.5	27721.3	11623.0	48963.7	ø 12/15.0'
0.79	3.26	10326.5	12320.6	11623.0	21761.7	ø 8/15.0'
3.26	3.88	10326.5	27721.3	11623.0	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
251	Ft. 37	-50869.7	-3075.9	432.6	-56.9
	Fc. 36	-51552.7	-3077.0	437.5	-746.6
	ClsMax 36	-51552.7	-3077.0	437.5	-59.1
	ClsMed 36	-51552.7	-3077.0	437.5	-28.2
351	Ft. 37	-49351.0	3088.9	-432.4	-41.2
	Fc. 36	-50034.0	3090.3	-437.4	-737.0
	ClsMax 36	-50034.0	3090.3	-437.4	-58.5
	ClsMed 36	-50034.0	3090.3	-437.4	-27.9
Combinazioni Frequenti					
251	Ft. 39	-47671.7	-2803.1	397.9	-63.3
	Fc. 39	-47671.7	-2803.1	397.9	-685.4
	ClsMax 39	-47671.7	-2803.1	397.9	-54.2
	ClsMed 39	-47671.7	-2803.1	397.9	-25.9
351	Ft. 39	-46153.0	2813.7	-398.6	-48.4
	Fc. 39	-46153.0	2813.7	-398.6	-675.4
	ClsMax 39	-46153.0	2813.7	-398.6	-53.6
	ClsMed 39	-46153.0	2813.7	-398.6	-25.6
Combinazioni Quasi Permanenti					
251	Ft. 41	-46833.4	-2712.6	388.1	-67.2
	Fc. 41	-46833.4	-2712.6	388.1	-668.7
	ClsMax 41	-46833.4	-2712.6	388.1	-52.8
	ClsMed 41	-46833.4	-2712.6	388.1	-25.3
351	Ft. 41	-45314.7	2722.4	-389.0	-52.5
	Fc. 41	-45314.7	2722.4	-389.0	-658.6
	ClsMax 41	-45314.7	2722.4	-389.0	-52.2
	ClsMed 41	-45314.7	2722.4	-389.0	-24.9

- Pilastro: 351/451 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

Staffe: \varnothing 12/15.0' x 61.8+ \varnothing 8/15.0' x 247.3+ \varnothing 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
351	20	-29784.1	-11229.9	7932.5	12.97	2.28	0.75
451	20	-28265.4	11229.9	-7932.5	15.26	2.57	0.75

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9288.2	27721.3	11534.3	48963.7	\varnothing 12/15.0'
0.79	3.26	9288.2	12320.6	11534.3	21761.7	\varnothing 8/15.0'
3.26	3.88	9288.2	27721.3	11534.3	48963.7	\varnothing 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
351	Ft. 37	-35224.4	-3106.2	519.6	142.4
	Fc. 36	-35910.0	-3107.2	526.5	-652.6
	ClsMax 36	-35910.0	-3107.2	526.5	-54.1
	ClsMed 36	-35910.0	-3107.2	526.5	-25.2
451	Ft. 37	-33705.7	3107.6	-488.3	164.5
	Fc. 36	-34391.3	3107.9	-494.7	-640.9
	ClsMax 36	-34391.3	3107.9	-494.7	-53.5
	ClsMed 36	-34391.3	3107.9	-494.7	-25.0
Combinazioni Frequenti					
351	Ft. 39	-32844.5	-2826.9	477.4	117.7
	Fc. 39	-32844.5	-2826.9	477.4	-594.7
	ClsMax 39	-32844.5	-2826.9	477.4	-49.2
	ClsMed 39	-32844.5	-2826.9	477.4	-23.0
451	Ft. 39	-31325.7	2827.1	-448.5	139.1
	Fc. 39	-31325.7	2827.1	-448.5	-583.1
	ClsMax 39	-31325.7	2827.1	-448.5	-48.6
	ClsMed 39	-31325.7	2827.1	-448.5	-22.7
Combinazioni Quasi Permanenti					
351	Ft. 41	-32279.7	-2734.2	465.7	106.4
	Fc. 41	-32279.7	-2734.2	465.7	-578.6
	ClsMax 41	-32279.7	-2734.2	465.7	-47.8
	ClsMed 41	-32279.7	-2734.2	465.7	-22.3
451	Ft. 41	-30760.9	2733.6	-437.3	127.2
	Fc. 41	-30760.9	2733.6	-437.3	-566.9
	ClsMax 41	-30760.9	2733.6	-437.3	-47.2
	ClsMed 41	-30760.9	2733.6	-437.3	-22.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 451/551 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
451	32	-15639.7	-11677.2	7932.5	138.54	2.40	0.86
551	17	-19734.2	7623.7	6619.9	1.00	1.00	0.54

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9064.5	27721.3	12741.3	48963.7	$\phi 12/15.0'$
0.79	3.26	9064.5	12320.6	12741.3	21761.7	$\phi 8/15.0'$
3.26	3.88	9064.5	27721.3	12741.3	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
451	Ft. 37	-19622.7	-3131.8	721.9	510.3
	Fc. 36	-20311.5	-3137.0	732.9	-588.4
	ClsMax 36	-20311.5	-3137.0	732.9	-53.6
	ClsMed 36	-20311.5	-3137.0	732.9	-23.7
551	Ft. 37	-18103.9	3158.8	-905.6	584.7
	Fc. 36	-18792.7	3170.3	-918.6	-603.9
	ClsMax 36	-18792.7	3170.3	-918.6	-55.6
	ClsMed 36	-18792.7	3170.3	-918.6	-23.9
Combinazioni Frequenti					
451	Ft. 39	-18060.2	-2848.2	666.1	459.3
	Fc. 39	-18060.2	-2848.2	666.1	-532.1
	ClsMax 39	-18060.2	-2848.2	666.1	-48.6
	ClsMed 39	-18060.2	-2848.2	666.1	-21.5
551	Ft. 39	-16541.4	2873.1	-839.9	531.7
	Fc. 39	-16541.4	2873.1	-839.9	-545.2
	ClsMax 39	-16541.4	2873.1	-839.9	-50.4
	ClsMed 39	-16541.4	2873.1	-839.9	-21.6
Combinazioni Quasi Permanenti					
451	Ft. 41	-17768.9	-2755.4	651.2	437.0
	Fc. 41	-17768.9	-2755.4	651.2	-517.2
	ClsMax 41	-17768.9	-2755.4	651.2	-47.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-17768.9	-2755.4	651.2	-20.8
551	Ft. 41	-16250.2	2781.8	-822.3	509.1
	Fc. 41	-16250.2	2781.8	-822.3	-530.3
	ClsMax 41	-16250.2	2781.8	-822.3	-48.9
	ClsMed 41	-16250.2	2781.8	-822.3	-20.9

- Pilastro: 551/651 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0' \times 100.6$ Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
551	17	-3562.4	-5018.9	331.2	1.00	1.00	0.39
651	1	-5264.6	2616.4	-409.4	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5127.3	9240.4	1686.8	16321.2	$\varnothing 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
551	Ft. 37	-3586.4	-2890.6	1.7	846.1
	Fc. 36	-4283.9	-2867.1	5.8	-346.1
	ClsMax 37	-3586.4	-2890.6	1.7	-39.7
	ClsMed 37	-3586.4	-2890.6	1.7	-19.8
651	Ft. 36	-3796.4	1851.9	-292.6	530.5
	Fc. 36	-3796.4	1851.9	-292.6	-271.7
	ClsMax 36	-3796.4	1851.9	-292.6	-29.0
	ClsMed 36	-3796.4	1851.9	-292.6	-13.0
Combinazioni Frequenti					
551	Ft. 39	-2833.7	-2622.7	-16.3	784.2
	Fc. 39	-2833.7	-2622.7	-16.3	-307.0
	ClsMax 39	-2833.7	-2622.7	-16.3	-36.0
	ClsMed 39	-2833.7	-2622.7	-16.3	-17.9
651	Ft. 40	-2606.8	1059.2	-254.3	300.5
	Fc. 40	-2606.8	1059.2	-254.3	-170.2
	ClsMax 40	-2606.8	1059.2	-254.3	-17.6
	ClsMed 40	-2606.8	1059.2	-254.3	-7.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

551	Ft. 41	-2815.3	-2525.5	-20.9	752.9
	Fc. 41	-2815.3	-2525.5	-20.9	-297.3
	ClsMax 41	-2815.3	-2525.5	-20.9	-34.8
	ClsMed 41	-2815.3	-2525.5	-20.9	-17.3
651	Ft. 41	-2327.8	863.9	-251.9	244.4
	Fc. 41	-2327.8	863.9	-251.9	-146.0
	ClsMax 41	-2327.8	863.9	-251.9	-14.9
	ClsMed 41	-2327.8	863.9	-251.9	-6.2

- Pilastro: 52/152 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
52	22	-67291.7	-13148.0	9288.9	4.05	5.28	0.95
152	22	-66073.0	13148.0	9288.9	3.39	21.76	0.96

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11668.8	27721.3	7636.4	48963.7	$\phi 12/15.0'$
0.51	2.57	11668.8	12320.6	7636.4	21761.7	$\phi 8/15.0'$
2.57	3.08	11668.8	27721.3	7636.4	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
52	Ft. 38	-85425.6	-1331.7	156.9	-558.8
	Fc. 36	-90008.1	-1457.8	162.0	-931.6
	ClsMax 36	-90008.1	-1457.8	162.0	-66.6
	ClsMed 36	-90008.1	-1457.8	162.0	-50.5
152	Ft. 38	-84206.9	2697.0	-199.4	-394.0
	Fc. 36	-88789.4	2953.1	-200.1	-1090.0
	ClsMax 36	-88789.4	2953.1	-200.1	-81.7
	ClsMed 36	-88789.4	2953.1	-200.1	-49.8
Combinazioni Frequenti					
52	Ft. 40	-82684.9	-1289.5	153.9	-540.7
	Fc. 39	-83909.1	-1331.5	155.3	-865.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-83909.1	-1331.5	155.3	-61.8
	ClsMed 39	-83909.1	-1331.5	155.3	-47.1
152	Ft. 40	-81466.2	2611.3	-198.9	-380.5
	Fc. 39	-82690.4	2696.6	-199.0	-1010.2
	ClsMax 39	-82690.4	2696.6	-199.0	-75.6
	ClsMed 39	-82690.4	2696.6	-199.0	-46.4

Combinazioni Quasi Permanenti

52	Ft. 41	-82381.6	-1289.5	153.6	-538.2
	Fc. 41	-82381.6	-1289.5	153.6	-848.1
	ClsMax 41	-82381.6	-1289.5	153.6	-60.5
	ClsMed 41	-82381.6	-1289.5	153.6	-46.2
152	Ft. 41	-81162.9	2611.2	-198.8	-377.9
	Fc. 41	-81162.9	2611.2	-198.8	-987.9
	ClsMax 41	-81162.9	2611.2	-198.8	-73.8
	ClsMed 41	-81162.9	2611.2	-198.8	-45.5

- Pilastro: 152/252 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/15.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
152	29	-55588.5	-9971.9	5169.9	323.39	1.48	0.65
252	28	-53620.3	11896.0	-5807.7	25.86	2.98	0.82

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9608.4	27721.3	8728.1	48963.7	$\varnothing 12/15.0'$
0.79	3.28	9608.4	12320.6	8728.1	21761.7	$\varnothing 8/15.0'$
3.28	3.90	9608.4	27721.3	8728.1	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
152	Ft. 37	-72577.2	-3469.0	342.9	-199.3
	Fc. 36	-73335.4	-3469.5	344.2	-1028.6
	ClsMax 36	-73335.4	-3469.5	344.2	-79.2
	ClsMed 36	-73335.4	-3469.5	344.2	-41.1
252	Ft. 37	-71051.0	3392.9	-293.2	-198.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-71809.1	3393.5	-294.1	-1003.4
	ClsMax 36	-71809.1	3393.5	-294.1	-77.3
	ClsMed 36	-71809.1	3393.5	-294.1	-40.3

Combinazioni Frequenti

152	Ft. 39	-68127.6	-3165.7	331.8	-196.3
	Fc. 39	-68127.6	-3165.7	331.8	-950.1
	ClsMax 39	-68127.6	-3165.7	331.8	-73.1
	ClsMed 39	-68127.6	-3165.7	331.8	-38.2
252	Ft. 39	-66601.4	3093.6	-286.2	-195.1
	Fc. 39	-66601.4	3093.6	-286.2	-925.7
	ClsMax 39	-66601.4	3093.6	-286.2	-71.2
	ClsMed 39	-66601.4	3093.6	-286.2	-37.4

Combinazioni Quasi Permanenti

152	Ft. 41	-66897.2	-3064.7	328.5	-197.4
	Fc. 41	-66897.2	-3064.7	328.5	-928.3
	ClsMax 41	-66897.2	-3064.7	328.5	-71.3
	ClsMed 41	-66897.2	-3064.7	328.5	-37.5
252	Ft. 41	-65370.9	2994.0	-284.1	-195.9
	Fc. 41	-65370.9	2994.0	-284.1	-904.2
	ClsMax 41	-65370.9	2994.0	-284.1	-69.5
	ClsMed 41	-65370.9	2994.0	-284.1	-36.7

- Pilastro: 252/352 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
252	20	-47047.1	-11257.5	5836.4	12.43	1.72	0.64
352	20	-45528.4	11229.9	-7932.5	12.16	3.00	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10506.2	27721.3	11669.9	48963.7	$\phi 12/15.0'$
0.79	3.26	10506.2	12320.6	11669.9	21761.7	$\phi 8/15.0'$
3.26	3.88	10506.2	27721.3	11669.9	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

252	Ft. 37	-55538.9	-3340.1	397.9	-70.1
	Fc. 36	-56296.8	-3341.2	400.2	-807.5
	ClsMax 36	-56296.8	-3341.2	400.2	-63.9
	ClsMed 36	-56296.8	-3341.2	400.2	-30.7
352	Ft. 37	-54020.1	3353.0	-373.1	-56.5
	Fc. 36	-54778.1	3354.4	-374.9	-795.8
	ClsMax 36	-54778.1	3354.4	-374.9	-63.1
	ClsMed 36	-54778.1	3354.4	-374.9	-30.4

Combinazioni Frequenti

252	Ft. 39	-51992.3	-3041.2	381.0	-75.0
	Fc. 39	-51992.3	-3041.2	381.0	-741.8
	ClsMax 39	-51992.3	-3041.2	381.0	-58.6
	ClsMed 39	-51992.3	-3041.2	381.0	-28.2
352	Ft. 39	-50473.6	3051.5	-358.9	-62.0
	Fc. 39	-50473.6	3051.5	-358.9	-730.0
	ClsMax 39	-50473.6	3051.5	-358.9	-57.8
	ClsMed 39	-50473.6	3051.5	-358.9	-27.8

Combinazioni Quasi Permanenti

252	Ft. 41	-51062.8	-2942.0	376.1	-78.6
	Fc. 41	-51062.8	-2942.0	376.1	-723.9
	ClsMax 41	-51062.8	-2942.0	376.1	-57.1
	ClsMed 41	-51062.8	-2942.0	376.1	-27.5
352	Ft. 41	-49544.0	2951.5	-354.8	-65.9
	Fc. 41	-49544.0	2951.5	-354.8	-712.0
	ClsMax 41	-49544.0	2951.5	-354.8	-56.3
	ClsMed 41	-49544.0	2951.5	-354.8	-27.1

- Pilastro: 352/452 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8 + $\phi 8/15.0'$ x 247.3 + $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
352	33	-30702.4	-11363.6	7932.5	152.44	2.54	0.75
452	20	-31225.4	11229.9	-7932.5	9.53	2.78	0.74

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9401.4	27721.3	11627.1	48963.7	$\phi 12/15.0'$
0.79	3.26	9401.4	12320.6	11627.1	21761.7	$\phi 8/15.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	9401.4	27721.3	11627.1	48963.7	ø 12/15.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

352	Ft. 37	-38524.7	-3370.2	417.6	136.0
	Fc. 36	-39282.4	-3371.1	420.5	-696.8
	ClsMax 36	-39282.4	-3371.1	420.5	-57.7
	ClsMed 36	-39282.4	-3371.1	420.5	-27.4
452	Ft. 37	-37006.0	3370.7	-365.8	155.5
	Fc. 36	-37763.6	3370.7	-367.6	-682.8
	ClsMax 36	-37763.6	3370.7	-367.6	-56.9
	ClsMed 36	-37763.6	3370.7	-367.6	-27.1

Combinazioni Frequenti

352	Ft. 39	-35883.9	-3064.4	398.7	112.4
	Fc. 39	-35883.9	-3064.4	398.7	-635.9
	ClsMax 39	-35883.9	-3064.4	398.7	-52.6
	ClsMed 39	-35883.9	-3064.4	398.7	-24.9
452	Ft. 39	-34365.1	3063.6	-351.0	131.3
	Fc. 39	-34365.1	3063.6	-351.0	-622.3
	ClsMax 39	-34365.1	3063.6	-351.0	-51.8
	ClsMed 39	-34365.1	3063.6	-351.0	-24.7

Combinazioni Quasi Permanenti

352	Ft. 41	-35256.1	-2962.8	393.4	101.0
	Fc. 41	-35256.1	-2962.8	393.4	-619.0
	ClsMax 41	-35256.1	-2962.8	393.4	-51.1
	ClsMed 41	-35256.1	-2962.8	393.4	-24.2
452	Ft. 41	-33737.4	2961.2	-346.6	119.4
	Fc. 41	-33737.4	2961.2	-346.6	-605.4
	ClsMax 41	-33737.4	2961.2	-346.6	-50.3
	ClsMed 41	-33737.4	2961.2	-346.6	-23.9

- Pilastro: 452/552 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af} = 27.14 \text{ [cm}^2\text{]} < 1 \phi 24 \times 4 \text{ V} + 1 \phi 24 \times 2 \text{ B} + 0 \phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
452	26	-16884.6	-11711.3	7932.5	83.88	1.23	0.86
552	17	-21498.7	7284.4	6657.1	1.00	1.00	0.52

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9208.9	27721.3	12902.3	48963.7	ø 12/15.0'
0.79	3.26	9208.9	12320.6	12902.3	21761.7	ø 8/15.0'
3.26	3.88	9208.9	27721.3	12902.3	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

452	Ft. 37	-21505.8	-3396.2	559.6	520.7
	Fc. 36	-22262.6	-3402.0	565.2	-614.8
	ClsMax 36	-22262.6	-3402.0	565.2	-56.1
	ClsMed 36	-22262.6	-3402.0	565.2	-25.6
552	Ft. 37	-19987.1	3424.3	-721.5	591.3
	Fc. 36	-20743.8	3437.3	-728.7	-627.6
	ClsMax 36	-20743.8	3437.3	-728.7	-57.9
	ClsMed 36	-20743.8	3437.3	-728.7	-25.8

Combinazioni Frequenti

452	Ft. 39	-19774.2	-3085.4	530.8	469.2
	Fc. 39	-19774.2	-3085.4	530.8	-557.0
	ClsMax 39	-19774.2	-3085.4	530.8	-51.0
	ClsMed 39	-19774.2	-3085.4	530.8	-23.2
552	Ft. 39	-18255.4	3110.9	-683.1	537.7
	Fc. 39	-18255.4	3110.9	-683.1	-567.4
	ClsMax 39	-18255.4	3110.9	-683.1	-52.5
	ClsMed 39	-18255.4	3110.9	-683.1	-23.3

Combinazioni Quasi Permanenti

452	Ft. 41	-19449.3	-2983.7	523.1	446.0
	Fc. 41	-19449.3	-2983.7	523.1	-541.7
	ClsMax 41	-19449.3	-2983.7	523.1	-49.4
	ClsMed 41	-19449.3	-2983.7	523.1	-22.5
552	Ft. 41	-17930.5	3010.7	-672.7	514.3
	Fc. 41	-17930.5	3010.7	-672.7	-552.0
	ClsMax 41	-17930.5	3010.7	-672.7	-51.0
	ClsMed 41	-17930.5	3010.7	-672.7	-22.6

- Pilastro: 552/652 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6 \text{ Ast/s}=0.100531 < 0.08 \text{ fcd bst/fyd } 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
552	17	-3895.8	-4979.8	370.5	1.00	1.00	0.38
652	1	-5900.2	2854.4	-127.8	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5438.6	9240.4	1456.5	16321.2	ø 8/20.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
552	Ft. 37	-3977.6	-3131.6	-48.2	919.8
	Fc. 36	-4738.4	-3104.3	-50.7	-381.8
	ClsMax 37	-3977.6	-3131.6	-48.2	-43.5
	ClsMed 37	-3977.6	-3131.6	-48.2	-21.5
652	Ft. 36	-4250.9	2019.0	-97.4	544.4
	Fc. 36	-4250.9	2019.0	-97.4	-268.2
	ClsMax 36	-4250.9	2019.0	-97.4	-29.3
	ClsMed 36	-4250.9	2019.0	-97.4	-14.1
Combinazioni Frequenti					
552	Ft. 39	-3149.7	-2841.4	-35.8	849.4
	Fc. 39	-3149.7	-2841.4	-35.8	-336.0
	ClsMax 39	-3149.7	-2841.4	-35.8	-39.3
	ClsMed 39	-3149.7	-2841.4	-35.8	-19.4
652	Ft. 40	-2944.1	1149.8	-88.3	296.8
	Fc. 40	-2944.1	1149.8	-88.3	-161.8
	ClsMax 40	-2944.1	1149.8	-88.3	-17.2
	ClsMed 40	-2944.1	1149.8	-88.3	-8.1
Combinazioni Quasi Permanenti					
552	Ft. 41	-3127.3	-2735.6	-32.6	814.2
	Fc. 41	-3127.3	-2735.6	-32.6	-324.2
	ClsMax 41	-3127.3	-2735.6	-32.6	-37.8
	ClsMed 41	-3127.3	-2735.6	-32.6	-18.7
652	Ft. 41	-2639.8	935.2	-87.8	235.4
	Fc. 41	-2639.8	935.2	-87.8	-135.8
	ClsMax 41	-2639.8	935.2	-87.8	-14.2
	ClsMed 41	-2639.8	935.2	-87.8	-6.7

- Pilastro: 53/153 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4$ V + $1\varnothing 20 \times 2$ B + $0\varnothing 20 \times 2$ H >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/15.0' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
53	30	-71088.5	13103.1	9465.6	378.97	5.47	0.94
153	30	-69869.8	13103.1	9465.6	6.84	6.44	0.95

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11632.5	27721.3	8019.8	48963.7	$\varnothing 12/15.0'$
0.51	2.57	11632.5	12320.6	8019.8	21761.7	$\varnothing 8/15.0'$
2.57	3.08	11632.5	27721.3	8019.8	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
53	Ft. 38	-87839.9	-1367.7	5.1	-587.2
	Fc. 36	-92575.4	-1497.7	9.6	-945.6
	ClsMax 36	-92575.4	-1497.7	9.6	-67.5
	ClsMed 36	-92575.4	-1497.7	9.6	-51.9
153	Ft. 38	-86621.2	2771.2	119.1	-412.4
	Fc. 36	-91356.7	3035.0	119.8	-1114.4
	ClsMax 36	-91356.7	3035.0	119.8	-83.4
	ClsMed 36	-91356.7	3035.0	119.8	-51.2
Combinazioni Frequenti					
53	Ft. 40	-85006.3	-1324.2	2.5	-568.3
	Fc. 39	-86271.1	-1367.5	3.8	-877.7
	ClsMax 39	-86271.1	-1367.5	3.8	-62.6
	ClsMed 39	-86271.1	-1367.5	3.8	-48.4
153	Ft. 40	-83787.6	2682.9	118.8	-398.4
	Fc. 39	-85052.3	2770.7	119.0	-1032.0
	ClsMax 39	-85052.3	2770.7	119.0	-77.2
	ClsMed 39	-85052.3	2770.7	119.0	-47.7
Combinazioni Quasi Permanenti					
53	Ft. 41	-84692.6	-1324.2	2.3	-565.7
	Fc. 41	-84692.6	-1324.2	2.3	-859.5
	ClsMax 41	-84692.6	-1324.2	2.3	-61.2
	ClsMed 41	-84692.6	-1324.2	2.3	-47.5
153	Ft. 41	-83473.8	2682.8	118.8	-395.8
	Fc. 41	-83473.8	2682.8	118.8	-1008.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-83473.8	2682.8	118.8	-75.4
	ClsMed 41	-83473.8	2682.8	118.8	-46.8

- Pilastro: 153/253 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ϕ 20 Af=18.85 [cm²] < 1 ϕ 20 x 4 V + 1 ϕ 20 x 2 B + 0 ϕ 20 x 2 H >

Staffe: ϕ 12/15.0' x 62.2+ ϕ 8/15.0' x 248.7+ ϕ 12/15.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
153	28	-60720.3	-9971.9	5613.3	21.89	1.78	0.65
253	23	-57927.0	11740.2	-5807.7	838.72	3.29	0.78

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9573.3	27721.3	9006.5	48963.7	ϕ 12/15.0'
0.79	3.28	9573.3	12320.6	9006.5	21761.7	ϕ 8/15.0'
3.28	3.90	9573.3	27721.3	9006.5	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
153	Ft. 37	-74661.3	-3565.4	-40.6	-230.0
	Fc. 36	-75445.5	-3565.8	-39.7	-1033.0
	ClsMax 36	-75445.5	-3565.8	-39.7	-79.5
	ClsMed 36	-75445.5	-3565.8	-39.7	-42.3
253	Ft. 37	-73135.0	3486.3	88.3	-222.1
	Fc. 36	-73919.3	3486.9	88.0	-1015.2
	ClsMax 36	-73919.3	3486.9	88.0	-78.1
	ClsMed 36	-73919.3	3486.9	88.0	-41.5
Combinazioni Frequenti					
153	Ft. 39	-70060.5	-3252.7	-48.9	-225.3
	Fc. 39	-70060.5	-3252.7	-48.9	-953.7
	ClsMax 39	-70060.5	-3252.7	-48.9	-73.3
	ClsMed 39	-70060.5	-3252.7	-48.9	-39.3
253	Ft. 39	-68534.2	3177.9	91.8	-217.3
	Fc. 39	-68534.2	3177.9	91.8	-936.0
	ClsMax 39	-68534.2	3177.9	91.8	-71.9
	ClsMed 39	-68534.2	3177.9	91.8	-38.4
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

153	Ft. 41	-68788.3	-3148.6	-51.4	-225.9
	Fc. 41	-68788.3	-3148.6	-51.4	-931.7
	ClsMax 41	-68788.3	-3148.6	-51.4	-71.5
	ClsMed 41	-68788.3	-3148.6	-51.4	-38.6
253	Ft. 41	-67262.0	3075.3	92.8	-217.9
	Fc. 41	-67262.0	3075.3	92.8	-914.0
	ClsMax 41	-67262.0	3075.3	92.8	-70.2
	ClsMed 41	-67262.0	3075.3	92.8	-37.7

- Pilastro: 253/353 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
253	32	-47390.3	-11257.5	5836.4	916.10	1.68	0.64
353	32	-45871.5	11229.9	-6913.7	74.62	2.26	0.67

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10605.1	27721.3	11262.5	48963.7	$\varnothing 12/15.0'$
0.79	3.26	10605.1	12320.6	11262.5	21761.7	$\varnothing 8/15.0'$
3.26	3.88	10605.1	27721.3	11262.5	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
253	Ft. 37	-57160.2	-3432.8	5.4	-103.4
	Fc. 36	-57944.0	-3433.9	6.8	-800.4
	ClsMax 36	-57944.0	-3433.9	6.8	-63.2
	ClsMed 36	-57944.0	-3433.9	6.8	-31.6
353	Ft. 37	-55641.4	3445.1	31.1	-86.5
	Fc. 36	-56425.3	3446.5	30.3	-791.9
	ClsMax 36	-56425.3	3446.5	30.3	-62.7
	ClsMed 36	-56425.3	3446.5	30.3	-31.3
Combinazioni Frequenti					
253	Ft. 39	-53491.3	-3124.8	-6.5	-106.6
	Fc. 39	-53491.3	-3124.8	-6.5	-734.2
	ClsMax 39	-53491.3	-3124.8	-6.5	-57.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-53491.3	-3124.8	-6.5	-28.9
353	Ft. 39	-51972.5	3134.4	39.5	-89.9
	Fc. 39	-51972.5	3134.4	39.5	-726.0
	ClsMax 39	-51972.5	3134.4	39.5	-57.4
	ClsMed 39	-51972.5	3134.4	39.5	-28.6

Combinazioni Quasi Permanenti

253	Ft. 41	-52529.6	-3022.4	-10.0	-109.5
	Fc. 41	-52529.6	-3022.4	-10.0	-716.5
	ClsMax 41	-52529.6	-3022.4	-10.0	-56.4
	ClsMed 41	-52529.6	-3022.4	-10.0	-28.2
353	Ft. 41	-51010.9	3031.3	42.1	-93.2
	Fc. 41	-51010.9	3031.3	42.1	-708.1
	ClsMax 41	-51010.9	3031.3	42.1	-55.9
	ClsMed 41	-51010.9	3031.3	42.1	-27.8

- Pilastro: 353/453 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
353	27	-32502.3	-11485.8	6913.7	175.39	1.34	0.73
453	32	-31529.4	11229.9	-6913.7	33.73	2.53	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9720.8	27721.3	11034.1	48963.7	$\varnothing 12/15.0'$
0.79	3.26	9720.8	12320.6	11034.1	21761.7	$\varnothing 8/15.0'$
3.26	3.88	9720.8	27721.3	11034.1	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
353	Ft. 37	-39677.5	-3466.1	2.9	100.7
	Fc. 36	-40460.8	-3467.0	4.5	-679.7
	ClsMax 36	-40460.8	-3467.0	4.5	-56.3
	ClsMed 36	-40460.8	-3467.0	4.5	-28.1
453	Ft. 37	-38158.7	3470.0	48.5	129.1
	Fc. 36	-38942.1	3470.1	48.0	-674.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-38942.1	3470.1	48.0	-56.2
	ClsMed 36	-38942.1	3470.1	48.0	-27.9

Combinazioni Frequenti

353	Ft. 39	-36944.0	-3150.7	-9.5	79.1
	Fc. 39	-36944.0	-3150.7	-9.5	-619.3
	ClsMax 39	-36944.0	-3150.7	-9.5	-51.3
	ClsMed 39	-36944.0	-3150.7	-9.5	-25.6
453	Ft. 39	-35425.3	3153.0	56.7	106.6
	Fc. 39	-35425.3	3153.0	56.7	-613.9
	ClsMax 39	-35425.3	3153.0	56.7	-51.1
	ClsMed 39	-35425.3	3153.0	56.7	-25.4

Combinazioni Quasi Permanenti

353	Ft. 41	-36294.0	-3045.9	-13.1	68.5
	Fc. 41	-36294.0	-3045.9	-13.1	-602.9
	ClsMax 41	-36294.0	-3045.9	-13.1	-49.8
	ClsMed 41	-36294.0	-3045.9	-13.1	-24.8
453	Ft. 41	-34775.3	3047.4	59.2	95.1
	Fc. 41	-34775.3	3047.4	59.2	-597.2
	ClsMax 41	-34775.3	3047.4	59.2	-49.6
	ClsMed 41	-34775.3	3047.4	59.2	-24.6

- Pilastro: 453/553 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
453	35	-17856.0	-11753.2	6913.7	223.03	1.30	0.84
553	17	-21022.7	6735.1	6997.5	1.00	1.00	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9167.3	27721.3	12590.8	48963.7	$\varnothing 12/15.0'$
0.79	3.26	9167.3	12320.6	12590.8	21761.7	$\varnothing 8/15.0'$
3.26	3.88	9167.3	27721.3	12590.8	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

453	Ft. 37	-22188.4	-3465.5	110.6	472.4
	Fc. 36	-22970.5	-3471.0	114.4	-579.1
	ClsMax 36	-22970.5	-3471.0	114.4	-53.2
	ClsMed 36	-22970.5	-3471.0	114.4	-26.1
553	Ft. 37	-20669.7	3458.1	-235.2	525.3
	Fc. 36	-21451.7	3470.4	-240.1	-582.5
	ClsMax 36	-21451.7	3470.4	-240.1	-54.0
	ClsMed 36	-21451.7	3470.4	-240.1	-26.0

Combinazioni Frequenti

453	Ft. 39	-20394.2	-3146.8	90.6	421.3
	Fc. 39	-20394.2	-3146.8	90.6	-520.6
	ClsMax 39	-20394.2	-3146.8	90.6	-48.0
	ClsMed 39	-20394.2	-3146.8	90.6	-23.6
553	Ft. 39	-18875.5	3139.2	-207.6	473.1
	Fc. 39	-18875.5	3139.2	-207.6	-522.2
	ClsMax 39	-18875.5	3139.2	-207.6	-48.7
	ClsMed 39	-18875.5	3139.2	-207.6	-23.4

Combinazioni Quasi Permanenti

453	Ft. 41	-20056.9	-3042.4	85.2	398.2
	Fc. 41	-20056.9	-3042.4	85.2	-505.4
	ClsMax 41	-20056.9	-3042.4	85.2	-46.5
	ClsMed 41	-20056.9	-3042.4	85.2	-22.9
553	Ft. 41	-18538.1	3037.0	-200.1	450.0
	Fc. 41	-18538.1	3037.0	-200.1	-507.0
	ClsMax 41	-18538.1	3037.0	-200.1	-47.2
	ClsMed 41	-18538.1	3037.0	-200.1	-22.7

- Pilastro: 553/653 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$ Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
553	17	-3815.0	-4923.4	-63.8	1.00	1.00	0.38
653	1	-6176.5	3030.7	92.5	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5896.7	9240.4	1816.8	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
553	Ft. 37	-4151.5	-3429.7	-469.7	1072.8
	Fc. 36	-4936.7	-3405.4	-472.8	-472.3
	ClsMax 37	-4151.5	-3429.7	-469.7	-52.2
	ClsMed 37	-4151.5	-3429.7	-469.7	-23.6
653	Ft. 36	-4449.2	2144.1	67.2	575.4
	Fc. 36	-4449.2	2144.1	67.2	-279.5
	ClsMax 36	-4449.2	2144.1	67.2	-30.7
	ClsMed 36	-4449.2	2144.1	67.2	-15.0
Combinazioni Frequenti					
553	Ft. 39	-3292.8	-3115.9	-454.4	995.6
	Fc. 39	-3292.8	-3115.9	-454.4	-423.5
	ClsMax 39	-3292.8	-3115.9	-454.4	-47.6
	ClsMed 39	-3292.8	-3115.9	-454.4	-21.4
653	Ft. 40	-3094.9	1241.8	69.5	320.0
	Fc. 40	-3094.9	1241.8	69.5	-170.7
	ClsMax 40	-3094.9	1241.8	69.5	-18.3
	ClsMed 40	-3094.9	1241.8	69.5	-8.8
Combinazioni Quasi Permanenti					
553	Ft. 41	-3268.3	-3003.3	-450.3	958.0
	Fc. 41	-3268.3	-3003.3	-450.3	-410.7
	ClsMax 41	-3268.3	-3003.3	-450.3	-46.1
	ClsMed 41	-3268.3	-3003.3	-450.3	-20.6
653	Ft. 41	-2780.8	1020.2	69.6	256.6
	Fc. 41	-2780.8	1020.2	69.6	-143.9
	ClsMax 41	-2780.8	1020.2	69.6	-15.2
	ClsMed 41	-2780.8	1020.2	69.6	-7.2

- Pilastro: 54/154 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
54	22	-71700.2	-12498.7	9142.5	4.58	5.49	0.89
154	22	-70481.4	12498.7	9142.5	3.54	14.51	0.89

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.00	0.51	11607.4	27721.3	7679.4	48963.7	ø 12/15.0'
0.51	2.57	11607.4	12320.6	7679.4	21761.7	ø 8/15.0'
2.57	3.08	11607.4	27721.3	7679.4	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
54	Ft. 38	-84875.5	-1321.2	60.2	-563.0
	Fc. 36	-89432.8	-1446.3	64.6	-917.8
	ClsMax 36	-89432.8	-1446.3	64.6	-65.6
	ClsMed 36	-89432.8	-1446.3	64.6	-50.2
154	Ft. 38	-83656.8	2677.2	3.5	-407.0
	Fc. 36	-88214.1	2931.2	4.4	-1067.3
	ClsMax 36	-88214.1	2931.2	4.4	-79.9
	ClsMed 36	-88214.1	2931.2	4.4	-49.5
Combinazioni Frequenti					
54	Ft. 40	-82147.0	-1279.3	57.7	-544.9
	Fc. 39	-83363.8	-1320.9	58.9	-852.4
	ClsMax 39	-83363.8	-1320.9	58.9	-60.8
	ClsMed 39	-83363.8	-1320.9	58.9	-46.8
154	Ft. 40	-80928.3	2592.1	3.1	-393.5
	Fc. 39	-82145.0	2676.7	3.3	-988.0
	ClsMax 39	-82145.0	2676.7	3.3	-73.8
	ClsMed 39	-82145.0	2676.7	3.3	-46.1
Combinazioni Quasi Permanenti					
54	Ft. 41	-81844.7	-1279.2	57.4	-542.4
	Fc. 41	-81844.7	-1279.2	57.4	-834.9
	ClsMax 41	-81844.7	-1279.2	57.4	-59.5
	ClsMed 41	-81844.7	-1279.2	57.4	-45.9
154	Ft. 41	-80625.9	2592.0	3.0	-391.0
	Fc. 41	-80625.9	2592.0	3.0	-965.8
	ClsMax 41	-80625.9	2592.0	3.0	-72.1
	ClsMed 41	-80625.9	2592.0	3.0	-45.2

- Pilastro: 154/254 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
154	23	-58171.9	-9971.9	5475.2	95.14	1.30	0.65

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

254	31	-54498.7	11962.8	-5807.7	10647.50	2.35	0.82
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9549.5	27721.3	8664.1	48963.7	ø 12/15.0'
0.79	3.28	9549.5	12320.6	8664.1	21761.7	ø 8/15.0'
3.28	3.90	9549.5	27721.3	8664.1	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
154	Ft. 37	-72161.0	-3443.6	91.5	-218.4
	Fc. 36	-72916.6	-3444.1	92.3	-1002.4
	ClsMax 36	-72916.6	-3444.1	92.3	-77.1
	ClsMed 36	-72916.6	-3444.1	92.3	-40.9
254	Ft. 37	-70634.8	3366.7	-36.2	-218.5
	Fc. 36	-71390.3	3367.3	-36.4	-976.6
	ClsMax 36	-71390.3	3367.3	-36.4	-75.1
	ClsMed 36	-71390.3	3367.3	-36.4	-40.0
Combinazioni Frequenti					
154	Ft. 39	-67731.2	-3142.4	83.5	-215.2
	Fc. 39	-67731.2	-3142.4	83.5	-924.6
	ClsMax 39	-67731.2	-3142.4	83.5	-71.1
	ClsMed 39	-67731.2	-3142.4	83.5	-38.0
254	Ft. 39	-66205.0	3069.8	-33.2	-214.3
	Fc. 39	-66205.0	3069.8	-33.2	-899.8
	ClsMax 39	-66205.0	3069.8	-33.2	-69.1
	ClsMed 39	-66205.0	3069.8	-33.2	-37.1
Combinazioni Quasi Permanenti					
154	Ft. 41	-66506.5	-3042.2	81.2	-216.1
	Fc. 41	-66506.5	-3042.2	81.2	-903.0
	ClsMax 41	-66506.5	-3042.2	81.2	-69.3
	ClsMed 41	-66506.5	-3042.2	81.2	-37.3
254	Ft. 41	-64980.2	2971.0	-32.3	-215.0
	Fc. 41	-64980.2	2971.0	-32.3	-878.4
	ClsMax 41	-64980.2	2971.0	-32.3	-67.4
	ClsMed 41	-64980.2	2971.0	-32.3	-36.4

- Pilastro: 254/354 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: \varnothing 12/15.0' x 61.8+ \varnothing 8/15.0' x 247.3+ \varnothing 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
254	32	-46083.3	-11257.5	5836.4	30.20	1.60	0.65
354	29	-43883.3	11229.9	-6913.7	111.84	1.88	0.68

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10517.0	27721.3	11342.5	48963.7	\varnothing 12/15.0'
0.79	3.26	10517.0	12320.6	11342.5	21761.7	\varnothing 8/15.0'
3.26	3.88	10517.0	27721.3	11342.5	48963.7	\varnothing 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
254	Ft. 37	-55248.3	-3316.7	122.1	-91.4
	Fc. 36	-56003.0	-3317.8	123.4	-782.1
	ClsMax 36	-56003.0	-3317.8	123.4	-61.8
	ClsMed 36	-56003.0	-3317.8	123.4	-30.5
354	Ft. 37	-53729.6	3328.9	-84.3	-79.1
	Fc. 36	-54484.2	3330.3	-85.0	-769.1
	ClsMax 36	-54484.2	3330.3	-85.0	-60.9
	ClsMed 36	-54484.2	3330.3	-85.0	-30.2
Combinazioni Frequenti					
254	Ft. 39	-51715.9	-3020.0	111.0	-95.4
	Fc. 39	-51715.9	-3020.0	111.0	-717.4
	ClsMax 39	-51715.9	-3020.0	111.0	-56.6
	ClsMed 39	-51715.9	-3020.0	111.0	-28.0
354	Ft. 39	-50197.1	3029.6	-76.8	-83.7
	Fc. 39	-50197.1	3029.6	-76.8	-704.4
	ClsMax 39	-50197.1	3029.6	-76.8	-55.7
	ClsMed 39	-50197.1	3029.6	-76.8	-27.6
Combinazioni Quasi Permanenti					
254	Ft. 41	-50789.9	-2921.4	107.7	-98.7
	Fc. 41	-50789.9	-2921.4	107.7	-699.9
	ClsMax 41	-50789.9	-2921.4	107.7	-55.1
	ClsMed 41	-50789.9	-2921.4	107.7	-27.2
354	Ft. 41	-49271.2	2930.2	-74.5	-87.3
	Fc. 41	-49271.2	2930.2	-74.5	-686.7
	ClsMax 41	-49271.2	2930.2	-74.5	-54.3
	ClsMed 41	-49271.2	2930.2	-74.5	-26.9

- Pilastro: 354/454 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8+ $\phi 8/15.0'$ x 247.3+ $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
354	23	-31272.1	-11451.3	6913.7	135.00	1.28	0.74
454	26	-30025.6	11229.9	-6913.7	91.63	1.39	0.73

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9652.1	27721.3	10971.0	48963.7	$\phi 12/15.0'$
0.79	3.26	9652.1	12320.6	10971.0	21761.7	$\phi 8/15.0'$
3.26	3.88	9652.1	27721.3	10971.0	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
354	Ft. 37	-38335.7	-3346.3	122.1	107.3
	Fc. 36	-39089.0	-3347.1	123.6	-666.7
	ClsMax 36	-39089.0	-3347.1	123.6	-55.2
	ClsMed 36	-39089.0	-3347.1	123.6	-27.2
454	Ft. 37	-36816.9	3345.7	-76.0	126.7
	Fc. 36	-37570.3	3345.6	-76.4	-652.7
	ClsMax 36	-37570.3	3345.6	-76.4	-54.4
	ClsMed 36	-37570.3	3345.6	-76.4	-26.9
Combinazioni Frequenti					
354	Ft. 39	-35705.1	-3042.6	110.5	84.8
	Fc. 39	-35705.1	-3042.6	110.5	-607.0
	ClsMax 39	-35705.1	-3042.6	110.5	-50.2
	ClsMed 39	-35705.1	-3042.6	110.5	-24.7
454	Ft. 39	-34186.4	3040.8	-68.4	103.6
	Fc. 39	-34186.4	3040.8	-68.4	-593.4
	ClsMax 39	-34186.4	3040.8	-68.4	-49.4
	ClsMed 39	-34186.4	3040.8	-68.4	-24.5
Combinazioni Quasi Permanenti					
354	Ft. 41	-35079.4	-2941.7	107.1	73.9
	Fc. 41	-35079.4	-2941.7	107.1	-590.5
	ClsMax 41	-35079.4	-2941.7	107.1	-48.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-35079.4	-2941.7	107.1	-24.0
454	Ft. 41	-33560.6	2939.1	-66.0	92.2
	Fc. 41	-33560.6	2939.1	-66.0	-576.9
	ClsMax 41	-33560.6	2939.1	-66.0	-47.9
	ClsMed 41	-33560.6	2939.1	-66.0	-23.7

- Pilastro: 454/554 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
454	30	-17160.8	-11795.8	6913.7	253.34	1.22	0.85
554	17	-20020.8	6139.9	6915.3	1.00	1.00	0.47

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9090.9	27721.3	9878.4	48963.7	$\varnothing 12/15.0'$
0.79	3.26	9090.9	12320.6	9878.4	21761.7	$\varnothing 8/15.0'$
3.26	3.88	9090.9	27721.3	9878.4	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
454	Ft. 37	-21398.0	-3376.2	203.6	476.7
	Fc. 36	-22149.0	-3382.0	207.0	-573.0
	ClsMax 36	-22149.0	-3382.0	207.0	-52.6
	ClsMed 36	-22149.0	-3382.0	207.0	-25.4
554	Ft. 37	-19879.3	3408.1	-289.6	538.0
	Fc. 36	-20630.3	3421.1	-293.6	-577.0
	ClsMax 36	-20630.3	3421.1	-293.6	-53.7
	ClsMed 36	-20630.3	3421.1	-293.6	-25.5
Combinazioni Frequenti					
454	Ft. 39	-19674.4	-3067.4	185.8	427.0
	Fc. 39	-19674.4	-3067.4	185.8	-516.7
	ClsMax 39	-19674.4	-3067.4	185.8	-47.6
	ClsMed 39	-19674.4	-3067.4	185.8	-23.0
554	Ft. 39	-18155.6	3096.6	-266.1	486.6
	Fc. 39	-18155.6	3096.6	-266.1	-518.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-18155.6	3096.6	-266.1	-48.5
	ClsMed 39	-18155.6	3096.6	-266.1	-23.1

Combinazioni Quasi Permanenti

454	Ft. 41	-19350.2	-2966.4	181.0	404.4
	Fc. 41	-19350.2	-2966.4	181.0	-502.0
	ClsMax 41	-19350.2	-2966.4	181.0	-46.1
	ClsMed 41	-19350.2	-2966.4	181.0	-22.3
554	Ft. 41	-17831.4	2997.1	-259.6	463.9
	Fc. 41	-17831.4	2997.1	-259.6	-504.1
	ClsMax 41	-17831.4	2997.1	-259.6	-47.0
	ClsMed 41	-17831.4	2997.1	-259.6	-22.4

- Pilastro: 554/654 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$ Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
554	17	-3589.1	-4243.6	-15.9	1.00	1.00	0.32
654	1	-5877.8	2829.9	12.6	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5372.5	9240.4	1956.2	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

554	Ft. 37	-3968.9	-3088.0	-206.5	927.4
	Fc. 36	-4722.3	-3060.8	-208.6	-398.3
	ClsMax 37	-3968.9	-3088.0	-206.5	-44.7
	ClsMed 37	-3968.9	-3088.0	-206.5	-21.2
654	Ft. 36	-4234.8	2001.9	7.4	527.2
	Fc. 36	-4234.8	2001.9	7.4	-254.4
	ClsMax 36	-4234.8	2001.9	7.4	-28.1
	ClsMed 36	-4234.8	2001.9	7.4	-14.0

Combinazioni Frequenti

554	Ft. 39	-3146.6	-2800.4	-195.6	858.0
	Fc. 39	-3146.6	-2800.4	-195.6	-353.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-3146.6	-2800.4	-195.6	-40.5
	ClsMed 39	-3146.6	-2800.4	-195.6	-19.2
654	Ft. 40	-2937.5	1138.5	10.5	283.0
	Fc. 40	-2937.5	1138.5	10.5	-150.5
	ClsMax 40	-2937.5	1138.5	10.5	-16.2
	ClsMed 40	-2937.5	1138.5	10.5	-8.0

Combinazioni Quasi Permanenti

554	Ft. 41	-3123.7	-2695.4	-192.6	823.1
	Fc. 41	-3123.7	-2695.4	-192.6	-341.8
	ClsMax 41	-3123.7	-2695.4	-192.6	-39.1
	ClsMed 41	-3123.7	-2695.4	-192.6	-18.5
654	Ft. 41	-2636.2	925.3	10.6	222.1
	Fc. 41	-2636.2	925.3	10.6	-124.9
	ClsMax 41	-2636.2	925.3	10.6	-13.3
	ClsMed 41	-2636.2	925.3	10.6	-6.6

- Pilastro: 55/155 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 0ø20 x 2 H >

Staffe: ø 12/15.0' x 51.3+ø 8/15.0' x 205.3+ø 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
55	22	-73370.4	-12487.9	9147.3	5.03	5.49	0.88
155	22	-72151.7	12487.9	9147.3	3.71	14.57	0.89

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11583.3	27721.3	7659.8	48963.7	ø 12/15.0'
0.51	2.57	11583.3	12320.6	7659.8	21761.7	ø 8/15.0'
2.57	3.08	11583.3	27721.3	7659.8	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
55	Ft. 38	-84782.8	-1319.2	60.8	-562.4
	Fc. 36	-89332.8	-1444.2	65.4	-916.8
	ClsMax 36	-89332.8	-1444.2	65.4	-65.5
	ClsMed 36	-89332.8	-1444.2	65.4	-50.1
155	Ft. 38	-83564.0	2673.9	2.1	-406.7

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-88114.0	2927.6	2.6	-1065.9
	ClsMax 36	-88114.0	2927.6	2.6	-79.8
	ClsMed 36	-88114.0	2927.6	2.6	-49.4

Combinazioni Frequenti

55	Ft. 40	-82060.0	-1277.3	58.2	-544.3
	Fc. 39	-83275.1	-1318.9	59.5	-851.5
	ClsMax 39	-83275.1	-1318.9	59.5	-60.7
	ClsMed 39	-83275.1	-1318.9	59.5	-46.7
155	Ft. 40	-80841.2	2588.9	2.0	-393.2
	Fc. 39	-82056.3	2673.4	2.1	-986.8
	ClsMax 39	-82056.3	2673.4	2.1	-73.7
	ClsMed 39	-82056.3	2673.4	2.1	-46.0

Combinazioni Quasi Permanenti

55	Ft. 41	-81758.4	-1277.2	57.9	-541.8
	Fc. 41	-81758.4	-1277.2	57.9	-834.0
	ClsMax 41	-81758.4	-1277.2	57.9	-59.5
	ClsMed 41	-81758.4	-1277.2	57.9	-45.9
155	Ft. 41	-80539.7	2588.8	2.0	-390.7
	Fc. 41	-80539.7	2588.8	2.0	-964.6
	ClsMax 41	-80539.7	2588.8	2.0	-72.0
	ClsMed 41	-80539.7	2588.8	2.0	-45.2

- Pilastro: 155/255 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
155	22	-59248.6	-9971.9	5476.6	19.94	1.25	0.65
255	30	-56064.9	11594.7	-5807.7	24.62	2.30	0.78

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9508.7	27721.3	5082.1	48963.7	$\phi 12/15.0'$
0.79	3.28	9508.7	12320.6	5082.1	21761.7	$\phi 8/15.0'$
3.28	3.90	9508.7	27721.3	5082.1	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

155	Ft. 37	-72061.9	-3440.0	97.8	-217.5
	Fc. 36	-72815.5	-3440.5	98.7	-1001.6
	ClsMax 36	-72815.5	-3440.5	98.7	-77.1
	ClsMed 36	-72815.5	-3440.5	98.7	-40.8
255	Ft. 37	-70535.7	3363.2	-47.0	-217.2
	Fc. 36	-71289.2	3363.8	-47.4	-976.2
	ClsMax 36	-71289.2	3363.8	-47.4	-75.1
	ClsMed 36	-71289.2	3363.8	-47.4	-40.0

Combinazioni Frequenti

155	Ft. 39	-67640.9	-3139.1	89.0	-214.3
	Fc. 39	-67640.9	-3139.1	89.0	-923.9
	ClsMax 39	-67640.9	-3139.1	89.0	-71.0
	ClsMed 39	-67640.9	-3139.1	89.0	-37.9
255	Ft. 39	-66114.6	3066.5	-42.9	-213.2
	Fc. 39	-66114.6	3066.5	-42.9	-899.4
	ClsMax 39	-66114.6	3066.5	-42.9	-69.1
	ClsMed 39	-66114.6	3066.5	-42.9	-37.1

Combinazioni Quasi Permanenti

155	Ft. 41	-66418.4	-3039.0	86.4	-215.3
	Fc. 41	-66418.4	-3039.0	86.4	-902.3
	ClsMax 41	-66418.4	-3039.0	86.4	-69.3
	ClsMed 41	-66418.4	-3039.0	86.4	-37.3
255	Ft. 41	-64892.1	2967.8	-41.7	-213.9
	Fc. 41	-64892.1	2967.8	-41.7	-878.1
	ClsMax 41	-64892.1	2967.8	-41.7	-67.4
	ClsMed 41	-64892.1	2967.8	-41.7	-36.4

- Pilastro: 255/355 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $0\phi 12 \times 2$ H >

Staffe: $\phi 12/15.0'$ x 61.8 + $\phi 8/15.0'$ x 247.3 + $\phi 12/15.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
255	23	-45655.5	-11257.5	6037.9	99.23	1.00	0.65
355	22	-43915.2	11229.9	-6913.7	205.25	1.38	0.68

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10473.7	27721.3	11210.4	48963.7	$\phi 12/15.0'$
0.79	3.26	10473.7	12320.6	11210.4	21761.7	$\phi 8/15.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	10473.7	27721.3	11210.4	48963.7	ø 12/15.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

255	Ft. 37	-55159.9	-3315.2	138.7	-89.5
	Fc. 36	-55912.8	-3316.3	140.2	-782.5
	ClsMax 36	-55912.8	-3316.3	140.2	-61.8
	ClsMed 36	-55912.8	-3316.3	140.2	-30.5
355	Ft. 37	-53641.2	3327.2	-102.5	-77.1
	Fc. 36	-54394.1	3328.6	-103.4	-769.6
	ClsMax 36	-54394.1	3328.6	-103.4	-61.0
	ClsMed 36	-54394.1	3328.6	-103.4	-30.2

Combinazioni Frequenti

255	Ft. 39	-51635.0	-3018.5	126.1	-93.8
	Fc. 39	-51635.0	-3018.5	126.1	-717.8
	ClsMax 39	-51635.0	-3018.5	126.1	-56.6
	ClsMed 39	-51635.0	-3018.5	126.1	-27.9
355	Ft. 39	-50116.3	3027.9	-93.4	-81.9
	Fc. 39	-50116.3	3027.9	-93.4	-704.8
	ClsMax 39	-50116.3	3027.9	-93.4	-55.8
	ClsMed 39	-50116.3	3027.9	-93.4	-27.6

Combinazioni Quasi Permanenti

255	Ft. 41	-50711.0	-2919.9	122.4	-97.1
	Fc. 41	-50711.0	-2919.9	122.4	-700.2
	ClsMax 41	-50711.0	-2919.9	122.4	-55.2
	ClsMed 41	-50711.0	-2919.9	122.4	-27.2
355	Ft. 41	-49192.3	2928.6	-90.6	-85.5
	Fc. 41	-49192.3	2928.6	-90.6	-687.2
	ClsMax 41	-49192.3	2928.6	-90.6	-54.3
	ClsMed 41	-49192.3	2928.6	-90.6	-26.9

- Pilastro: 355/455 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
355	34	-31420.3	-11332.6	6913.7	54.10	1.29	0.73
455	34	-29901.6	11229.9	-6913.7	162.40	1.33	0.73

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9612.7	27721.3	10824.3	48963.7	ø 12/15.0'
0.79	3.26	9612.7	12320.6	10824.3	21761.7	ø 8/15.0'
3.26	3.88	9612.7	27721.3	10824.3	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
355	Ft. 37	-38265.6	-3344.7	147.7	110.3
	Fc. 36	-39017.5	-3345.5	149.6	-668.4
	ClsMax 36	-39017.5	-3345.5	149.6	-55.3
	ClsMed 36	-39017.5	-3345.5	149.6	-27.1
455	Ft. 37	-36746.9	3343.3	-108.1	130.2
	Fc. 36	-37498.8	3343.1	-109.0	-654.8
	ClsMax 36	-37498.8	3343.1	-109.0	-54.6
	ClsMed 36	-37498.8	3343.1	-109.0	-26.9
Combinazioni Frequenti					
355	Ft. 39	-35640.9	-3041.0	134.0	87.5
	Fc. 39	-35640.9	-3041.0	134.0	-608.5
	ClsMax 39	-35640.9	-3041.0	134.0	-50.3
	ClsMed 39	-35640.9	-3041.0	134.0	-24.7
455	Ft. 39	-34122.1	3038.4	-97.9	106.8
	Fc. 39	-34122.1	3038.4	-97.9	-595.3
	ClsMax 39	-34122.1	3038.4	-97.9	-49.6
	ClsMed 39	-34122.1	3038.4	-97.9	-24.4
Combinazioni Quasi Permanenti					
355	Ft. 41	-35016.6	-2940.1	130.0	76.6
	Fc. 41	-35016.6	-2940.1	130.0	-591.9
	ClsMax 41	-35016.6	-2940.1	130.0	-48.9
	ClsMed 41	-35016.6	-2940.1	130.0	-24.0
455	Ft. 41	-33497.9	2936.8	-94.8	95.3
	Fc. 41	-33497.9	2936.8	-94.8	-578.7
	ClsMax 41	-33497.9	2936.8	-94.8	-48.1
	ClsMed 41	-33497.9	2936.8	-94.8	-23.7

- Pilastro: 455/555 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af} = 27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
455	30	-17563.1	-11409.0	6913.7	20.06	1.23	0.82
555	17	-19532.1	5595.8	6751.6	1.00	1.00	0.44

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9057.5	27721.3	8732.7	48963.7	ø 12/15.0'
0.79	3.26	9057.5	12320.6	8732.7	21761.7	ø 8/15.0'
3.26	3.88	9057.5	27721.3	8732.7	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

455	Ft. 37	-21350.1	-3378.6	215.5	480.0
	Fc. 36	-22100.1	-3384.5	219.0	-574.3
	ClsMax 36	-22100.1	-3384.5	219.0	-52.8
	ClsMed 36	-22100.1	-3384.5	219.0	-25.4
555	Ft. 37	-19831.4	3414.8	-273.4	539.6
	Fc. 36	-20581.4	3427.9	-277.3	-575.7
	ClsMax 36	-20581.4	3427.9	-277.3	-53.6
	ClsMed 36	-20581.4	3427.9	-277.3	-25.6

Combinazioni Frequenti

455	Ft. 39	-19630.3	-3069.5	196.3	429.9
	Fc. 39	-19630.3	-3069.5	196.3	-517.8
	ClsMax 39	-19630.3	-3069.5	196.3	-47.8
	ClsMed 39	-19630.3	-3069.5	196.3	-23.0
555	Ft. 39	-18111.5	3102.8	-250.4	487.9
	Fc. 39	-18111.5	3102.8	-250.4	-517.5
	ClsMax 39	-18111.5	3102.8	-250.4	-48.5
	ClsMed 39	-18111.5	3102.8	-250.4	-23.1

Combinazioni Quasi Permanenti

455	Ft. 41	-19307.0	-2968.5	191.1	407.3
	Fc. 41	-19307.0	-2968.5	191.1	-503.1
	ClsMax 41	-19307.0	-2968.5	191.1	-46.3
	ClsMed 41	-19307.0	-2968.5	191.1	-22.3
555	Ft. 41	-17788.2	3003.2	-244.0	465.3
	Fc. 41	-17788.2	3003.2	-244.0	-502.8
	ClsMax 41	-17788.2	3003.2	-244.0	-47.0
	ClsMed 41	-17788.2	3003.2	-244.0	-22.4

- Pilastro: 555/655 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 24 Af=27.14 [cm^2] < 1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H >$

Staffe: $\phi 8/20.0' \times 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
555	2	-5361.2	-4175.4	-107.2	1.00	1.00	0.30
655	1	-5857.0	2834.4	-68.3	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5360.7	9240.4	2306.0	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
555	Ft. 37	-3954.7	-3074.0	-75.2	905.0
	Fc. 36	-4707.7	-3046.8	-75.2	-378.7
	ClsMax 37	-3954.7	-3074.0	-75.2	-43.1
	ClsMed 37	-3954.7	-3074.0	-75.2	-21.1
655	Ft. 36	-4220.2	2005.1	-50.0	534.4
	Fc. 36	-4220.2	2005.1	-50.0	-260.2
	ClsMax 36	-4220.2	2005.1	-50.0	-28.6
	ClsMed 36	-4220.2	2005.1	-50.0	-14.0
Combinazioni Frequenti					
555	Ft. 39	-3133.5	-2787.1	-73.2	836.9
	Fc. 39	-3133.5	-2787.1	-73.2	-335.2
	ClsMax 39	-3133.5	-2787.1	-73.2	-39.0
	ClsMed 39	-3133.5	-2787.1	-73.2	-19.1
655	Ft. 40	-2924.5	1142.3	-41.7	288.8
	Fc. 40	-2924.5	1142.3	-41.7	-154.8
	ClsMax 40	-2924.5	1142.3	-41.7	-16.6
	ClsMed 40	-2924.5	1142.3	-41.7	-8.1
Combinazioni Quasi Permanenti					
555	Ft. 41	-3110.8	-2682.4	-72.5	802.4
	Fc. 41	-3110.8	-2682.4	-72.5	-323.9
	ClsMax 41	-3110.8	-2682.4	-72.5	-37.5
	ClsMed 41	-3110.8	-2682.4	-72.5	-18.4
655	Ft. 41	-2623.3	929.4	-41.2	227.9
	Fc. 41	-2623.3	929.4	-41.2	-129.1
	ClsMax 41	-2623.3	929.4	-41.2	-13.6
	ClsMed 41	-2623.3	929.4	-41.2	-6.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 56/156 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 0φ20 x 2 H >

Staffe: ø 12/15.0' x 51.3+ø 8/15.0' x 205.3+ø 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
56	22	-75133.4	-12487.9	9147.9	5.58	5.49	0.88
156	22	-73914.6	12487.9	9147.9	3.90	14.57	0.88

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11558.0	27721.3	7641.5	48963.7	ø 12/15.0'
0.51	2.57	11558.0	12320.6	7641.5	21761.7	ø 8/15.0'
2.57	3.08	11558.0	27721.3	7641.5	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
56	Ft. 38	-84788.0	-1318.5	61.1	-562.5
	Fc. 36	-89338.9	-1443.5	65.7	-916.8
	ClsMax 36	-89338.9	-1443.5	65.7	-65.5
	ClsMed 36	-89338.9	-1443.5	65.7	-50.1
156	Ft. 38	-83569.2	2673.3	1.6	-406.9
	Fc. 36	-88120.2	2927.0	2.1	-1065.9
	ClsMax 36	-88120.2	2927.0	2.1	-79.7
	ClsMed 36	-88120.2	2927.0	2.1	-49.4
Combinazioni Frequenti					
56	Ft. 40	-82064.7	-1276.6	58.4	-544.4
	Fc. 39	-83280.1	-1318.2	59.7	-851.5
	ClsMax 39	-83280.1	-1318.2	59.7	-60.7
	ClsMed 39	-83280.1	-1318.2	59.7	-46.7
156	Ft. 40	-80846.0	2588.3	1.5	-393.4
	Fc. 39	-82061.4	2672.8	1.6	-986.7
	ClsMax 39	-82061.4	2672.8	1.6	-73.7
	ClsMed 39	-82061.4	2672.8	1.6	-46.0
Combinazioni Quasi Permanenti					
56	Ft. 41	-81763.1	-1276.5	58.2	-541.9
	Fc. 41	-81763.1	-1276.5	58.2	-834.0
	ClsMax 41	-81763.1	-1276.5	58.2	-59.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 41	-81763.1	-1276.5	58.2	-45.9
156	Ft. 41	-80544.4	2588.2	1.5	-390.8
	Fc. 41	-80544.4	2588.2	1.5	-964.6
	ClsMax 41	-80544.4	2588.2	1.5	-72.0
	ClsMed 41	-80544.4	2588.2	1.5	-45.2

- Pilastro: 156/256 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
156	20	-63970.2	-9971.9	5784.7	4.83	2.82	0.64
256	30	-58028.7	11202.2	-5807.7	11.35	2.30	0.75

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9467.0	27721.3	5074.1	48963.7	$\phi 12/15.0'$
0.79	3.28	9467.0	12320.6	5074.1	21761.7	$\phi 8/15.0'$
3.28	3.90	9467.0	27721.3	5074.1	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
156	Ft. 37	-72068.0	-3439.7	98.3	-217.5
	Fc. 36	-72821.6	-3440.2	99.2	-1001.7
	ClsMax 36	-72821.6	-3440.2	99.2	-77.1
	ClsMed 36	-72821.6	-3440.2	99.2	-40.8
256	Ft. 37	-70541.7	3362.6	-47.4	-217.3
	Fc. 36	-71295.3	3363.2	-47.8	-976.3
	ClsMax 36	-71295.3	3363.2	-47.8	-75.1
	ClsMed 36	-71295.3	3363.2	-47.8	-40.0
Combinazioni Frequenti					
156	Ft. 39	-67645.9	-3138.7	89.5	-214.4
	Fc. 39	-67645.9	-3138.7	89.5	-924.0
	ClsMax 39	-67645.9	-3138.7	89.5	-71.0
	ClsMed 39	-67645.9	-3138.7	89.5	-37.9
256	Ft. 39	-66119.7	3065.9	-43.3	-213.2
	Fc. 39	-66119.7	3065.9	-43.3	-899.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-66119.7	3065.9	-43.3	-69.1
	ClsMed 39	-66119.7	3065.9	-43.3	-37.1

Combinazioni Quasi Permanenti

156	Ft. 41	-66423.1	-3038.5	86.9	-215.4
	Fc. 41	-66423.1	-3038.5	86.9	-902.4
	ClsMax 41	-66423.1	-3038.5	86.9	-69.3
	ClsMed 41	-66423.1	-3038.5	86.9	-37.3
256	Ft. 41	-64896.9	2967.1	-42.1	-214.0
	Fc. 41	-64896.9	2967.1	-42.1	-878.1
	ClsMax 41	-64896.9	2967.1	-42.1	-67.4
	ClsMed 41	-64896.9	2967.1	-42.1	-36.4

- Pilastro: 256/356 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
256	30	-45648.7	-11257.5	6830.3	158.09	1.00	0.67
356	30	-44129.9	11229.9	-6913.7	67.44	1.19	0.68

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10432.7	27721.3	6194.7	48963.7	$\varnothing 12/15.0'$
0.79	3.26	10432.7	12320.6	6194.7	21761.7	$\varnothing 8/15.0'$
3.26	3.88	10432.7	27721.3	6194.7	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
256	Ft. 37	-55165.4	-3316.2	138.6	-89.4
	Fc. 36	-55918.4	-3317.3	140.1	-782.7
	ClsMax 36	-55918.4	-3317.3	140.1	-61.8
	ClsMed 36	-55918.4	-3317.3	140.1	-30.5
356	Ft. 37	-53646.7	3328.0	-101.9	-77.1
	Fc. 36	-54399.6	3329.3	-102.8	-769.7
	ClsMax 36	-54399.6	3329.3	-102.8	-61.0
	ClsMed 36	-54399.6	3329.3	-102.8	-30.2
Combinazioni Frequenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

256	Ft. 39	-51639.6	-3019.3	126.0	-93.7
	Fc. 39	-51639.6	-3019.3	126.0	-717.9
	ClsMax 39	-51639.6	-3019.3	126.0	-56.6
	ClsMed 39	-51639.6	-3019.3	126.0	-27.9
356	Ft. 39	-50120.9	3028.5	-92.8	-82.0
	Fc. 39	-50120.9	3028.5	-92.8	-704.9
	ClsMax 39	-50120.9	3028.5	-92.8	-55.8
	ClsMed 39	-50120.9	3028.5	-92.8	-27.6

Combinazioni Quasi Permanenti

256	Ft. 41	-50715.4	-2920.6	122.3	-97.1
	Fc. 41	-50715.4	-2920.6	122.3	-700.3
	ClsMax 41	-50715.4	-2920.6	122.3	-55.2
	ClsMed 41	-50715.4	-2920.6	122.3	-27.2
356	Ft. 41	-49196.6	2929.1	-90.1	-85.6
	Fc. 41	-49196.6	2929.1	-90.1	-687.2
	ClsMax 41	-49196.6	2929.1	-90.1	-54.3
	ClsMed 41	-49196.6	2929.1	-90.1	-26.9

- Pilastro: 356/456 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/15.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
356	30	-31951.3	-11229.9	6913.7	22.22	1.21	0.72
456	30	-30432.5	11229.9	-6913.7	29.70	1.22	0.73

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9574.9	27721.3	5894.8	48963.7	ϕ 12/15.0'
0.79	3.26	9574.9	12320.6	5894.8	21761.7	ϕ 8/15.0'
3.26	3.88	9574.9	27721.3	5894.8	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
356	Ft. 37	-38269.6	-3345.9	150.4	110.7
	Fc. 36	-39021.6	-3346.7	152.3	-668.8
	ClsMax 36	-39021.6	-3346.7	152.3	-55.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 36	-39021.6	-3346.7	152.3	-27.2
456	Ft. 37	-36750.9	3344.2	-114.6	130.9
	Fc. 36	-37502.9	3344.1	-115.7	-655.6
	ClsMax 36	-37502.9	3344.1	-115.7	-54.6
	ClsMed 36	-37502.9	3344.1	-115.7	-26.9

Combinazioni Frequenti

356	Ft. 39	-35644.3	-3042.0	136.4	87.9
	Fc. 39	-35644.3	-3042.0	136.4	-608.8
	ClsMax 39	-35644.3	-3042.0	136.4	-50.4
	ClsMed 39	-35644.3	-3042.0	136.4	-24.7
456	Ft. 39	-34125.5	3039.2	-103.9	107.4
	Fc. 39	-34125.5	3039.2	-103.9	-595.9
	ClsMax 39	-34125.5	3039.2	-103.9	-49.7
	ClsMed 39	-34125.5	3039.2	-103.9	-24.5

Combinazioni Quasi Permanenti

356	Ft. 41	-35019.8	-2941.0	132.4	76.9
	Fc. 41	-35019.8	-2941.0	132.4	-592.3
	ClsMax 41	-35019.8	-2941.0	132.4	-48.9
	ClsMed 41	-35019.8	-2941.0	132.4	-24.0
456	Ft. 41	-33501.1	2937.5	-100.7	95.9
	Fc. 41	-33501.1	2937.5	-100.7	-579.3
	ClsMax 41	-33501.1	2937.5	-100.7	-48.1
	ClsMed 41	-33501.1	2937.5	-100.7	-23.7

- Pilastro: 456/556 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
456	30	-18024.2	-11229.9	6913.7	10.31	1.26	0.80
556	17	-19074.6	5048.6	6486.5	1.00	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8925.0	27721.3	8646.8	48963.7	$\varnothing 12/15.0'$
0.79	3.26	8925.0	12320.6	8646.8	21761.7	$\varnothing 8/15.0'$
3.26	3.88	8925.0	27721.3	8646.8	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
456	Ft. 37	-21352.4	-3380.6	202.2	479.1
	Fc. 36	-22102.4	-3386.5	205.6	-573.1
	ClsMax 36	-22102.4	-3386.5	205.6	-52.7
	ClsMed 36	-22102.4	-3386.5	205.6	-25.4
556	Ft. 37	-19833.6	3416.9	-235.3	535.8
	Fc. 36	-20583.7	3430.1	-238.6	-571.6
	ClsMax 36	-20583.7	3430.1	-238.6	-53.3
	ClsMed 36	-20583.7	3430.1	-238.6	-25.6
Combinazioni Frequenti					
456	Ft. 39	-19632.2	-3071.2	184.0	429.0
	Fc. 39	-19632.2	-3071.2	184.0	-516.7
	ClsMax 39	-19632.2	-3071.2	184.0	-47.7
	ClsMed 39	-19632.2	-3071.2	184.0	-23.0
556	Ft. 39	-18113.4	3104.6	-214.9	484.3
	Fc. 39	-18113.4	3104.6	-214.9	-513.7
	ClsMax 39	-18113.4	3104.6	-214.9	-48.2
	ClsMed 39	-18113.4	3104.6	-214.9	-23.1
Combinazioni Quasi Permanenti					
456	Ft. 41	-19308.8	-2970.1	179.0	406.4
	Fc. 41	-19308.8	-2970.1	179.0	-502.0
	ClsMax 41	-19308.8	-2970.1	179.0	-46.2
	ClsMed 41	-19308.8	-2970.1	179.0	-22.3
556	Ft. 41	-17790.0	3004.9	-209.2	461.7
	Fc. 41	-17790.0	3004.9	-209.2	-499.2
	ClsMax 41	-17790.0	3004.9	-209.2	-46.7
	ClsMed 41	-17790.0	3004.9	-209.2	-22.4

- Pilastro: 556/656 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
556	2	-5361.3	-4177.6	17.0	1.00	1.00	0.30
656	1	-5857.1	2836.5	-108.7	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	1.18	5364.2	9240.4	3071.8	16321.2	ø 8/20.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

556	Ft. 37	-3954.8	-3075.6	13.6	897.0
	Fc. 36	-4707.8	-3048.4	15.0	-370.8
	ClsMax 37	-3954.8	-3075.6	13.6	-42.4
	ClsMed 37	-3954.8	-3075.6	13.6	-21.1
656	Ft. 36	-4220.3	2006.7	-78.8	538.8
	Fc. 36	-4220.3	2006.7	-78.8	-264.2
	ClsMax 36	-4220.3	2006.7	-78.8	-28.9
	ClsMed 36	-4220.3	2006.7	-78.8	-14.0

Combinazioni Frequenti

556	Ft. 39	-3133.5	-2788.5	9.4	828.5
	Fc. 39	-3133.5	-2788.5	9.4	-326.6
	ClsMax 39	-3133.5	-2788.5	9.4	-38.3
	ClsMed 39	-3133.5	-2788.5	9.4	-19.1
656	Ft. 40	-2924.5	1143.7	-67.7	292.7
	Fc. 40	-2924.5	1143.7	-67.7	-158.3
	ClsMax 40	-2924.5	1143.7	-67.7	-16.9
	ClsMed 40	-2924.5	1143.7	-67.7	-8.1

Combinazioni Quasi Permanenti

556	Ft. 41	-3110.8	-2683.7	8.5	794.0
	Fc. 41	-3110.8	-2683.7	8.5	-315.2
	ClsMax 41	-3110.8	-2683.7	8.5	-36.8
	ClsMed 41	-3110.8	-2683.7	8.5	-18.4
656	Ft. 41	-2623.3	930.8	-67.1	231.7
	Fc. 41	-2623.3	930.8	-67.1	-132.5
	ClsMax 41	-2623.3	930.8	-67.1	-13.9
	ClsMed 41	-2623.3	930.8	-67.1	-6.6

- Pilastro: 57/157 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
57	22	-76932.3	-12487.9	9146.5	6.27	5.49	0.87
157	22	-75713.5	12487.9	9146.5	4.11	14.52	0.88

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11531.8	27721.3	7622.7	48963.7	ø 12/15.0'
0.51	2.57	11531.8	12320.6	7622.7	21761.7	ø 8/15.0'
2.57	3.08	11531.8	27721.3	7622.7	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

57	Ft. 38	-84851.3	-1317.1	59.7	-563.3
	Fc. 36	-89407.5	-1442.0	64.4	-917.1
	ClsMax 36	-89407.5	-1442.0	64.4	-65.5
	ClsMed 36	-89407.5	-1442.0	64.4	-50.2
157	Ft. 38	-83632.5	2671.2	4.4	-407.4
	Fc. 36	-88188.7	2924.7	4.7	-1066.4
	ClsMax 36	-88188.7	2924.7	4.7	-79.8
	ClsMed 36	-88188.7	2924.7	4.7	-49.5

Combinazioni Frequenti

57	Ft. 40	-82125.1	-1275.2	57.1	-545.2
	Fc. 39	-83341.9	-1316.8	58.4	-851.7
	ClsMax 39	-83341.9	-1316.8	58.4	-60.8
	ClsMed 39	-83341.9	-1316.8	58.4	-46.7
157	Ft. 40	-80906.3	2586.2	4.2	-393.9
	Fc. 39	-82123.2	2670.6	4.4	-987.2
	ClsMax 39	-82123.2	2670.6	4.4	-73.7
	ClsMed 39	-82123.2	2670.6	4.4	-46.1

Combinazioni Quasi Permanenti

57	Ft. 41	-81823.2	-1275.1	56.8	-542.7
	Fc. 41	-81823.2	-1275.1	56.8	-834.2
	ClsMax 41	-81823.2	-1275.1	56.8	-59.5
	ClsMed 41	-81823.2	-1275.1	56.8	-45.9
157	Ft. 41	-80604.5	2586.1	4.2	-391.4
	Fc. 41	-80604.5	2586.1	4.2	-965.1
	ClsMax 41	-80604.5	2586.1	4.2	-72.0
	ClsMed 41	-80604.5	2586.1	4.2	-45.2

- Pilastro: 157/257 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 0φ20 x 2 H >

Staffe: ø 12/15.0' x 62.2+ø 8/15.0' x 248.7+ø 12/15.0' x 62.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
157	20	-64641.8	-9971.9	5785.1	4.32	2.82	0.64
257	30	-60020.5	11202.2	-5807.7	7.47	2.30	0.74

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9425.0	27721.3	5066.0	48963.7	ø 12/15.0'
0.79	3.28	9425.0	12320.6	5066.0	21761.7	ø 8/15.0'
3.28	3.90	9425.0	27721.3	5066.0	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

157	Ft. 37	-72138.9	-3437.6	98.6	-218.3
	Fc. 36	-72893.3	-3438.1	99.6	-1002.1
	ClsMax 36	-72893.3	-3438.1	99.6	-77.1
	ClsMed 36	-72893.3	-3438.1	99.6	-40.9
257	Ft. 37	-70612.7	3360.4	-51.5	-217.8
	Fc. 36	-71367.1	3361.0	-51.9	-976.9
	ClsMax 36	-71367.1	3361.0	-51.9	-75.2
	ClsMed 36	-71367.1	3361.0	-51.9	-40.0

Combinazioni Frequenti

157	Ft. 39	-67711.5	-3136.6	89.6	-215.1
	Fc. 39	-67711.5	-3136.6	89.6	-924.3
	ClsMax 39	-67711.5	-3136.6	89.6	-71.0
	ClsMed 39	-67711.5	-3136.6	89.6	-38.0
257	Ft. 39	-66185.2	3063.7	-47.0	-213.7
	Fc. 39	-66185.2	3063.7	-47.0	-900.0
	ClsMax 39	-66185.2	3063.7	-47.0	-69.1
	ClsMed 39	-66185.2	3063.7	-47.0	-37.1

Combinazioni Quasi Permanenti

157	Ft. 41	-66487.1	-3036.5	86.9	-216.2
	Fc. 41	-66487.1	-3036.5	86.9	-902.7
	ClsMax 41	-66487.1	-3036.5	86.9	-69.3
	ClsMed 41	-66487.1	-3036.5	86.9	-37.3
257	Ft. 41	-64960.8	2965.0	-45.7	-214.5
	Fc. 41	-64960.8	2965.0	-45.7	-878.7
	ClsMax 41	-64960.8	2965.0	-45.7	-67.4
	ClsMed 41	-64960.8	2965.0	-45.7	-36.4

- Pilastro: 257/357 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
257	30	-47179.5	-11257.5	6821.7	13.18	1.00	0.67
357	30	-45660.8	11229.9	-7932.5	12.19	1.37	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	10200.0	27721.3	6480.1	48963.7	$\phi 12/15.0'$
0.79	3.26	10200.0	12320.6	6480.1	21761.7	$\phi 8/15.0'$
3.26	3.88	10200.0	27721.3	6480.1	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
257	Ft. 37	-55225.1	-3315.6	145.7	-89.5
	Fc. 36	-55978.7	-3316.6	147.1	-783.6
	ClsMax 36	-55978.7	-3316.6	147.1	-61.9
	ClsMed 36	-55978.7	-3316.6	147.1	-30.5
357	Ft. 37	-53706.3	3326.9	-108.4	-77.3
	Fc. 36	-54460.0	3328.3	-109.3	-770.5
	ClsMax 36	-54460.0	3328.3	-109.3	-61.1
	ClsMed 36	-54460.0	3328.3	-109.3	-30.2
Combinazioni Frequenti					
257	Ft. 39	-51694.9	-3018.5	132.7	-93.8
	Fc. 39	-51694.9	-3018.5	132.7	-718.7
	ClsMax 39	-51694.9	-3018.5	132.7	-56.7
	ClsMed 39	-51694.9	-3018.5	132.7	-28.0
357	Ft. 39	-50176.2	3027.4	-99.0	-82.1
	Fc. 39	-50176.2	3027.4	-99.0	-705.6
	ClsMax 39	-50176.2	3027.4	-99.0	-55.8
	ClsMed 39	-50176.2	3027.4	-99.0	-27.6
Combinazioni Quasi Permanenti					
257	Ft. 41	-50769.4	-2919.9	128.8	-97.1
	Fc. 41	-50769.4	-2919.9	128.8	-701.1
	ClsMax 41	-50769.4	-2919.9	128.8	-55.2
	ClsMed 41	-50769.4	-2919.9	128.8	-27.2
357	Ft. 41	-49250.7	2928.0	-96.1	-85.7
	Fc. 41	-49250.7	2928.0	-96.1	-688.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-49250.7	2928.0	-96.1	-54.4
	ClsMed 41	-49250.7	2928.0	-96.1	-26.9

- Pilastro: 357/457 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ϕ 24 Af=27.14 [cm²] < 1 ϕ 24 x 4 V + 1 ϕ 24 x 2 B + 0 ϕ 12 x 2 H >

Staffe: ϕ 12/15.0' x 61.8+ ϕ 8/15.0' x 247.3+ ϕ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
357	30	-32922.7	-11229.9	7932.5	9.57	1.38	0.74
457	30	-31403.9	11229.9	-7932.5	10.42	1.38	0.74

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9176.8	27721.3	6482.3	48963.7	ϕ 12/15.0'
0.79	3.26	9176.8	12320.6	6482.3	21761.7	ϕ 8/15.0'
3.26	3.88	9176.8	27721.3	6482.3	48963.7	ϕ 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
357	Ft. 37	-38312.3	-3345.2	162.5	111.0
	Fc. 36	-39064.9	-3346.0	164.5	-670.0
	ClsMax 36	-39064.9	-3346.0	164.5	-55.5
	ClsMed 36	-39064.9	-3346.0	164.5	-27.2
457	Ft. 37	-36793.5	3343.3	-133.3	131.7
	Fc. 36	-37546.1	3343.2	-134.5	-657.4
	ClsMax 36	-37546.1	3343.2	-134.5	-54.8
	ClsMed 36	-37546.1	3343.2	-134.5	-26.9
Combinazioni Frequenti					
357	Ft. 39	-35683.9	-3041.2	147.9	88.2
	Fc. 39	-35683.9	-3041.2	147.9	-610.0
	ClsMax 39	-35683.9	-3041.2	147.9	-50.5
	ClsMed 39	-35683.9	-3041.2	147.9	-24.7
457	Ft. 39	-34165.1	3038.2	-121.5	108.2
	Fc. 39	-34165.1	3038.2	-121.5	-597.6
	ClsMax 39	-34165.1	3038.2	-121.5	-49.8
	ClsMed 39	-34165.1	3038.2	-121.5	-24.5
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

357	Ft. 41	-35058.6	-2940.2	143.7	77.2
	Fc. 41	-35058.6	-2940.2	143.7	-593.4
	ClsMax 41	-35058.6	-2940.2	143.7	-49.0
	ClsMed 41	-35058.6	-2940.2	143.7	-24.0
457	Ft. 41	-33539.9	2936.4	-118.0	96.6
	Fc. 41	-33539.9	2936.4	-118.0	-581.0
	ClsMax 41	-33539.9	2936.4	-118.0	-48.3
	ClsMed 41	-33539.9	2936.4	-118.0	-23.7

- Pilastro: 457/557 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

Staffe: ø 12/15.0' x 61.8+ø 8/15.0' x 247.3+ø 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
457	29	-18474.3	-11229.9	7932.5	5.50	2.86	0.81
557	17	-18316.2	4504.6	6055.3	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8940.1	27721.3	8896.2	48963.7	ø 12/15.0'
0.79	3.26	8940.1	12320.6	8896.2	21761.7	ø 8/15.0'
3.26	3.88	8940.1	27721.3	8896.2	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
457	Ft. 37	-21371.4	-3381.4	197.0	478.3
	Fc. 36	-22121.8	-3387.4	200.2	-572.7
	ClsMax 36	-22121.8	-3387.4	200.2	-52.6
	ClsMed 36	-22121.8	-3387.4	200.2	-25.4
557	Ft. 37	-19852.7	3418.4	-198.3	531.4
	Fc. 36	-20603.1	3431.8	-200.7	-567.8
	ClsMax 36	-20603.1	3431.8	-200.7	-53.0
	ClsMed 36	-20603.1	3431.8	-200.7	-25.6
Combinazioni Frequenti					
457	Ft. 39	-19649.9	-3071.7	179.4	428.2
	Fc. 39	-19649.9	-3071.7	179.4	-516.4
	ClsMax 39	-19649.9	-3071.7	179.4	-47.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-19649.9	-3071.7	179.4	-23.0
557	Ft. 39	-18131.1	3105.8	-180.8	480.3
	Fc. 39	-18131.1	3105.8	-180.8	-510.2
	ClsMax 39	-18131.1	3105.8	-180.8	-47.9
	ClsMed 39	-18131.1	3105.8	-180.8	-23.1

Combinazioni Quasi Permanenti

457	Ft. 41	-19326.1	-2970.6	174.6	405.6
	Fc. 41	-19326.1	-2970.6	174.6	-501.7
	ClsMax 41	-19326.1	-2970.6	174.6	-46.1
	ClsMed 41	-19326.1	-2970.6	174.6	-22.3
557	Ft. 41	-17807.4	3006.0	-175.8	457.8
	Fc. 41	-17807.4	3006.0	-175.8	-495.7
	ClsMax 41	-17807.4	3006.0	-175.8	-46.4
	ClsMed 41	-17807.4	3006.0	-175.8	-22.4

- Pilastro: 557/657 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
557	2	-5370.0	-4166.0	160.4	1.00	1.00	0.30
657	1	-5866.1	2827.8	-155.9	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5347.6	9240.4	4263.2	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
557	Ft. 37	-3960.7	-3067.3	116.1	908.2
	Fc. 36	-4714.0	-3039.4	119.3	-384.0
	ClsMax 37	-3960.7	-3067.3	116.1	-43.4
	ClsMed 37	-3960.7	-3067.3	116.1	-21.1
657	Ft. 36	-4226.5	2000.5	-112.2	541.0
	Fc. 36	-4226.5	2000.5	-112.2	-268.0
	ClsMax 36	-4226.5	2000.5	-112.2	-29.2
	ClsMed 36	-4226.5	2000.5	-112.2	-14.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Frequenti

557	Ft. 39	-3139.2	-2781.2	104.4	839.1
	Fc. 39	-3139.2	-2781.2	104.4	-339.0
	ClsMax 39	-3139.2	-2781.2	104.4	-39.2
	ClsMed 39	-3139.2	-2781.2	104.4	-19.0
657	Ft. 40	-2930.2	1139.1	-98.4	295.0
	Fc. 40	-2930.2	1139.1	-98.4	-161.8
	ClsMax 40	-2930.2	1139.1	-98.4	-17.1
	ClsMed 40	-2930.2	1139.1	-98.4	-8.1

Combinazioni Quasi Permanenti

557	Ft. 41	-3116.4	-2676.6	101.6	804.3
	Fc. 41	-3116.4	-2676.6	101.6	-327.3
	ClsMax 41	-3116.4	-2676.6	101.6	-37.8
	ClsMed 41	-3116.4	-2676.6	101.6	-18.3
657	Ft. 41	-2628.9	926.5	-97.6	234.1
	Fc. 41	-2628.9	926.5	-97.6	-136.0
	ClsMax 41	-2628.9	926.5	-97.6	-14.2
	ClsMed 41	-2628.9	926.5	-97.6	-6.6

- Pilastro: 58/158 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/15.0' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
58	30	-76798.3	-12487.9	9545.9	16.25	5.38	0.88
158	30	-75579.6	12487.9	9545.9	5.58	6.95	0.89

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	11516.8	27721.3	7863.3	48963.7	$\varnothing 12/15.0'$
0.51	2.57	11516.8	12320.6	7863.3	21761.7	$\varnothing 8/15.0'$
2.57	3.08	11516.8	27721.3	7863.3	48963.7	$\varnothing 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
58	Ft. 38	-84868.1	-1293.4	76.7	-564.7
	Fc. 36	-89384.4	-1416.4	78.3	-915.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-89384.4	-1416.4	78.3	-65.3
	ClsMed 36	-89384.4	-1416.4	78.3	-50.1
158	Ft. 38	-83649.3	2623.8	-31.1	-410.7
	Fc. 36	-88165.7	2873.2	-24.4	-1062.1
	ClsMax 36	-88165.7	2873.2	-24.4	-79.4
	ClsMed 36	-88165.7	2873.2	-24.4	-49.5

Combinazioni Frequenti

58	Ft. 40	-82191.9	-1252.2	75.9	-546.9
	Fc. 39	-83404.7	-1293.1	76.3	-851.0
	ClsMax 39	-83404.7	-1293.1	76.3	-60.7
	ClsMed 39	-83404.7	-1293.1	76.3	-46.8
158	Ft. 40	-80973.1	2540.2	-35.1	-397.1
	Fc. 39	-82185.9	2623.2	-33.3	-984.8
	ClsMax 39	-82185.9	2623.2	-33.3	-73.5
	ClsMed 39	-82185.9	2623.2	-33.3	-46.1

Combinazioni Quasi Permanenti

58	Ft. 41	-81899.2	-1252.1	75.8	-544.4
	Fc. 41	-81899.2	-1252.1	75.8	-833.8
	ClsMax 41	-81899.2	-1252.1	75.8	-59.4
	ClsMed 41	-81899.2	-1252.1	75.8	-45.9
158	Ft. 41	-80680.4	2540.0	-35.5	-394.6
	Fc. 41	-80680.4	2540.0	-35.5	-963.1
	ClsMax 41	-80680.4	2540.0	-35.5	-71.8
	ClsMed 41	-80680.4	2540.0	-35.5	-45.3

- Pilastro: 158/258 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
158	30	-61945.7	-9971.9	5840.7	5.25	1.16	0.65
258	30	-60419.5	11202.2	-5807.7	5.69	2.37	0.74

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9393.5	27721.3	5128.5	48963.7	$\phi 12/15.0'$
0.79	3.28	9393.5	12320.6	5128.5	21761.7	$\phi 8/15.0'$
3.28	3.90	9393.5	27721.3	5128.5	48963.7	$\phi 12/15.0'$

- Verifiche a Presso-Flessione S.L.E.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
158	Ft. 37	-71836.5	-3381.3	67.7	-224.5
	Fc. 36	-72569.3	-3381.8	66.7	-990.5
	ClsMax 36	-72569.3	-3381.8	66.7	-76.1
	ClsMed 36	-72569.3	-3381.8	66.7	-40.7
258	Ft. 37	-70310.3	3309.0	51.0	-221.0
	Fc. 36	-71043.0	3309.7	53.3	-968.6
	ClsMax 36	-71043.0	3309.7	53.3	-74.5
	ClsMed 36	-71043.0	3309.7	53.3	-39.9
Combinazioni Frequenti					
158	Ft. 39	-67476.9	-3084.6	71.3	-220.4
	Fc. 39	-67476.9	-3084.6	71.3	-915.1
	ClsMax 39	-67476.9	-3084.6	71.3	-70.2
	ClsMed 39	-67476.9	-3084.6	71.3	-37.9
258	Ft. 39	-65950.6	3016.2	39.0	-217.7
	Fc. 39	-65950.6	3016.2	39.0	-892.1
	ClsMax 39	-65950.6	3016.2	39.0	-68.5
	ClsMed 39	-65950.6	3016.2	39.0	-37.0
Combinazioni Quasi Permanenti					
158	Ft. 41	-66268.0	-2986.0	72.1	-221.1
	Fc. 41	-66268.0	-2986.0	72.1	-894.1
	ClsMax 41	-66268.0	-2986.0	72.1	-68.5
	ClsMed 41	-66268.0	-2986.0	72.1	-37.2
258	Ft. 41	-64741.7	2918.9	35.7	-218.5
	Fc. 41	-64741.7	2918.9	35.7	-870.9
	ClsMax 41	-64741.7	2918.9	35.7	-66.8
	ClsMed 41	-64741.7	2918.9	35.7	-36.3

- Pilastro: 258/358 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
258	30	-47126.5	-11257.5	6608.5	7.02	1.00	0.66
358	30	-45607.7	11229.9	-7932.5	6.82	1.46	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	10166.3	27721.3	6511.5	48963.7	ø 12/15.0'
0.79	3.26	10166.3	12320.6	6511.5	21761.7	ø 8/15.0'
3.26	3.88	10166.3	27721.3	6511.5	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Combinazioni Rare					
258	Ft. 37	-54805.7	-3270.1	-57.3	-97.7
	Fc. 36	-55541.0	-3271.4	-59.8	-769.0
	ClsMax 36	-55541.0	-3271.4	-59.8	-60.7
	ClsMed 36	-55541.0	-3271.4	-59.8	-30.2
358	Ft. 37	-53287.0	3280.7	129.0	-77.5
	Fc. 36	-54022.2	3282.3	132.7	-764.1
	ClsMax 36	-54022.2	3282.3	132.7	-60.5
	ClsMed 36	-54022.2	3282.3	132.7	-29.9
Combinazioni Frequenti					
258	Ft. 39	-51338.2	-2976.5	-47.8	-101.7
	Fc. 39	-51338.2	-2976.5	-47.8	-705.4
	ClsMax 39	-51338.2	-2976.5	-47.8	-55.6
	ClsMed 39	-51338.2	-2976.5	-47.8	-27.7
358	Ft. 39	-49819.4	2984.7	113.6	-82.8
	Fc. 39	-49819.4	2984.7	113.6	-699.5
	ClsMax 39	-49819.4	2984.7	113.6	-55.3
	ClsMed 39	-49819.4	2984.7	113.6	-27.3
Combinazioni Quasi Permanenti					
258	Ft. 41	-50427.4	-2879.0	-45.5	-104.9
	Fc. 41	-50427.4	-2879.0	-45.5	-688.2
	ClsMax 41	-50427.4	-2879.0	-45.5	-54.2
	ClsMed 41	-50427.4	-2879.0	-45.5	-26.9
358	Ft. 41	-48908.7	2886.5	109.7	-86.5
	Fc. 41	-48908.7	2886.5	109.7	-682.0
	ClsMax 41	-48908.7	2886.5	109.7	-53.9
	ClsMed 41	-48908.7	2886.5	109.7	-26.6

- Pilastro: 358/458 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α₁₂	α₁₃	Sd/Sr
358	30	-32736.5	-11229.9	7932.5	6.18	1.49	0.74

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

458	30	-31217.7	11229.9	-7932.5	6.39	1.47	0.74
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	9156.8	27721.3	6468.2	48963.7	ø 12/15.0'
0.79	3.26	9156.8	12320.6	6468.2	21761.7	ø 8/15.0'
3.26	3.88	9156.8	27721.3	6468.2	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
358	Ft. 37	-37892.5	-3301.5	-139.1	106.4
	Fc. 36	-38631.6	-3302.7	-142.8	-660.1
	ClsMax 36	-38631.6	-3302.7	-142.8	-54.6
	ClsMed 36	-38631.6	-3302.7	-142.8	-26.8
458	Ft. 37	-36373.8	3301.8	202.1	135.9
	Fc. 36	-37112.8	3302.3	207.3	-656.1
	ClsMax 36	-37112.8	3302.3	207.3	-54.6
	ClsMed 36	-37112.8	3302.3	207.3	-26.6
Combinazioni Frequenti					
358	Ft. 39	-35314.5	-3000.7	-124.6	83.6
	Fc. 39	-35314.5	-3000.7	-124.6	-600.7
	ClsMax 39	-35314.5	-3000.7	-124.6	-49.7
	ClsMed 39	-35314.5	-3000.7	-124.6	-24.4
458	Ft. 39	-33795.7	2999.7	182.5	111.5
	Fc. 39	-33795.7	2999.7	182.5	-596.0
	ClsMax 39	-33795.7	2999.7	182.5	-49.6
	ClsMed 39	-33795.7	2999.7	182.5	-24.2
Combinazioni Quasi Permanenti					
358	Ft. 41	-34701.5	-2900.8	-121.0	72.7
	Fc. 41	-34701.5	-2900.8	-121.0	-584.4
	ClsMax 41	-34701.5	-2900.8	-121.0	-48.2
	ClsMed 41	-34701.5	-2900.8	-121.0	-23.7
458	Ft. 41	-33182.7	2899.1	177.7	99.8
	Fc. 41	-33182.7	2899.1	177.7	-579.4
	ClsMax 41	-33182.7	2899.1	177.7	-48.1
	ClsMed 41	-33182.7	2899.1	177.7	-23.4

- Pilastro: 458/558 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ø 24 Af=27.14 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 0ø12 x 2 H >

Staffe: \varnothing 12/15.0' x 61.8+ \varnothing 8/15.0' x 247.3+ \varnothing 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
458	29	-18204.5	-11229.9	7932.5	4.75	3.60	0.81
558	17	-18034.4	3878.9	5490.4	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8865.2	27721.3	8403.2	48963.7	\varnothing 12/15.0'
0.79	3.26	8865.2	12320.6	8403.2	21761.7	\varnothing 8/15.0'
3.26	3.88	8865.2	27721.3	8403.2	48963.7	\varnothing 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
458	Ft. 37	-21041.4	-3332.3	-161.4	468.2
	Fc. 36	-21785.2	-3338.0	-165.8	-560.9
	ClMax 36	-21785.2	-3338.0	-165.8	-51.6
	ClMed 36	-21785.2	-3338.0	-165.8	-25.1
558	Ft. 37	-19522.6	3357.9	151.1	516.4
	Fc. 36	-20266.5	3369.9	156.6	-553.3
	ClMax 36	-20266.5	3369.9	156.6	-51.7
	ClMed 36	-20266.5	3369.9	156.6	-25.1
Combinazioni Frequenti					
458	Ft. 39	-19351.7	-3026.8	-145.3	418.7
	Fc. 39	-19351.7	-3026.8	-145.3	-505.3
	ClMax 39	-19351.7	-3026.8	-145.3	-46.7
	ClMed 39	-19351.7	-3026.8	-145.3	-22.7
558	Ft. 39	-17832.9	3051.1	134.3	466.3
	Fc. 39	-17832.9	3051.1	134.3	-496.5
	ClMax 39	-17832.9	3051.1	134.3	-46.6
	ClMed 39	-17832.9	3051.1	134.3	-22.7
Combinazioni Quasi Permanenti					
458	Ft. 41	-19036.4	-2926.9	-141.3	396.4
	Fc. 41	-19036.4	-2926.9	-141.3	-490.9
	ClMax 41	-19036.4	-2926.9	-141.3	-45.2
	ClMed 41	-19036.4	-2926.9	-141.3	-22.0
558	Ft. 41	-17517.7	2952.8	130.6	444.1
	Fc. 41	-17517.7	2952.8	130.6	-482.4
	ClMax 41	-17517.7	2952.8	130.6	-45.2
	ClMed 41	-17517.7	2952.8	130.6	-22.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 558/658 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6 Ast/s=0.100531 < 0.08 fcd bst/fyd 0.148742

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
558	2	-5012.3	-4180.4	-405.9	1.00	1.00	0.31
658	5	-2203.7	1025.5	3985.8	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	5324.2	9240.4	6250.3	16321.2	$\phi 8/20.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
558	Ft. 37	-3708.1	-3077.5	-294.4	945.3
	Fc. 36	-4462.5	-3054.6	-301.4	-407.6
	ClsMax 37	-3708.1	-3077.5	-294.4	-45.5
	ClsMed 37	-3708.1	-3077.5	-294.4	-21.1
658	Ft. 36	-3975.0	1964.6	363.8	572.0
	Fc. 36	-3975.0	1964.6	363.8	-294.7
	ClsMax 36	-3975.0	1964.6	363.8	-31.4
	ClsMed 36	-3975.0	1964.6	363.8	-13.8
Combinazioni Frequenti					
558	Ft. 39	-2898.2	-2786.3	-265.4	871.8
	Fc. 39	-2898.2	-2786.3	-265.4	-359.1
	ClsMax 39	-2898.2	-2786.3	-265.4	-41.0
	ClsMed 39	-2898.2	-2786.3	-265.4	-19.0
658	Ft. 40	-2694.0	1119.0	333.6	328.7
	Fc. 40	-2694.0	1119.0	333.6	-187.5
	ClsMax 40	-2694.0	1119.0	333.6	-19.3
	ClsMed 40	-2694.0	1119.0	333.6	-8.0
Combinazioni Quasi Permanenti					
558	Ft. 41	-2879.7	-2681.6	-258.0	836.2
	Fc. 41	-2879.7	-2681.6	-258.0	-346.9
	ClsMax 41	-2879.7	-2681.6	-258.0	-39.5
	ClsMed 41	-2879.7	-2681.6	-258.0	-18.4
658	Ft. 41	-2392.2	911.0	331.2	269.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 41	-2392.2	911.0	331.2	-161.6
	ClsMax 41	-2392.2	911.0	331.2	-16.3
	ClsMed 41	-2392.2	911.0	331.2	-6.6

- Pilastro: 67/167 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 0φ20 x 2 H >

Staffe: ø 12/15.0' x 51.3+ø 8/15.0' x 205.3+ø 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
67	4	-17452.3	4205.4	-13801.8	1.00	1.00	0.81
167	4	-16233.6	-3893.1	12642.8	1.00	1.00	0.74

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	6176.2	27721.3	16943.7	48963.7	ø 12/15.0'
0.51	2.57	6176.2	12320.6	16943.7	21761.7	ø 8/15.0'
2.57	3.08	6176.2	27721.3	16943.7	48963.7	ø 12/15.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
67	Ft. 38	-16863.9	809.7	-2.2	-52.0
	Fc. 36	-18404.3	888.0	14.9	-254.4
	ClsMax 36	-18404.3	888.0	14.9	-19.6
	ClsMed 36	-18404.3	888.0	14.9	-10.3
167	Ft. 37	-17168.9	-1770.8	148.3	154.4
	Fc. 36	-17185.5	-1771.2	147.0	-374.7
	ClsMax 37	-17168.9	-1770.8	148.3	-31.9
	ClsMed 36	-17185.5	-1771.2	147.0	-15.3
Combinazioni Frequenti					
67	Ft. 40	-16323.9	782.7	-8.5	-50.0
	Fc. 39	-16830.7	808.6	-3.0	-231.4
	ClsMax 39	-16830.7	808.6	-3.0	-17.8
	ClsMed 39	-16830.7	808.6	-3.0	-9.4
167	Ft. 39	-15611.9	-1610.0	153.7	142.5
	Fc. 39	-15611.9	-1610.0	153.7	-342.7
	ClsMax 39	-15611.9	-1610.0	153.7	-29.1
	ClsMed 39	-15611.9	-1610.0	153.7	-13.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Quasi Permanenti

67	Ft. 41	-16317.2	782.5	-8.7	-49.9
	Fc. 41	-16317.2	782.5	-8.7	-224.7
	ClsMax 41	-16317.2	782.5	-8.7	-17.3
	ClsMed 41	-16317.2	782.5	-8.7	-9.2
167	Ft. 41	-15098.5	-1556.5	155.1	138.4
	Fc. 41	-15098.5	-1556.5	155.1	-332.1
	ClsMax 41	-15098.5	-1556.5	155.1	-28.2
	ClsMed 41	-15098.5	-1556.5	155.1	-13.4

- Pilastro: 59/159 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 12 \emptyset 20 Af=37.70 [cm²] < 2 \emptyset 20 x 4 V + 1 \emptyset 20 x 2 B + 1 \emptyset 20 x 2 H >

Staffe: \emptyset 12/10.0' x 50.1+ \emptyset 12/20.0' x 200.3+ \emptyset 12/10.0' x 50.1

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
59	4	-28184.5	-29029.2	-23166.5	28.51	1.00	1.00
159	4	-26153.2	-29029.2	17298.7	17.15	1.94	0.92

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	29385.9	73445.6	21195.8	73445.6	\emptyset 12/10.0'
0.50	2.50	29385.9	36722.8	21195.8	36722.8	\emptyset 12/20.0'
2.50	3.01	29385.9	73445.6	21195.8	73445.6	\emptyset 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
59	Ft. 38	-93002.1	1250.2	164.3	-393.2
	Fc. 36	-96409.7	1317.7	164.3	-536.6
	ClsMax 36	-96409.7	1317.7	164.3	-36.7
	ClsMed 36	-96409.7	1317.7	164.3	-31.5
159	Ft. 38	-90970.8	-2260.0	-344.9	-331.2
	Fc. 36	-94378.5	-2382.5	-344.9	-581.1
	ClsMax 36	-94378.5	-2382.5	-344.9	-40.4
	ClsMed 36	-94378.5	-2382.5	-344.9	-30.8
Combinazioni Frequenti					
59	Ft. 40	-91140.7	1226.7	164.3	-385.1
	Fc. 39	-92095.3	1249.0	164.3	-512.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 39	-92095.3	1249.0	164.3	-35.0
	ClsMed 39	-92095.3	1249.0	164.3	-30.0
159	Ft. 40	-89109.5	-2218.1	-344.9	-323.9
	Fc. 39	-90064.0	-2258.7	-344.9	-554.6
	ClsMax 39	-90064.0	-2258.7	-344.9	-38.5
	ClsMed 39	-90064.0	-2258.7	-344.9	-29.4

Combinazioni Quasi Permanenti

59	Ft. 41	-90959.4	1226.5	164.3	-384.2
	Fc. 41	-90959.4	1226.5	164.3	-505.9
	ClsMax 41	-90959.4	1226.5	164.3	-34.6
	ClsMed 41	-90959.4	1226.5	164.3	-29.7
159	Ft. 41	-88928.1	-2217.8	-344.9	-323.0
	Fc. 41	-88928.1	-2217.8	-344.9	-547.2
	ClsMax 41	-88928.1	-2217.8	-344.9	-38.0
	ClsMed 41	-88928.1	-2217.8	-344.9	-29.0

- Pilastro: 159/259 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \varnothing 20$ Af=37.70 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.7 + \varnothing 12/20.0' \times 238.7 + \varnothing 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
159	4	-26248.3	23180.5	-19538.3	16.23	1.00	0.81
259	4	-23704.6	-27998.5	18041.3	17.94	1.04	0.91

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	24025.6	73445.6	18334.8	73445.6	$\varnothing 12/10.0'$
0.84	3.23	24025.6	36722.8	18334.8	36722.8	$\varnothing 12/20.0'$
3.23	3.83	24025.6	73445.6	18334.8	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
159	Ft. 38	-77472.9	2874.6	401.2	-235.8
	Fc. 36	-80214.9	3029.6	401.2	-542.6
	ClsMax 36	-80214.9	3029.6	401.2	-38.3
	ClsMed 36	-80214.9	3029.6	401.2	-26.2
259	Ft. 38	-74929.1	-2779.9	-385.8	-228.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Fc. 36	-77671.2	-2929.4	-385.8	-525.1
	ClsMax 36	-77671.2	-2929.4	-385.8	-37.0
	ClsMed 36	-77671.2	-2929.4	-385.8	-25.3

Combinazioni Frequenti

159	Ft. 40	-75835.0	2820.0	401.2	-230.1
	Fc. 39	-76568.0	2870.9	401.2	-517.8
	ClsMax 39	-76568.0	2870.9	401.2	-36.5
	ClsMed 39	-76568.0	2870.9	401.2	-25.0
259	Ft. 40	-73291.2	-2726.6	-385.8	-222.5
	Fc. 39	-74024.3	-2775.5	-385.8	-500.5
	ClsMax 39	-74024.3	-2775.5	-385.8	-35.3
	ClsMed 39	-74024.3	-2775.5	-385.8	-24.1

Combinazioni Quasi Permanenti

159	Ft. 41	-75654.0	2819.3	401.2	-229.3
	Fc. 41	-75654.0	2819.3	401.2	-511.1
	ClsMax 41	-75654.0	2819.3	401.2	-36.0
	ClsMed 41	-75654.0	2819.3	401.2	-24.7
259	Ft. 41	-73110.3	-2725.7	-385.8	-221.6
	Fc. 41	-73110.3	-2725.7	-385.8	-493.9
	ClsMax 41	-73110.3	-2725.7	-385.8	-34.8
	ClsMed 41	-73110.3	-2725.7	-385.8	-23.8

- Pilastro: 259/359 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \varnothing 20$ Af=37.70 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
259	4	-25495.8	28136.8	-18130.4	14.09	1.18	0.91
359	4	-22964.6	-26104.9	16435.1	14.38	1.00	0.84

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	22710.2	73445.6	16646.5	73445.6	$\varnothing 12/10.0'$
0.84	3.21	22710.2	36722.8	16646.5	36722.8	$\varnothing 12/20.0'$
3.21	3.81	22710.2	73445.6	16646.5	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni Rare

259	Ft. 38	-61258.6	2881.2	374.4	-157.3
	Fc. 36	-63325.8	3035.4	374.4	-459.1
	ClsMax 36	-63325.8	3035.4	374.4	-32.7
	ClsMed 36	-63325.8	3035.4	374.4	-20.7
359	Ft. 38	-58727.3	-2903.2	-375.7	-143.9
	Fc. 36	-60794.6	-3059.1	-375.7	-447.8
	ClsMax 36	-60794.6	-3059.1	-375.7	-31.9
	ClsMed 36	-60794.6	-3059.1	-375.7	-19.8

Combinazioni Frequenti

259	Ft. 40	-59849.0	2824.8	374.4	-152.9
	Fc. 39	-60357.9	2875.0	374.4	-437.5
	ClsMax 39	-60357.9	2875.0	374.4	-31.1
	ClsMed 39	-60357.9	2875.0	374.4	-19.7
359	Ft. 40	-57317.7	-2847.0	-375.7	-139.4
	Fc. 39	-57826.6	-2898.0	-375.7	-426.2
	ClsMax 39	-57826.6	-2898.0	-375.7	-30.4
	ClsMed 39	-57826.6	-2898.0	-375.7	-18.9

Combinazioni Quasi Permanenti

259	Ft. 41	-59668.8	2823.6	374.4	-152.0
	Fc. 41	-59668.8	2823.6	374.4	-431.9
	ClsMax 41	-59668.8	2823.6	374.4	-30.7
	ClsMed 41	-59668.8	2823.6	374.4	-19.5
359	Ft. 41	-57137.6	-2846.0	-375.7	-138.6
	Fc. 41	-57137.6	-2846.0	-375.7	-420.6
	ClsMax 41	-57137.6	-2846.0	-375.7	-30.0
	ClsMed 41	-57137.6	-2846.0	-375.7	-18.6

- Pilastro: 359/459 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \varnothing 20$ Af=37.70 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
359	14	-38125.7	-26392.9	18992.4	7.70	13.55	0.83
459	4	-20323.3	-22393.4	14082.0	10.04	1.00	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	22864.2	73445.6	15134.3	73445.6	$\varnothing 12/10.0'$
0.84	3.21	22864.2	36722.8	15134.3	36722.8	$\varnothing 12/20.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.21	3.81	22864.2	73445.6	15134.3	73445.6	ø 12/10.0'
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- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

359	Ft. 37	-45886.2	3193.0	383.2	-68.0
	Fc. 36	-46333.1	3199.6	383.2	-383.5
	ClsMax 36	-46333.1	3199.6	383.2	-27.7
	ClsMed 36	-46333.1	3199.6	383.2	-15.1
459	Ft. 37	-43355.0	-3206.7	-389.7	-54.7
	Fc. 36	-43801.9	-3216.6	-389.7	-372.2
	ClsMax 36	-43801.9	-3216.6	-389.7	-27.0
	ClsMed 36	-43801.9	-3216.6	-389.7	-14.3

Combinazioni Frequenti

359	Ft. 39	-44051.7	3027.0	383.2	-66.3
	Fc. 39	-44051.7	3027.0	383.2	-364.8
	ClsMax 39	-44051.7	3027.0	383.2	-26.4
	ClsMed 39	-44051.7	3027.0	383.2	-14.4
459	Ft. 39	-41520.4	-3039.6	-389.7	-53.1
	Fc. 39	-41520.4	-3039.6	-389.7	-353.2
	ClsMax 39	-41520.4	-3039.6	-389.7	-25.6
	ClsMed 39	-41520.4	-3039.6	-389.7	-13.5

Combinazioni Quasi Permanenti

359	Ft. 41	-43589.1	2973.8	383.2	-66.4
	Fc. 41	-43589.1	2973.8	383.2	-360.2
	ClsMax 41	-43589.1	2973.8	383.2	-26.0
	ClsMed 41	-43589.1	2973.8	383.2	-14.2
459	Ft. 41	-41057.9	-2987.2	-389.7	-53.1
	Fc. 41	-41057.9	-2987.2	-389.7	-348.7
	ClsMax 41	-41057.9	-2987.2	-389.7	-25.3
	ClsMed 41	-41057.9	-2987.2	-389.7	-13.4

- Pilastro: 459/559 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 12 ø 20 Af=37.70 [cm²] < 2ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
459	14	-25042.5	-22662.3	14181.3	15.93	5.01	0.71
559	4	-14939.1	-18451.7	11055.9	7.56	1.00	0.59

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	22271.6	73445.6	13452.9	73445.6	ø 12/10.0'
0.84	3.21	22271.6	36722.8	13452.9	36722.8	ø 12/20.0'
3.21	3.80	22271.6	73445.6	13452.9	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
459	Ft. 37	-28817.1	3249.0	363.1	23.8
	Fc. 36	-29260.2	3247.5	363.1	-304.0
	ClsMax 36	-29260.2	3247.5	363.1	-22.5
	ClsMed 36	-29260.2	3247.5	363.1	-10.6
559	Ft. 37	-26285.8	-3220.1	-328.3	38.7
	Fc. 36	-26729.0	-3201.1	-328.3	-289.8
	ClsMax 36	-26729.0	-3201.1	-328.3	-21.6
	ClsMed 36	-26729.0	-3201.1	-328.3	-10.2
Combinazioni Frequenti					
459	Ft. 39	-27669.7	3081.0	363.1	21.1
	Fc. 39	-27669.7	3081.0	363.1	-288.9
	ClsMax 39	-27669.7	3081.0	363.1	-21.4
	ClsMed 39	-27669.7	3081.0	363.1	-10.0
559	Ft. 39	-25138.5	-3055.5	-328.3	36.0
	Fc. 39	-25138.5	-3055.5	-328.3	-275.9
	ClsMax 39	-25138.5	-3055.5	-328.3	-20.6
	ClsMed 39	-25138.5	-3055.5	-328.3	-9.7
Combinazioni Quasi Permanenti					
459	Ft. 41	-27435.0	3024.5	363.1	19.3
	Fc. 41	-27435.0	3024.5	363.1	-285.1
	ClsMax 41	-27435.0	3024.5	363.1	-21.1
	ClsMed 41	-27435.0	3024.5	363.1	-9.9
559	Ft. 41	-24903.7	-2994.3	-328.3	33.6
	Fc. 41	-24903.7	-2994.3	-328.3	-271.7
	ClsMax 41	-24903.7	-2994.3	-328.3	-20.2
	ClsMed 41	-24903.7	-2994.3	-328.3	-9.5

- Pilastro: 559/659 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
559	13	-9395.9	20507.0	11713.6	9.07	123.44	0.97
659	7	-6433.1	-5343.0	5564.0	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	17993.6	73445.6	17461.3	73445.6	ø 12/10.0'
0.84	3.21	17993.6	36722.8	17461.3	36722.8	ø 12/20.0'
3.21	3.80	17993.6	73445.6	17461.3	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
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Combinazioni Rare

559	Ft. 37	-11679.7	3422.2	456.6	390.5
	Fc. 36	-12111.9	3476.0	456.6	-316.9
	ClsMax 36	-12111.9	3476.0	456.6	-26.0
	ClsMed 36	-12111.9	3476.0	456.6	-11.5
659	Ft. 36	-9580.6	-3836.4	-627.7	572.1
	Fc. 36	-9580.6	-3836.4	-627.7	-353.6
	ClsMax 36	-9580.6	-3836.4	-627.7	-30.0
	ClsMed 36	-9580.6	-3836.4	-627.7	-12.7

Combinazioni Frequenti

559	Ft. 39	-11223.9	3239.1	456.6	366.4
	Fc. 39	-11223.9	3239.1	456.6	-297.9
	ClsMax 39	-11223.9	3239.1	456.6	-24.5
	ClsMed 39	-11223.9	3239.1	456.6	-10.7
659	Ft. 40	-8857.6	-3523.9	-627.7	529.0
	Fc. 40	-8857.6	-3523.9	-627.7	-329.7
	ClsMax 40	-8857.6	-3523.9	-627.7	-27.9
	ClsMed 40	-8857.6	-3523.9	-627.7	-11.7

Combinazioni Quasi Permanenti

559	Ft. 41	-11216.0	3196.0	456.6	357.6
	Fc. 41	-11216.0	3196.0	456.6	-294.6
	ClsMax 41	-11216.0	3196.0	456.6	-24.2
	ClsMed 41	-11216.0	3196.0	456.6	-10.6
659	Ft. 41	-8684.8	-3468.7	-627.7	523.0
	Fc. 41	-8684.8	-3468.7	-627.7	-325.4
	ClsMax 41	-8684.8	-3468.7	-627.7	-27.6
	ClsMed 41	-8684.8	-3468.7	-627.7	-11.5

- Pilastro: 60/160 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: 12 ø 20 Af=37.70 [cm²] < 2ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 50.1+ø 12/20.0' x 200.3+ø 12/10.0' x 50.1

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
60	25	-28184.0	-29029.2	23166.5	28.51	1.00	1.00
160	25	-26152.7	-29029.2	-17298.7	17.15	1.94	0.92

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	29385.9	73445.6	21195.8	73445.6	ø 12/10.0'
0.50	2.50	29385.9	36722.8	21195.8	36722.8	ø 12/20.0'
2.50	3.01	29385.9	73445.6	21195.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
60	Ft. 38	-93002.1	1250.2	-164.3	-393.2
	Fc. 36	-96409.7	1317.7	-164.3	-536.6
	ClsMax 36	-96409.7	1317.7	-164.3	-36.7
	ClsMed 36	-96409.7	1317.7	-164.3	-31.5
160	Ft. 38	-90970.8	-2260.0	344.9	-331.2
	Fc. 36	-94378.5	-2382.5	344.9	-581.1
	ClsMax 36	-94378.5	-2382.5	344.9	-40.4
	ClsMed 36	-94378.5	-2382.5	344.9	-30.8
Combinazioni Frequenti					
60	Ft. 40	-91140.7	1226.7	-164.3	-385.1
	Fc. 39	-92095.3	1249.0	-164.3	-512.5
	ClsMax 39	-92095.3	1249.0	-164.3	-35.0
	ClsMed 39	-92095.3	1249.0	-164.3	-30.0
160	Ft. 40	-89109.5	-2218.1	344.9	-323.9
	Fc. 39	-90064.0	-2258.7	344.9	-554.6
	ClsMax 39	-90064.0	-2258.7	344.9	-38.5
	ClsMed 39	-90064.0	-2258.7	344.9	-29.4
Combinazioni Quasi Permanenti					
60	Ft. 41	-90959.4	1226.5	-164.3	-384.2
	Fc. 41	-90959.4	1226.5	-164.3	-505.9
	ClsMax 41	-90959.4	1226.5	-164.3	-34.6
	ClsMed 41	-90959.4	1226.5	-164.3	-29.7
160	Ft. 41	-88928.1	-2217.8	344.9	-323.0
	Fc. 41	-88928.1	-2217.8	344.9	-547.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-88928.1	-2217.8	344.9	-38.0
	ClsMed 41	-88928.1	-2217.8	344.9	-29.0

- Pilastro: 160/260 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 12 ø 20 Af=37.70 [cm²] < 2ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 59.7+ø 12/20.0' x 238.7+ø 12/10.0' x 59.7

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
160	25	-26247.9	23180.5	19538.3	16.24	1.00	0.81
260	25	-23704.2	-27998.5	-18041.3	17.94	1.04	0.91

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	24025.6	73445.6	18334.8	73445.6	ø 12/10.0'
0.84	3.23	24025.6	36722.8	18334.8	36722.8	ø 12/20.0'
3.23	3.83	24025.6	73445.6	18334.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
160	Ft. 38	-77472.9	2874.6	-401.2	-235.8
	Fc. 36	-80214.9	3029.6	-401.2	-542.6
	ClsMax 36	-80214.9	3029.6	-401.2	-38.3
	ClsMed 36	-80214.9	3029.6	-401.2	-26.2
260	Ft. 38	-74929.1	-2779.9	385.8	-228.1
	Fc. 36	-77671.2	-2929.4	385.8	-525.1
	ClsMax 36	-77671.2	-2929.4	385.8	-37.0
	ClsMed 36	-77671.2	-2929.4	385.8	-25.3
Combinazioni Frequenti					
160	Ft. 40	-75835.0	2820.0	-401.2	-230.1
	Fc. 39	-76568.0	2870.9	-401.2	-517.8
	ClsMax 39	-76568.0	2870.9	-401.2	-36.5
	ClsMed 39	-76568.0	2870.9	-401.2	-25.0
260	Ft. 40	-73291.2	-2726.6	385.8	-222.5
	Fc. 39	-74024.3	-2775.5	385.8	-500.5
	ClsMax 39	-74024.3	-2775.5	385.8	-35.3
	ClsMed 39	-74024.3	-2775.5	385.8	-24.1
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

160	Ft. 41	-75654.0	2819.3	-401.2	-229.3
	Fc. 41	-75654.0	2819.3	-401.2	-511.1
	ClsMax 41	-75654.0	2819.3	-401.2	-36.0
	ClsMed 41	-75654.0	2819.3	-401.2	-24.7
260	Ft. 41	-73110.3	-2725.7	385.8	-221.6
	Fc. 41	-73110.3	-2725.7	385.8	-493.9
	ClsMax 41	-73110.3	-2725.7	385.8	-34.8
	ClsMed 41	-73110.3	-2725.7	385.8	-23.8

- Pilastro: 260/360 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 12 ø 20 Af=37.70 [cm²] < 2ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
260	25	-25495.6	28136.8	18130.4	14.09	1.18	0.91
360	25	-22964.3	-26104.9	-16435.1	14.38	1.00	0.84

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	22710.2	73445.6	16646.6	73445.6	ø 12/10.0'
0.84	3.21	22710.2	36722.8	16646.6	36722.8	ø 12/20.0'
3.21	3.81	22710.2	73445.6	16646.6	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
260	Ft. 38	-61258.6	2881.2	-374.4	-157.3
	Fc. 36	-63325.8	3035.4	-374.4	-459.1
	ClsMax 36	-63325.8	3035.4	-374.4	-32.7
	ClsMed 36	-63325.8	3035.4	-374.4	-20.7
360	Ft. 38	-58727.3	-2903.2	375.7	-143.9
	Fc. 36	-60794.6	-3059.1	375.7	-447.8
	ClsMax 36	-60794.6	-3059.1	375.7	-31.9
	ClsMed 36	-60794.6	-3059.1	375.7	-19.8
Combinazioni Frequenti					
260	Ft. 40	-59849.0	2824.8	-374.4	-152.9
	Fc. 39	-60357.9	2875.0	-374.4	-437.5
	ClsMax 39	-60357.9	2875.0	-374.4	-31.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-60357.9	2875.0	-374.4	-19.7
360	Ft. 40	-57317.7	-2847.0	375.7	-139.4
	Fc. 39	-57826.6	-2898.0	375.7	-426.2
	ClsMax 39	-57826.6	-2898.0	375.7	-30.4
	ClsMed 39	-57826.6	-2898.0	375.7	-18.9

Combinazioni Quasi Permanenti

260	Ft. 41	-59668.8	2823.6	-374.4	-152.0
	Fc. 41	-59668.8	2823.6	-374.4	-431.9
	ClsMax 41	-59668.8	2823.6	-374.4	-30.7
	ClsMed 41	-59668.8	2823.6	-374.4	-19.5
360	Ft. 41	-57137.6	-2846.0	375.7	-138.6
	Fc. 41	-57137.6	-2846.0	375.7	-420.6
	ClsMax 41	-57137.6	-2846.0	375.7	-30.0
	ClsMed 41	-57137.6	-2846.0	375.7	-18.6

- Pilastro: 360/460 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 12 ϕ 20 Af=37.70 [cm²] < 2 ϕ 20 x 4 V + 1 ϕ 20 x 2 B + 1 ϕ 20 x 2 H >

Staffe: ϕ 12/10.0' x 59.3 + ϕ 12/20.0' x 237.3 + ϕ 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
360	17	-38125.7	-26392.9	-18992.4	7.70	13.55	0.83
460	25	-20323.1	-22393.4	-14082.0	10.04	1.00	0.72

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	22864.2	73445.6	15134.4	73445.6	ϕ 12/10.0'
0.84	3.21	22864.2	36722.8	15134.4	36722.8	ϕ 12/20.0'
3.21	3.81	22864.2	73445.6	15134.4	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
360	Ft. 37	-45886.2	3193.0	-383.2	-68.0
	Fc. 36	-46333.1	3199.6	-383.2	-383.5
	ClsMax 36	-46333.1	3199.6	-383.2	-27.7
	ClsMed 36	-46333.1	3199.6	-383.2	-15.1
460	Ft. 37	-43355.0	-3206.7	389.7	-54.7
	Fc. 36	-43801.9	-3216.6	389.7	-372.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-43801.9	-3216.6	389.7	-27.0
	ClsMed 36	-43801.9	-3216.6	389.7	-14.3

Combinazioni Frequenti

360	Ft. 39	-44051.7	3027.0	-383.2	-66.3
	Fc. 39	-44051.7	3027.0	-383.2	-364.8
	ClsMax 39	-44051.7	3027.0	-383.2	-26.4
	ClsMed 39	-44051.7	3027.0	-383.2	-14.4
460	Ft. 39	-41520.4	-3039.6	389.7	-53.1
	Fc. 39	-41520.4	-3039.6	389.7	-353.2
	ClsMax 39	-41520.4	-3039.6	389.7	-25.6
	ClsMed 39	-41520.4	-3039.6	389.7	-13.5

Combinazioni Quasi Permanenti

360	Ft. 41	-43589.1	2973.8	-383.2	-66.4
	Fc. 41	-43589.1	2973.8	-383.2	-360.2
	ClsMax 41	-43589.1	2973.8	-383.2	-26.0
	ClsMed 41	-43589.1	2973.8	-383.2	-14.2
460	Ft. 41	-41057.9	-2987.2	389.7	-53.1
	Fc. 41	-41057.9	-2987.2	389.7	-348.7
	ClsMax 41	-41057.9	-2987.2	389.7	-25.3
	ClsMed 41	-41057.9	-2987.2	389.7	-13.4

- Pilastro: 460/560 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \text{ } \phi \text{ } 20 \text{ Af}=37.70 \text{ [cm}^2\text{]} < 2\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
460	17	-25042.4	-22662.3	-14181.3	15.93	5.01	0.71
560	25	-14939.1	-18451.7	-11055.9	7.56	1.00	0.59

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	22271.6	73445.6	13452.9	73445.6	$\phi 12/10.0'$
0.84	3.21	22271.6	36722.8	13452.9	36722.8	$\phi 12/20.0'$
3.21	3.80	22271.6	73445.6	13452.9	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

460	Ft. 37	-28817.1	3249.0	-363.1	23.8
	Fc. 36	-29260.2	3247.5	-363.1	-304.0
	ClsMax 36	-29260.2	3247.5	-363.1	-22.5
	ClsMed 36	-29260.2	3247.5	-363.1	-10.6
560	Ft. 37	-26285.8	-3220.1	328.3	38.7
	Fc. 36	-26729.0	-3201.1	328.3	-289.8
	ClsMax 36	-26729.0	-3201.1	328.3	-21.6
	ClsMed 36	-26729.0	-3201.1	328.3	-10.2

Combinazioni Frequenti

460	Ft. 39	-27669.7	3081.0	-363.1	21.1
	Fc. 39	-27669.7	3081.0	-363.1	-288.9
	ClsMax 39	-27669.7	3081.0	-363.1	-21.4
	ClsMed 39	-27669.7	3081.0	-363.1	-10.0
560	Ft. 39	-25138.5	-3055.5	328.3	36.0
	Fc. 39	-25138.5	-3055.5	328.3	-275.9
	ClsMax 39	-25138.5	-3055.5	328.3	-20.6
	ClsMed 39	-25138.5	-3055.5	328.3	-9.7

Combinazioni Quasi Permanenti

460	Ft. 41	-27435.0	3024.5	-363.1	19.3
	Fc. 41	-27435.0	3024.5	-363.1	-285.1
	ClsMax 41	-27435.0	3024.5	-363.1	-21.1
	ClsMed 41	-27435.0	3024.5	-363.1	-9.9
560	Ft. 41	-24903.7	-2994.3	328.3	33.6
	Fc. 41	-24903.7	-2994.3	328.3	-271.7
	ClsMax 41	-24903.7	-2994.3	328.3	-20.2
	ClsMed 41	-24903.7	-2994.3	328.3	-9.5

- Pilastro: 560/660 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0'$ x 59.3+ $\phi 12/20.0'$ x 237.3+ $\phi 12/10.0'$ x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
560	18	-9395.9	20506.9	-11713.6	9.07	123.44	0.97
660	26	-6433.1	-5342.9	-5564.0	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	17993.6	73445.6	17461.3	73445.6	$\phi 12/10.0'$
0.84	3.21	17993.6	36722.8	17461.3	36722.8	$\phi 12/20.0'$
3.21	3.80	17993.6	73445.6	17461.3	73445.6	$\phi 12/10.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
560	Ft. 37	-11679.7	3422.2	-456.6	390.5
	Fc. 36	-12111.9	3476.0	-456.6	-316.9
	ClsMax 36	-12111.9	3476.0	-456.6	-26.0
	ClsMed 36	-12111.9	3476.0	-456.6	-11.5
660	Ft. 36	-9580.6	-3836.4	627.7	572.1
	Fc. 36	-9580.6	-3836.4	627.7	-353.6
	ClsMax 36	-9580.6	-3836.4	627.7	-30.0
	ClsMed 36	-9580.6	-3836.4	627.7	-12.7
Combinazioni Frequenti					
560	Ft. 39	-11223.9	3239.1	-456.6	366.4
	Fc. 39	-11223.9	3239.1	-456.6	-297.9
	ClsMax 39	-11223.9	3239.1	-456.6	-24.5
	ClsMed 39	-11223.9	3239.1	-456.6	-10.7
660	Ft. 40	-8857.6	-3523.9	627.7	529.0
	Fc. 40	-8857.6	-3523.9	627.7	-329.7
	ClsMax 40	-8857.6	-3523.9	627.7	-27.9
	ClsMed 40	-8857.6	-3523.9	627.7	-11.7
Combinazioni Quasi Permanenti					
560	Ft. 41	-11216.0	3196.0	-456.6	357.6
	Fc. 41	-11216.0	3196.0	-456.6	-294.6
	ClsMax 41	-11216.0	3196.0	-456.6	-24.2
	ClsMed 41	-11216.0	3196.0	-456.6	-10.6
660	Ft. 41	-8684.8	-3468.7	627.7	523.0
	Fc. 41	-8684.8	-3468.7	627.7	-325.4
	ClsMax 41	-8684.8	-3468.7	627.7	-27.6
	ClsMed 41	-8684.8	-3468.7	627.7	-11.5

- Pilastro: 61/161 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 50.1 + \varnothing 12/20.0' \times 200.3 + \varnothing 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
61	6	-72819.9	24289.3	-17520.6	2.79	1.00	0.88
161	6	-70788.6	-24289.3	17298.7	4.82	2.65	0.88

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	23222.9	73445.6	19587.5	73445.6	ø 12/10.0'
0.50	2.50	23222.9	36722.8	19587.5	36722.8	ø 12/20.0'
2.50	3.01	23222.9	73445.6	19587.5	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
61	Ft. 38	-122281.0	173.8	164.3	-621.2
	Fc. 36	-127097.7	182.6	164.3	-679.4
	ClsMax 36	-127097.7	182.6	164.3	-45.5
	ClsMed 36	-127097.7	182.6	164.3	-44.2
161	Ft. 38	-120249.8	-1.0	-344.9	-610.2
	Fc. 36	-125066.4	-0.3	-344.9	-668.8
	ClsMax 36	-125066.4	-0.3	-344.9	-44.8
	ClsMed 36	-125066.4	-0.3	-344.9	-43.5
Combinazioni Frequenti					
61	Ft. 40	-119645.3	169.8	164.3	-607.6
	Fc. 39	-120993.3	172.4	164.3	-647.1
	ClsMax 39	-120993.3	172.4	164.3	-43.4
	ClsMed 39	-120993.3	172.4	164.3	-42.1
161	Ft. 40	-117614.0	-0.0	-344.9	-596.5
	Fc. 39	-118962.0	0.6	-344.9	-636.9
	ClsMax 39	-118962.0	0.6	-344.9	-42.7
	ClsMed 39	-118962.0	0.6	-344.9	-41.3
Combinazioni Quasi Permanenti					
61	Ft. 41	-119387.7	169.5	164.3	-606.3
	Fc. 41	-119387.7	169.5	164.3	-638.6
	ClsMax 41	-119387.7	169.5	164.3	-42.8
	ClsMed 41	-119387.7	169.5	164.3	-41.5
161	Ft. 41	-117356.5	0.3	-344.9	-595.2
	Fc. 41	-117356.5	0.3	-344.9	-628.6
	ClsMax 41	-117356.5	0.3	-344.9	-42.1
	ClsMed 41	-117356.5	0.3	-344.9	-40.8

- Pilastro: 161/261 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.7 + \phi 12/20.0' \times 238.7 + \phi 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
161	6	-61776.2	19395.6	-14717.6	2.13	1.00	0.70
261	6	-59232.5	-23787.4	18041.3	2.72	1.39	0.93

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	18784.7	73445.6	16430.9	73445.6	Ø 12/10.0'
0.84	3.23	18784.7	36722.8	16430.9	36722.8	Ø 12/20.0'
3.23	3.83	18784.7	73445.6	16430.9	73445.6	Ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
161	Ft. 38	-101101.3	265.6	401.2	-494.9
	Fc. 36	-104942.7	278.2	401.2	-580.0
	ClMax 36	-104942.7	278.2	401.2	-39.1
	ClMed 36	-104942.7	278.2	401.2	-36.5
261	Ft. 38	-98557.6	-291.3	-385.8	-481.1
	Fc. 36	-102398.9	-305.2	-385.8	-567.3
	ClMax 36	-102398.9	-305.2	-385.8	-38.3
	ClMed 36	-102398.9	-305.2	-385.8	-35.6
Combinazioni Frequenti					
161	Ft. 40	-98789.5	258.4	401.2	-483.2
	Fc. 39	-99812.1	261.8	401.2	-552.5
	ClMax 39	-99812.1	261.8	401.2	-37.3
	ClMed 39	-99812.1	261.8	401.2	-34.7
261	Ft. 40	-96245.7	-283.4	-385.8	-469.4
	Fc. 39	-97268.3	-287.2	-385.8	-539.7
	ClMax 39	-97268.3	-287.2	-385.8	-36.4
	ClMed 39	-97268.3	-287.2	-385.8	-33.8
Combinazioni Quasi Permanenti					
161	Ft. 41	-98531.6	257.6	401.2	-481.9
	Fc. 41	-98531.6	257.6	401.2	-545.6
	ClMax 41	-98531.6	257.6	401.2	-36.8
	ClMed 41	-98531.6	257.6	401.2	-34.2
261	Ft. 41	-95987.9	-282.6	-385.8	-468.1
	Fc. 41	-95987.9	-282.6	-385.8	-532.8
	ClMax 41	-95987.9	-282.6	-385.8	-36.0
	ClMed 41	-95987.9	-282.6	-385.8	-33.4

- Pilastro: 261/361 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4$ V + $1\varnothing 20 \times 2$ B + $1\varnothing 20 \times 2$ H >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
261	6	-51769.4	23904.9	-18130.4	2.91	1.56	0.97
361	6	-49238.2	-21842.4	15556.1	2.54	1.26	0.85

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	17444.7	73445.6	15491.3	73445.6	$\varnothing 12/10.0'$
0.84	3.21	17444.7	36722.8	15491.3	36722.8	$\varnothing 12/20.0'$
3.21	3.81	17444.7	73445.6	15491.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
261	Ft. 38	-79573.6	482.3	374.4	-373.4
	Fc. 36	-82446.3	504.9	374.4	-472.4
	ClsMax 36	-82446.3	504.9	374.4	-32.1
	ClsMed 36	-82446.3	504.9	374.4	-28.7
361	Ft. 38	-77042.4	-490.7	-375.7	-359.8
	Fc. 36	-79915.1	-513.3	-375.7	-459.7
	ClsMax 36	-79915.1	-513.3	-375.7	-31.2
	ClsMed 36	-79915.1	-513.3	-375.7	-27.8
Combinazioni Frequenti					
261	Ft. 40	-77582.0	468.8	374.4	-363.7
	Fc. 39	-78281.1	474.8	374.4	-449.2
	ClsMax 39	-78281.1	474.8	374.4	-30.5
	ClsMed 39	-78281.1	474.8	374.4	-27.2
361	Ft. 40	-75050.8	-476.4	-375.7	-350.1
	Fc. 39	-75749.8	-482.3	-375.7	-436.4
	ClsMax 39	-75749.8	-482.3	-375.7	-29.7
	ClsMed 39	-75749.8	-482.3	-375.7	-26.3
Combinazioni Quasi Permanenti					
261	Ft. 41	-77323.5	467.3	374.4	-362.4
	Fc. 41	-77323.5	467.3	374.4	-443.9
	ClsMax 41	-77323.5	467.3	374.4	-30.2
	ClsMed 41	-77323.5	467.3	374.4	-26.9
361	Ft. 41	-74792.2	-474.8	-375.7	-348.8
	Fc. 41	-74792.2	-474.8	-375.7	-431.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-74792.2	-474.8	-375.7	-29.3
	ClsMed 41	-74792.2	-474.8	-375.7	-26.0

- Pilastro: 361/461 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
361	5	-40551.8	-21842.4	-15556.1	21.28	1.69	0.90
461	5	-38020.5	18601.6	11034.2	14.75	1.07	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	17108.7	73445.6	13747.5	73445.6	ø 12/10.0'
0.84	3.21	17108.7	36722.8	13747.5	36722.8	ø 12/20.0'
3.21	3.81	17108.7	73445.6	13747.5	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
361	Ft. 38	-58144.7	607.6	383.2	-255.2
	Fc. 36	-60052.5	635.8	383.2	-362.4
	ClsMax 36	-60052.5	635.8	383.2	-24.8
	ClsMed 36	-60052.5	635.8	383.2	-20.9
461	Ft. 38	-55613.5	-619.3	-389.7	-241.2
	Fc. 36	-57521.2	-649.0	-389.7	-350.1
	ClsMax 36	-57521.2	-649.0	-389.7	-24.0
	ClsMed 36	-57521.2	-649.0	-389.7	-20.0
Combinazioni Frequenti					
361	Ft. 40	-56470.4	590.2	383.2	-247.3
	Fc. 39	-56846.7	597.6	383.2	-343.8
	ClsMax 39	-56846.7	597.6	383.2	-23.6
	ClsMed 39	-56846.7	597.6	383.2	-19.8
461	Ft. 40	-53939.1	-602.8	-389.7	-233.2
	Fc. 39	-54315.5	-611.1	-389.7	-331.6
	ClsMax 39	-54315.5	-611.1	-389.7	-22.8
	ClsMed 39	-54315.5	-611.1	-389.7	-18.9
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

361	Ft. 41	-56210.8	588.2	383.2	-246.1
	Fc. 41	-56210.8	588.2	383.2	-340.1
	ClsMax 41	-56210.8	588.2	383.2	-23.3
	ClsMed 41	-56210.8	588.2	383.2	-19.5
461	Ft. 41	-53679.5	-601.2	-389.7	-231.9
	Fc. 41	-53679.5	-601.2	-389.7	-327.8
	ClsMax 41	-53679.5	-601.2	-389.7	-22.5
	ClsMed 41	-53679.5	-601.2	-389.7	-18.7

- Pilastro: 461/561 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
461	18	-36732.0	-18601.6	14181.3	2.11	7.73	0.78
561	5	-24955.1	16748.3	8292.1	28.90	1.00	0.66

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	16542.2	73445.6	11212.3	73445.6	ø 12/10.0'
0.84	3.21	16542.2	36722.8	11212.3	36722.8	ø 12/20.0'
3.21	3.80	16542.2	73445.6	11212.3	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
461	Ft. 38	-36776.5	693.4	363.1	-140.6
	Fc. 36	-37722.5	722.9	363.1	-249.2
	ClsMax 36	-37722.5	722.9	363.1	-17.3
	ClsMed 36	-37722.5	722.9	363.1	-13.1
561	Ft. 38	-34245.3	-699.6	-328.3	-128.8
	Fc. 36	-35191.2	-726.0	-328.3	-234.5
	ClsMax 36	-35191.2	-726.0	-328.3	-16.3
	ClsMed 36	-35191.2	-726.0	-328.3	-12.2
Combinazioni Frequenti					
461	Ft. 39	-35472.8	676.6	363.1	-134.7
	Fc. 39	-35472.8	676.6	363.1	-235.2
	ClsMax 39	-35472.8	676.6	363.1	-16.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-35472.8	676.6	363.1	-12.3
561	Ft. 40	-32887.0	-671.7	-328.3	-123.1
	Fc. 39	-32941.5	-675.7	-328.3	-220.3
	ClsMax 39	-32941.5	-675.7	-328.3	-15.4
	ClsMed 39	-32941.5	-675.7	-328.3	-11.4

Combinazioni Quasi Permanenti

461	Ft. 41	-35157.5	666.7	363.1	-133.5
	Fc. 41	-35157.5	666.7	363.1	-233.1
	ClsMax 41	-35157.5	666.7	363.1	-16.2
	ClsMed 41	-35157.5	666.7	363.1	-12.2
561	Ft. 41	-32626.2	-667.0	-328.3	-122.0
	Fc. 41	-32626.2	-667.0	-328.3	-218.2
	ClsMax 41	-32626.2	-667.0	-328.3	-15.2
	ClsMed 41	-32626.2	-667.0	-328.3	-11.3

- Pilastro: 561/661 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
561	9	-11927.0	18269.6	-7314.5	325.87	3.63	0.78
661	28	-11196.5	-7380.9	551.1	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	18788.8	73445.6	15612.0	73445.6	$\phi 12/10.0'$
0.84	3.21	18788.8	36722.8	15612.0	36722.8	$\phi 12/20.0'$
3.21	3.80	18788.8	73445.6	15612.0	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
561	Ft. 37	-14796.2	825.6	456.6	-15.1
	Fc. 36	-15456.5	837.3	456.6	-143.2
	ClsMax 36	-15456.5	837.3	456.6	-10.4
	ClsMed 38	-15474.4	804.9	456.6	-5.4
661	Ft. 37	-12264.9	-977.1	-627.7	16.5
	Fc. 36	-12925.3	-974.3	-627.7	-146.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-12925.3	-974.3	-627.7	-10.8
	ClsMed 36	-12925.3	-974.3	-627.7	-4.7

Combinazioni Frequenti

561	Ft. 39	-14153.6	781.6	456.6	-13.9
	Fc. 40	-14423.7	775.4	456.6	-134.8
	ClsMax 40	-14423.7	775.4	456.6	-9.8
	ClsMed 40	-14423.7	775.4	456.6	-5.0
661	Ft. 39	-11622.4	-926.8	-627.7	17.8
	Fc. 40	-11892.5	-908.0	-627.7	-137.7
	ClsMax 39	-11622.4	-926.8	-627.7	-10.3
	ClsMed 40	-11892.5	-908.0	-627.7	-4.4

Combinazioni Quasi Permanenti

561	Ft. 41	-14159.6	770.8	456.6	-14.5
	Fc. 41	-14159.6	770.8	456.6	-133.2
	ClsMax 41	-14159.6	770.8	456.6	-9.7
	ClsMed 41	-14159.6	770.8	456.6	-4.9
661	Ft. 41	-11628.3	-909.2	-627.7	16.6
	Fc. 41	-11628.3	-909.2	-627.7	-136.6
	ClsMax 41	-11628.3	-909.2	-627.7	-10.2
	ClsMed 41	-11628.3	-909.2	-627.7	-4.3

- Pilastro: 62/162 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 50.1 + \varnothing 12/20.0' \times 200.3 + \varnothing 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
62	27	-72819.9	24289.3	17520.6	2.79	1.00	0.88
162	27	-70788.6	-24289.3	-17298.7	4.82	2.65	0.88

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	23222.9	73445.6	19587.5	73445.6	$\varnothing 12/10.0'$
0.50	2.50	23222.9	36722.8	19587.5	36722.8	$\varnothing 12/20.0'$
2.50	3.01	23222.9	73445.6	19587.5	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

62	Ft. 38	-122281.0	173.8	-164.3	-621.2
	Fc. 36	-127097.7	182.6	-164.3	-679.4
	ClsMax 36	-127097.7	182.6	-164.3	-45.5
	ClsMed 36	-127097.7	182.6	-164.3	-44.2
162	Ft. 38	-120249.8	-1.0	344.9	-610.2
	Fc. 36	-125066.4	-0.3	344.9	-668.8
	ClsMax 36	-125066.4	-0.3	344.9	-44.8
	ClsMed 36	-125066.4	-0.3	344.9	-43.5

Combinazioni Frequenti

62	Ft. 40	-119645.3	169.8	-164.3	-607.6
	Fc. 39	-120993.3	172.4	-164.3	-647.1
	ClsMax 39	-120993.3	172.4	-164.3	-43.4
	ClsMed 39	-120993.3	172.4	-164.3	-42.1
162	Ft. 40	-117614.0	-0.0	344.9	-596.5
	Fc. 39	-118962.0	0.6	344.9	-636.9
	ClsMax 39	-118962.0	0.6	344.9	-42.7
	ClsMed 39	-118962.0	0.6	344.9	-41.3

Combinazioni Quasi Permanenti

62	Ft. 41	-119387.7	169.5	-164.3	-606.3
	Fc. 41	-119387.7	169.5	-164.3	-638.6
	ClsMax 41	-119387.7	169.5	-164.3	-42.8
	ClsMed 41	-119387.7	169.5	-164.3	-41.5
162	Ft. 41	-117356.5	0.3	344.9	-595.2
	Fc. 41	-117356.5	0.3	344.9	-628.6
	ClsMax 41	-117356.5	0.3	344.9	-42.1
	ClsMed 41	-117356.5	0.3	344.9	-40.8

- Pilastro: 162/262 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4$ V + $1\phi 20 \times 2$ B + $1\phi 20 \times 2$ H >

Staffe: $\phi 12/10.0'$ x 59.7 + $\phi 12/20.0'$ x 238.7 + $\phi 12/10.0'$ x 59.7

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
162	27	-61776.3	19395.6	14717.6	2.13	1.00	0.70
262	27	-59232.5	-23787.4	-18041.3	2.72	1.39	0.93

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	18784.7	73445.6	16430.9	73445.6	$\phi 12/10.0'$
0.84	3.23	18784.7	36722.8	16430.9	36722.8	$\phi 12/20.0'$
3.23	3.83	18784.7	73445.6	16430.9	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
162	Ft. 38	-101101.3	265.6	-401.2	-494.9
	Fc. 36	-104942.7	278.2	-401.2	-580.0
	ClsMax 36	-104942.7	278.2	-401.2	-39.1
	ClsMed 36	-104942.7	278.2	-401.2	-36.5
262	Ft. 38	-98557.6	-291.3	385.8	-481.1
	Fc. 36	-102398.9	-305.2	385.8	-567.3
	ClsMax 36	-102398.9	-305.2	385.8	-38.3
	ClsMed 36	-102398.9	-305.2	385.8	-35.6
Combinazioni Frequenti					
162	Ft. 40	-98789.5	258.4	-401.2	-483.2
	Fc. 39	-99812.1	261.8	-401.2	-552.5
	ClsMax 39	-99812.1	261.8	-401.2	-37.3
	ClsMed 39	-99812.1	261.8	-401.2	-34.7
262	Ft. 40	-96245.7	-283.4	385.8	-469.4
	Fc. 39	-97268.3	-287.2	385.8	-539.7
	ClsMax 39	-97268.3	-287.2	385.8	-36.4
	ClsMed 39	-97268.3	-287.2	385.8	-33.8
Combinazioni Quasi Permanenti					
162	Ft. 41	-98531.6	257.6	-401.2	-481.9
	Fc. 41	-98531.6	257.6	-401.2	-545.6
	ClsMax 41	-98531.6	257.6	-401.2	-36.8
	ClsMed 41	-98531.6	257.6	-401.2	-34.2
262	Ft. 41	-95987.9	-282.6	385.8	-468.1
	Fc. 41	-95987.9	-282.6	385.8	-532.8
	ClsMax 41	-95987.9	-282.6	385.8	-36.0
	ClsMed 41	-95987.9	-282.6	385.8	-33.4

- Pilastro: 262/362 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
262	27	-51769.4	23904.9	18130.4	2.91	1.56	0.97
362	27	-49238.2	-21842.4	-15556.1	2.54	1.26	0.85

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	17444.7	73445.6	15491.3	73445.6	ø 12/10.0'
0.84	3.21	17444.7	36722.8	15491.3	36722.8	ø 12/20.0'
3.21	3.81	17444.7	73445.6	15491.3	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
262	Ft. 38	-79573.6	482.3	-374.4	-373.4
	Fc. 36	-82446.3	504.9	-374.4	-472.4
	ClsMax 36	-82446.3	504.9	-374.4	-32.1
	ClsMed 36	-82446.3	504.9	-374.4	-28.7
362	Ft. 38	-77042.4	-490.7	375.7	-359.8
	Fc. 36	-79915.1	-513.3	375.7	-459.7
	ClsMax 36	-79915.1	-513.3	375.7	-31.2
	ClsMed 36	-79915.1	-513.3	375.7	-27.8
Combinazioni Frequenti					
262	Ft. 40	-77582.0	468.8	-374.4	-363.7
	Fc. 39	-78281.1	474.8	-374.4	-449.2
	ClsMax 39	-78281.1	474.8	-374.4	-30.5
	ClsMed 39	-78281.1	474.8	-374.4	-27.2
362	Ft. 40	-75050.8	-476.4	375.7	-350.1
	Fc. 39	-75749.8	-482.3	375.7	-436.4
	ClsMax 39	-75749.8	-482.3	375.7	-29.7
	ClsMed 39	-75749.8	-482.3	375.7	-26.3
Combinazioni Quasi Permanenti					
262	Ft. 41	-77323.5	467.3	-374.4	-362.4
	Fc. 41	-77323.5	467.3	-374.4	-443.9
	ClsMax 41	-77323.5	467.3	-374.4	-30.2
	ClsMed 41	-77323.5	467.3	-374.4	-26.9
362	Ft. 41	-74792.2	-474.8	375.7	-348.8
	Fc. 41	-74792.2	-474.8	375.7	-431.1
	ClsMax 41	-74792.2	-474.8	375.7	-29.3
	ClsMed 41	-74792.2	-474.8	375.7	-26.0

- Pilastro: 362/462 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
362	24	-40551.8	-21842.4	15556.1	21.27	1.69	0.90
462	24	-38020.5	18601.6	-11034.2	14.75	1.07	0.70

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	17108.7	73445.6	13747.5	73445.6	Ø 12/10.0'
0.84	3.21	17108.7	36722.8	13747.5	36722.8	Ø 12/20.0'
3.21	3.81	17108.7	73445.6	13747.5	73445.6	Ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
362	Ft. 38	-58144.7	607.6	-383.2	-255.2
	Fc. 36	-60052.5	635.8	-383.2	-362.4
	ClsMax 36	-60052.5	635.8	-383.2	-24.8
	ClsMed 36	-60052.5	635.8	-383.2	-20.9
462	Ft. 38	-55613.5	-619.3	389.7	-241.2
	Fc. 36	-57521.2	-649.0	389.7	-350.1
	ClsMax 36	-57521.2	-649.0	389.7	-24.0
	ClsMed 36	-57521.2	-649.0	389.7	-20.0
Combinazioni Frequenti					
362	Ft. 40	-56470.4	590.2	-383.2	-247.3
	Fc. 39	-56846.7	597.6	-383.2	-343.8
	ClsMax 39	-56846.7	597.6	-383.2	-23.6
	ClsMed 39	-56846.7	597.6	-383.2	-19.8
462	Ft. 40	-53939.1	-602.8	389.7	-233.2
	Fc. 39	-54315.5	-611.1	389.7	-331.6
	ClsMax 39	-54315.5	-611.1	389.7	-22.8
	ClsMed 39	-54315.5	-611.1	389.7	-18.9
Combinazioni Quasi Permanenti					
362	Ft. 41	-56210.8	588.2	-383.2	-246.1
	Fc. 41	-56210.8	588.2	-383.2	-340.1
	ClsMax 41	-56210.8	588.2	-383.2	-23.3
	ClsMed 41	-56210.8	588.2	-383.2	-19.5
462	Ft. 41	-53679.6	-601.2	389.7	-231.9
	Fc. 41	-53679.6	-601.2	389.7	-327.8
	ClsMax 41	-53679.6	-601.2	389.7	-22.5
	ClsMed 41	-53679.6	-601.2	389.7	-18.7

- Pilastro: 462/562 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
462	13	-36732.0	-18601.6	-14181.3	2.11	7.73	0.78
562	24	-24955.1	16748.3	-8292.1	28.90	1.00	0.66

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	16542.2	73445.6	11212.3	73445.6	$\varnothing 12/10.0'$
0.84	3.21	16542.2	36722.8	11212.3	36722.8	$\varnothing 12/20.0'$
3.21	3.80	16542.2	73445.6	11212.3	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
462	Ft. 38	-36776.5	693.4	-363.1	-140.6
	Fc. 36	-37722.5	722.9	-363.1	-249.2
	ClsMax 36	-37722.5	722.9	-363.1	-17.3
	ClsMed 36	-37722.5	722.9	-363.1	-13.1
562	Ft. 38	-34245.3	-699.6	328.3	-128.8
	Fc. 36	-35191.2	-726.0	328.3	-234.5
	ClsMax 36	-35191.2	-726.0	328.3	-16.3
	ClsMed 36	-35191.2	-726.0	328.3	-12.2
Combinazioni Frequenti					
462	Ft. 39	-35472.8	676.6	-363.1	-134.7
	Fc. 39	-35472.8	676.6	-363.1	-235.2
	ClsMax 39	-35472.8	676.6	-363.1	-16.4
	ClsMed 39	-35472.8	676.6	-363.1	-12.3
562	Ft. 40	-32887.0	-671.7	328.3	-123.1
	Fc. 39	-32941.5	-675.7	328.3	-220.3
	ClsMax 39	-32941.5	-675.7	328.3	-15.4
	ClsMed 39	-32941.5	-675.7	328.3	-11.4
Combinazioni Quasi Permanenti					
462	Ft. 41	-35157.5	666.7	-363.1	-133.5
	Fc. 41	-35157.5	666.7	-363.1	-233.1
	ClsMax 41	-35157.5	666.7	-363.1	-16.2
	ClsMed 41	-35157.5	666.7	-363.1	-12.2
562	Ft. 41	-32626.2	-667.0	328.3	-122.0
	Fc. 41	-32626.2	-667.0	328.3	-218.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-32626.2	-667.0	328.3	-15.2
	ClsMed 41	-32626.2	-667.0	328.3	-11.3

- Pilastro: 562/662 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
562	20	-11927.0	18269.5	7314.5	325.93	3.63	0.78
662	35	-11196.5	-7380.9	-551.1	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	18788.8	73445.6	15612.0	73445.6	ø 12/10.0'
0.84	3.21	18788.8	36722.8	15612.0	36722.8	ø 12/20.0'
3.21	3.80	18788.8	73445.6	15612.0	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
562	Ft. 37	-14796.2	825.6	-456.6	-15.1
	Fc. 36	-15456.5	837.3	-456.6	-143.2
	ClsMax 36	-15456.5	837.3	-456.6	-10.4
	ClsMed 38	-15474.4	804.9	-456.6	-5.4
662	Ft. 37	-12264.9	-977.1	627.7	16.5
	Fc. 36	-12925.3	-974.3	627.7	-146.0
	ClsMax 36	-12925.3	-974.3	627.7	-10.8
	ClsMed 36	-12925.3	-974.3	627.7	-4.7
Combinazioni Frequenti					
562	Ft. 39	-14153.6	781.6	-456.6	-13.9
	Fc. 40	-14423.7	775.4	-456.6	-134.8
	ClsMax 40	-14423.7	775.4	-456.6	-9.8
	ClsMed 40	-14423.7	775.4	-456.6	-5.0
662	Ft. 39	-11622.4	-926.8	627.7	17.8
	Fc. 40	-11892.5	-908.0	627.7	-137.7
	ClsMax 39	-11622.4	-926.8	627.7	-10.3
	ClsMed 40	-11892.5	-908.0	627.7	-4.4
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

562	Ft. 41	-14159.6	770.8	-456.6	-14.5
	Fc. 41	-14159.6	770.8	-456.6	-133.2
	ClsMax 41	-14159.6	770.8	-456.6	-9.7
	ClsMed 41	-14159.6	770.8	-456.6	-4.9
662	Ft. 41	-11628.3	-909.2	627.7	16.6
	Fc. 41	-11628.3	-909.2	627.7	-136.6
	ClsMax 41	-11628.3	-909.2	627.7	-10.2
	ClsMed 41	-11628.3	-909.2	627.7	-4.3

- Pilastro: 63/163 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 50.1+ø 12/20.0' x 200.3+ø 12/10.0' x 50.1

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
63	9	-71073.5	-24289.3	-17679.5	3.65	1.00	0.89
163	9	-69042.2	24289.3	17298.7	6.31	2.65	0.88

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	23412.5	73445.6	19591.7	73445.6	ø 12/10.0'
0.50	2.50	23412.5	36722.8	19591.7	36722.8	ø 12/20.0'
2.50	3.01	23412.5	73445.6	19591.7	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
63	Ft. 38	-121586.7	265.8	164.3	-613.1
	Fc. 36	-126371.3	280.5	164.3	-680.4
	ClsMax 36	-126371.3	280.5	164.3	-45.7
	ClsMed 36	-126371.3	280.5	164.3	-43.9
163	Ft. 38	-119555.5	-194.1	-344.9	-597.3
	Fc. 36	-124340.0	-205.7	-344.9	-674.9
	ClsMax 36	-124340.0	-205.7	-344.9	-45.4
	ClsMed 36	-124340.0	-205.7	-344.9	-43.2
Combinazioni Frequenti					
63	Ft. 40	-118971.0	261.2	164.3	-599.7
	Fc. 39	-120310.7	266.2	164.3	-648.1
	ClsMax 39	-120310.7	266.2	164.3	-43.5

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	ClsMed 39	-120310.7	266.2	164.3	-41.8
163	Ft. 40	-116939.8	-191.9	-344.9	-583.7
	Fc. 39	-118279.4	-196.2	-344.9	-642.8
	ClsMax 39	-118279.4	-196.2	-344.9	-43.2
	ClsMed 39	-118279.4	-196.2	-344.9	-41.1

Combinazioni Quasi Permanenti

63	Ft. 41	-118715.8	261.3	164.3	-598.4
	Fc. 41	-118715.8	261.3	164.3	-639.5
	ClsMax 41	-118715.8	261.3	164.3	-42.9
	ClsMed 41	-118715.8	261.3	164.3	-41.3
163	Ft. 41	-116684.6	-192.3	-344.9	-582.4
	Fc. 41	-116684.6	-192.3	-344.9	-634.3
	ClsMax 41	-116684.6	-192.3	-344.9	-42.6
	ClsMed 41	-116684.6	-192.3	-344.9	-40.6

- Pilastro: 163/263 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.7 + \varnothing 12/20.0' \times 238.7 + \varnothing 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
163	9	-60162.8	-19395.6	-14972.4	2.85	1.00	0.72
263	9	-57619.1	23787.4	18041.3	3.60	1.37	0.93

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	19047.8	73445.6	16433.5	73445.6	$\varnothing 12/10.0'$
0.84	3.23	19047.8	36722.8	16433.5	36722.8	$\varnothing 12/20.0'$
3.23	3.83	19047.8	73445.6	16433.5	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
163	Ft. 38	-100366.3	326.6	401.2	-488.1
	Fc. 36	-104172.7	345.6	401.2	-579.3
	ClsMax 36	-104172.7	345.6	401.2	-39.1
	ClsMed 36	-104172.7	345.6	401.2	-36.2
263	Ft. 38	-97822.6	-169.9	-385.8	-483.1
	Fc. 36	-101629.0	-181.2	-385.8	-557.3

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-101629.0	-181.2	-385.8	-37.5
	ClsMed 36	-101629.0	-181.2	-385.8	-35.3

Combinazioni Frequenti

163	Ft. 40	-98074.5	322.2	401.2	-476.4
	Fc. 39	-99087.5	329.1	401.2	-551.9
	ClsMax 39	-99087.5	329.1	401.2	-37.3
	ClsMed 39	-99087.5	329.1	401.2	-34.4
263	Ft. 40	-95530.8	-169.4	-385.8	-471.2
	Fc. 39	-96543.8	-174.0	-385.8	-530.4
	ClsMax 39	-96543.8	-174.0	-385.8	-35.7
	ClsMed 39	-96543.8	-174.0	-385.8	-33.6

Combinazioni Quasi Permanenti

163	Ft. 41	-97818.7	322.7	401.2	-475.0
	Fc. 41	-97818.7	322.7	401.2	-545.0
	ClsMax 41	-97818.7	322.7	401.2	-36.8
	ClsMed 41	-97818.7	322.7	401.2	-34.0
263	Ft. 41	-95275.0	-170.2	-385.8	-469.8
	Fc. 41	-95275.0	-170.2	-385.8	-523.6
	ClsMax 41	-95275.0	-170.2	-385.8	-35.3
	ClsMed 41	-95275.0	-170.2	-385.8	-33.1

- Pilastro: 263/363 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
263	9	-50506.3	-23904.9	-18130.4	3.95	1.53	0.98
363	9	-47975.1	21842.4	15556.1	3.40	1.24	0.86

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	17441.3	73445.6	15488.4	73445.6	$\varnothing 12/10.0'$
0.84	3.21	17441.3	36722.8	15488.4	36722.8	$\varnothing 12/20.0'$
3.21	3.81	17441.3	73445.6	15488.4	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

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263	Ft. 38	-78895.5	105.8	374.4	-388.1
	Fc. 36	-81735.2	114.4	374.4	-449.8
	ClsMax 36	-81735.2	114.4	374.4	-30.3
	ClsMed 36	-81735.2	114.4	374.4	-28.4
363	Ft. 38	-76364.3	-26.9	-375.7	-378.7
	Fc. 36	-79203.9	-32.3	-375.7	-432.7
	ClsMax 36	-79203.9	-32.3	-375.7	-29.1
	ClsMed 36	-79203.9	-32.3	-375.7	-27.5

Combinazioni Frequenti

263	Ft. 40	-76921.3	107.4	374.4	-377.7
	Fc. 39	-77610.9	111.4	374.4	-428.1
	ClsMax 39	-77610.9	111.4	374.4	-28.9
	ClsMed 39	-77610.9	111.4	374.4	-27.0
363	Ft. 40	-74390.0	-31.4	-375.7	-368.2
	Fc. 39	-75079.7	-34.8	-375.7	-411.3
	ClsMax 39	-75079.7	-34.8	-375.7	-27.7
	ClsMed 39	-75079.7	-34.8	-375.7	-26.1

Combinazioni Quasi Permanenti

263	Ft. 41	-76664.4	108.6	374.4	-376.4
	Fc. 41	-76664.4	108.6	374.4	-423.1
	ClsMax 41	-76664.4	108.6	374.4	-28.5
	ClsMed 41	-76664.4	108.6	374.4	-26.6
363	Ft. 41	-74133.1	-33.0	-375.7	-366.7
	Fc. 41	-74133.1	-33.0	-375.7	-406.3
	ClsMax 41	-74133.1	-33.0	-375.7	-27.4
	ClsMed 41	-74133.1	-33.0	-375.7	-25.8

- Pilastro: 363/463 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4$ V + $1\phi 20 \times 2$ B + $1\phi 20 \times 2$ H >

Staffe: $\phi 12/10.0'$ x 59.3 + $\phi 12/20.0'$ x 237.3 + $\phi 12/10.0'$ x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
363	11	-39698.4	21842.4	-15556.1	8.04	1.66	0.91
463	11	-37167.2	-18601.6	11034.2	6.23	1.03	0.71

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	17173.6	73445.6	13732.9	73445.6	$\phi 12/10.0'$
0.84	3.21	17173.6	36722.8	13732.9	36722.8	$\phi 12/20.0'$
3.21	3.81	17173.6	73445.6	13732.9	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
363	Ft. 38	-57592.9	-3.8	383.2	-281.6
	Fc. 36	-59472.4	-0.7	383.2	-328.6
	ClsMax 36	-59472.4	-0.7	383.2	-22.2
	ClsMed 36	-59472.4	-0.7	383.2	-20.7
463	Ft. 38	-55061.7	61.7	-389.7	-265.2
	Fc. 36	-56941.1	62.2	-389.7	-318.7
	ClsMax 36	-56941.1	62.2	-389.7	-21.6
	ClsMed 36	-56941.1	62.2	-389.7	-19.8
Combinazioni Frequenti					
363	Ft. 40	-55931.0	0.5	383.2	-273.1
	Fc. 39	-56298.6	2.9	383.2	-312.2
	ClsMax 39	-56298.6	2.9	383.2	-21.1
	ClsMed 39	-56298.6	2.9	383.2	-19.6
463	Ft. 40	-53399.7	56.9	-389.7	-256.8
	Fc. 39	-53767.4	55.9	-389.7	-301.9
	ClsMax 39	-53767.4	55.9	-389.7	-20.4
	ClsMed 39	-53767.4	55.9	-389.7	-18.7
Combinazioni Quasi Permanenti					
363	Ft. 41	-55672.1	1.9	383.2	-271.6
	Fc. 41	-55672.1	1.9	383.2	-308.9
	ClsMax 41	-55672.1	1.9	383.2	-20.9
	ClsMed 41	-55672.1	1.9	383.2	-19.4
463	Ft. 41	-53140.9	55.7	-389.7	-255.5
	Fc. 41	-53140.9	55.7	-389.7	-298.6
	ClsMax 41	-53140.9	55.7	-389.7	-20.2
	ClsMed 41	-53140.9	55.7	-389.7	-18.5

- Pilastro: 463/563 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
463	35	-35801.9	18601.6	14181.3	2.35	10.16	0.78
563	11	-24392.7	-16344.5	8422.3	7.80	1.00	0.65

- Verifiche a Taglio

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	16570.8	73445.6	11195.8	73445.6	ø 12/10.0'
0.84	3.21	16570.8	36722.8	11195.8	36722.8	ø 12/20.0'
3.21	3.80	16570.8	73445.6	11195.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
463	Ft. 38	-36398.9	-98.4	363.1	-167.5
	Fc. 36	-37323.6	-96.2	363.1	-216.8
	ClsMax 36	-37323.6	-96.2	363.1	-14.8
	ClsMed 36	-37323.6	-96.2	363.1	-13.0
563	Ft. 38	-33867.7	140.2	-328.3	-153.9
	Fc. 36	-34792.3	133.0	-328.3	-203.7
	ClsMax 36	-34792.3	133.0	-328.3	-13.9
	ClsMed 36	-34792.3	133.0	-328.3	-12.1
Combinazioni Frequenti					
463	Ft. 40	-35046.6	-86.9	363.1	-161.0
	Fc. 39	-35093.8	-83.2	363.1	-204.6
	ClsMax 39	-35093.8	-83.2	363.1	-13.9
	ClsMed 39	-35093.8	-83.2	363.1	-12.2
563	Ft. 40	-32515.4	118.6	-328.3	-147.9
	Fc. 40	-32515.4	118.6	-328.3	-191.1
	ClsMax 40	-32515.4	118.6	-328.3	-13.0
	ClsMed 39	-32562.6	110.2	-328.3	-11.3
Combinazioni Quasi Permanenti					
463	Ft. 41	-34785.6	-83.9	363.1	-159.7
	Fc. 41	-34785.6	-83.9	363.1	-203.0
	ClsMax 41	-34785.6	-83.9	363.1	-13.8
	ClsMed 41	-34785.6	-83.9	363.1	-12.1
563	Ft. 41	-32254.3	112.6	-328.3	-146.8
	Fc. 41	-32254.3	112.6	-328.3	-189.5
	ClsMax 41	-32254.3	112.6	-328.3	-12.9
	ClsMed 41	-32254.3	112.6	-328.3	-11.2

- Pilastro: 563/663 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
563	32	-13117.4	16344.6	11394.4	4.32	3767.09	0.78
663	19	-12231.1	6691.9	-1408.4	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	18248.4	73445.6	17048.2	73445.6	Ø 12/10.0'
0.84	3.21	18248.4	36722.8	17048.2	36722.8	Ø 12/20.0'
3.21	3.80	18248.4	73445.6	17048.2	73445.6	Ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
563	Ft. 37	-14615.2	-206.3	456.6	-44.1
	Fc. 36	-15281.7	-201.8	456.6	-111.5
	ClsMax 36	-15281.7	-201.8	456.6	-7.9
	ClsMed 38	-15314.4	-187.2	456.6	-5.3
663	Ft. 37	-12084.0	238.2	-627.7	-21.1
	Fc. 36	-12750.5	216.3	-627.7	-107.3
	ClsMax 36	-12750.5	216.3	-627.7	-7.7
	ClsMed 38	-12783.1	184.6	-627.7	-4.4
Combinazioni Frequenti					
563	Ft. 39	-13981.4	-196.1	456.6	-41.3
	Fc. 40	-14258.9	-189.4	456.6	-105.6
	ClsMax 40	-14258.9	-189.4	456.6	-7.5
	ClsMed 40	-14258.9	-189.4	456.6	-5.0
663	Ft. 39	-11450.1	228.3	-627.7	-18.3
	Fc. 40	-11727.6	209.0	-627.7	-101.6
	ClsMax 40	-11727.6	209.0	-627.7	-7.3
	ClsMed 40	-11727.6	209.0	-627.7	-4.1
Combinazioni Quasi Permanenti					
563	Ft. 41	-13992.3	-191.2	456.6	-41.6
	Fc. 41	-13992.3	-191.2	456.6	-104.3
	ClsMax 41	-13992.3	-191.2	456.6	-7.4
	ClsMed 41	-13992.3	-191.2	456.6	-4.9
663	Ft. 41	-11461.0	217.7	-627.7	-18.9
	Fc. 41	-11461.0	217.7	-627.7	-100.6
	ClsMax 41	-11461.0	217.7	-627.7	-7.3
	ClsMed 41	-11461.0	217.7	-627.7	-4.0

- Pilastro: 64/164 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 50.1 + \varnothing 12/20.0' \times 200.3 + \varnothing 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
64	20	-71073.5	-24289.3	17679.5	3.65	1.00	0.89
164	20	-69042.3	24289.3	-17298.7	6.31	2.65	0.88

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	23412.5	73445.6	19591.7	73445.6	$\varnothing 12/10.0'$
0.50	2.50	23412.5	36722.8	19591.7	36722.8	$\varnothing 12/20.0'$
2.50	3.01	23412.5	73445.6	19591.7	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
64	Ft. 38	-121586.7	265.8	-164.3	-613.1
	Fc. 36	-126371.3	280.5	-164.3	-680.4
	ClsMax 36	-126371.3	280.5	-164.3	-45.7
	ClsMed 36	-126371.3	280.5	-164.3	-43.9
164	Ft. 38	-119555.5	-194.1	344.9	-597.3
	Fc. 36	-124340.0	-205.7	344.9	-674.9
	ClsMax 36	-124340.0	-205.7	344.9	-45.4
	ClsMed 36	-124340.0	-205.7	344.9	-43.2
Combinazioni Frequenti					
64	Ft. 40	-118971.0	261.2	-164.3	-599.7
	Fc. 39	-120310.7	266.2	-164.3	-648.1
	ClsMax 39	-120310.7	266.2	-164.3	-43.5
	ClsMed 39	-120310.7	266.2	-164.3	-41.8
164	Ft. 40	-116939.8	-191.9	344.9	-583.7
	Fc. 39	-118279.4	-196.2	344.9	-642.8
	ClsMax 39	-118279.4	-196.2	344.9	-43.2
	ClsMed 39	-118279.4	-196.2	344.9	-41.1
Combinazioni Quasi Permanenti					
64	Ft. 41	-118715.8	261.3	-164.3	-598.4
	Fc. 41	-118715.8	261.3	-164.3	-639.5
	ClsMax 41	-118715.8	261.3	-164.3	-42.9
	ClsMed 41	-118715.8	261.3	-164.3	-41.3
164	Ft. 41	-116684.6	-192.3	344.9	-582.4
	Fc. 41	-116684.6	-192.3	344.9	-634.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-116684.6	-192.3	344.9	-42.6
	ClsMed 41	-116684.6	-192.3	344.9	-40.6

- Pilastro: 164/264 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ϕ 20 Af=25.13 [cm²] < 1 ϕ 20 x 4 V + 1 ϕ 20 x 2 B + 1 ϕ 20 x 2 H >

Staffe: ϕ 12/10.0' x 59.7+ ϕ 12/20.0' x 238.7+ ϕ 12/10.0' x 59.7

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
164	20	-60162.9	-19395.6	14972.4	2.85	1.00	0.72
264	20	-57619.1	23787.4	-18041.3	3.60	1.37	0.93

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	19047.8	73445.6	16433.5	73445.6	ϕ 12/10.0'
0.84	3.23	19047.8	36722.8	16433.5	36722.8	ϕ 12/20.0'
3.23	3.83	19047.8	73445.6	16433.5	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
164	Ft. 38	-100366.3	326.6	-401.2	-488.1
	Fc. 36	-104172.8	345.6	-401.2	-579.3
	ClsMax 36	-104172.8	345.6	-401.2	-39.1
	ClsMed 36	-104172.8	345.6	-401.2	-36.2
264	Ft. 38	-97822.6	-169.9	385.8	-483.1
	Fc. 36	-101629.0	-181.2	385.8	-557.3
	ClsMax 36	-101629.0	-181.2	385.8	-37.5
	ClsMed 36	-101629.0	-181.2	385.8	-35.3
Combinazioni Frequenti					
164	Ft. 40	-98074.5	322.2	-401.2	-476.4
	Fc. 39	-99087.6	329.1	-401.2	-551.9
	ClsMax 39	-99087.6	329.1	-401.2	-37.3
	ClsMed 39	-99087.6	329.1	-401.2	-34.4
264	Ft. 40	-95530.8	-169.4	385.8	-471.2
	Fc. 39	-96543.8	-174.0	385.8	-530.4
	ClsMax 39	-96543.8	-174.0	385.8	-35.7
	ClsMed 39	-96543.8	-174.0	385.8	-33.6
Combinazioni Quasi Permanenti					

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

164	Ft. 41	-97818.8	322.7	-401.2	-475.0
	Fc. 41	-97818.8	322.7	-401.2	-545.0
	ClsMax 41	-97818.8	322.7	-401.2	-36.8
	ClsMed 41	-97818.8	322.7	-401.2	-34.0
264	Ft. 41	-95275.0	-170.2	385.8	-469.8
	Fc. 41	-95275.0	-170.2	385.8	-523.6
	ClsMax 41	-95275.0	-170.2	385.8	-35.3
	ClsMed 41	-95275.0	-170.2	385.8	-33.1

- Pilastro: 264/364 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
264	20	-50506.3	-23904.9	18130.4	3.95	1.53	0.98
364	20	-47975.1	21842.4	-15556.1	3.40	1.24	0.86

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	17441.3	73445.6	15488.4	73445.6	$\varnothing 12/10.0'$
0.84	3.21	17441.3	36722.8	15488.4	36722.8	$\varnothing 12/20.0'$
3.21	3.81	17441.3	73445.6	15488.4	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
264	Ft. 38	-78895.5	105.8	-374.4	-388.1
	Fc. 36	-81735.2	114.4	-374.4	-449.8
	ClsMax 36	-81735.2	114.4	-374.4	-30.3
	ClsMed 36	-81735.2	114.4	-374.4	-28.4
364	Ft. 38	-76364.3	-26.9	375.7	-378.7
	Fc. 36	-79203.9	-32.3	375.7	-432.7
	ClsMax 36	-79203.9	-32.3	375.7	-29.1
	ClsMed 36	-79203.9	-32.3	375.7	-27.5
Combinazioni Frequenti					
264	Ft. 40	-76921.3	107.4	-374.4	-377.7
	Fc. 39	-77610.9	111.4	-374.4	-428.1
	ClsMax 39	-77610.9	111.4	-374.4	-28.9

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	ClsMed 39	-77610.9	111.4	-374.4	-27.0
364	Ft. 40	-74390.0	-31.4	375.7	-368.2
	Fc. 39	-75079.7	-34.8	375.7	-411.3
	ClsMax 39	-75079.7	-34.8	375.7	-27.7
	ClsMed 39	-75079.7	-34.8	375.7	-26.1

Combinazioni Quasi Permanenti

264	Ft. 41	-76664.4	108.6	-374.4	-376.4
	Fc. 41	-76664.4	108.6	-374.4	-423.1
	ClsMax 41	-76664.4	108.6	-374.4	-28.5
	ClsMed 41	-76664.4	108.6	-374.4	-26.6
364	Ft. 41	-74133.1	-33.0	375.7	-366.7
	Fc. 41	-74133.1	-33.0	375.7	-406.3
	ClsMax 41	-74133.1	-33.0	375.7	-27.4
	ClsMed 41	-74133.1	-33.0	375.7	-25.8

- Pilastro: 364/464 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
364	22	-39698.4	21842.4	15556.1	8.04	1.66	0.91
464	22	-37167.2	-18601.6	-11034.2	6.23	1.03	0.71

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	17173.6	73445.6	13732.9	73445.6	$\varnothing 12/10.0'$
0.84	3.21	17173.6	36722.8	13732.9	36722.8	$\varnothing 12/20.0'$
3.21	3.81	17173.6	73445.6	13732.9	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
364	Ft. 38	-57592.9	-3.8	-383.2	-281.6
	Fc. 36	-59472.4	-0.7	-383.2	-328.6
	ClsMax 36	-59472.4	-0.7	-383.2	-22.2
	ClsMed 36	-59472.4	-0.7	-383.2	-20.7
464	Ft. 38	-55061.7	61.7	389.7	-265.2
	Fc. 36	-56941.1	62.2	389.7	-318.7

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	ClsMax 36	-56941.1	62.2	389.7	-21.6
	ClsMed 36	-56941.1	62.2	389.7	-19.8

Combinazioni Frequenti

364	Ft. 40	-55931.0	0.5	-383.2	-273.1
	Fc. 39	-56298.6	2.9	-383.2	-312.2
	ClsMax 39	-56298.6	2.9	-383.2	-21.1
	ClsMed 39	-56298.6	2.9	-383.2	-19.6
464	Ft. 40	-53399.7	56.9	389.7	-256.8
	Fc. 39	-53767.4	55.9	389.7	-301.9
	ClsMax 39	-53767.4	55.9	389.7	-20.4
	ClsMed 39	-53767.4	55.9	389.7	-18.7

Combinazioni Quasi Permanenti

364	Ft. 41	-55672.1	1.9	-383.2	-271.6
	Fc. 41	-55672.1	1.9	-383.2	-308.9
	ClsMax 41	-55672.1	1.9	-383.2	-20.9
	ClsMed 41	-55672.1	1.9	-383.2	-19.4
464	Ft. 41	-53140.9	55.7	389.7	-255.5
	Fc. 41	-53140.9	55.7	389.7	-298.6
	ClsMax 41	-53140.9	55.7	389.7	-20.2
	ClsMed 41	-53140.9	55.7	389.7	-18.5

- Pilastro: 464/564 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
464	28	-35801.9	18601.6	-14181.3	2.35	10.16	0.78
564	22	-24392.7	-16344.5	-8422.3	7.80	1.00	0.65

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	16570.8	73445.6	11195.8	73445.6	$\varnothing 12/10.0'$
0.84	3.21	16570.8	36722.8	11195.8	36722.8	$\varnothing 12/20.0'$
3.21	3.80	16570.8	73445.6	11195.8	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
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464	Ft. 38	-36398.9	-98.4	-363.1	-167.5
	Fc. 36	-37323.6	-96.2	-363.1	-216.8
	ClsMax 36	-37323.6	-96.2	-363.1	-14.8
	ClsMed 36	-37323.6	-96.2	-363.1	-13.0
564	Ft. 38	-33867.7	140.2	328.3	-153.9
	Fc. 36	-34792.3	133.0	328.3	-203.7
	ClsMax 36	-34792.3	133.0	328.3	-13.9
	ClsMed 36	-34792.3	133.0	328.3	-12.1

Combinazioni Frequenti

464	Ft. 40	-35046.6	-86.9	-363.1	-161.0
	Fc. 39	-35093.8	-83.2	-363.1	-204.6
	ClsMax 39	-35093.8	-83.2	-363.1	-13.9
	ClsMed 39	-35093.8	-83.2	-363.1	-12.2
564	Ft. 40	-32515.4	118.6	328.3	-147.9
	Fc. 40	-32515.4	118.6	328.3	-191.1
	ClsMax 40	-32515.4	118.6	328.3	-13.0
	ClsMed 39	-32562.6	110.2	328.3	-11.3

Combinazioni Quasi Permanenti

464	Ft. 41	-34785.6	-83.9	-363.1	-159.7
	Fc. 41	-34785.6	-83.9	-363.1	-203.0
	ClsMax 41	-34785.6	-83.9	-363.1	-13.8
	ClsMed 41	-34785.6	-83.9	-363.1	-12.1
564	Ft. 41	-32254.3	112.6	328.3	-146.8
	Fc. 41	-32254.3	112.6	328.3	-189.5
	ClsMax 41	-32254.3	112.6	328.3	-12.9
	ClsMed 41	-32254.3	112.6	328.3	-11.2

- Pilastro: 564/664 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
564	31	-13117.4	16344.6	-11394.5	4.32	3765.36	0.78
664	12	-12231.1	6691.9	1408.4	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	18248.4	73445.6	17048.3	73445.6	$\phi 12/10.0'$
0.84	3.21	18248.4	36722.8	17048.3	36722.8	$\phi 12/20.0'$
3.21	3.80	18248.4	73445.6	17048.3	73445.6	$\phi 12/10.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
564	Ft. 37	-14615.2	-206.3	-456.6	-44.1
	Fc. 36	-15281.7	-201.8	-456.6	-111.5
	ClsMax 36	-15281.7	-201.8	-456.6	-7.9
	ClsMed 38	-15314.4	-187.2	-456.6	-5.3
664	Ft. 37	-12084.0	238.2	627.7	-21.1
	Fc. 36	-12750.5	216.3	627.7	-107.3
	ClsMax 36	-12750.5	216.3	627.7	-7.7
	ClsMed 38	-12783.1	184.6	627.7	-4.4
Combinazioni Frequenti					
564	Ft. 39	-13981.4	-196.1	-456.6	-41.3
	Fc. 40	-14258.9	-189.4	-456.6	-105.6
	ClsMax 40	-14258.9	-189.4	-456.6	-7.5
	ClsMed 40	-14258.9	-189.4	-456.6	-5.0
664	Ft. 39	-11450.1	228.3	627.7	-18.3
	Fc. 40	-11727.6	209.0	627.7	-101.6
	ClsMax 40	-11727.6	209.0	627.7	-7.3
	ClsMed 40	-11727.6	209.0	627.7	-4.1
Combinazioni Quasi Permanenti					
564	Ft. 41	-13992.3	-191.2	-456.6	-41.6
	Fc. 41	-13992.3	-191.2	-456.6	-104.3
	ClsMax 41	-13992.3	-191.2	-456.6	-7.4
	ClsMed 41	-13992.3	-191.2	-456.6	-4.9
664	Ft. 41	-11461.0	217.7	627.7	-18.9
	Fc. 41	-11461.0	217.7	627.7	-100.6
	ClsMax 41	-11461.0	217.7	627.7	-7.3
	ClsMed 41	-11461.0	217.7	627.7	-4.0

- Pilastro: 65/165 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \varnothing 20$ Af=37.70 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 50.1 + \varnothing 12/20.0' \times 200.3 + \varnothing 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
65	11	-11722.0	15359.8	-20243.5	6.23	1.00	0.71
165	11	-9690.7	15359.8	17298.7	8.82	2.28	0.64

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	23422.8	73445.6	28640.7	73445.6	ø 12/10.0'
0.50	2.50	23422.8	36722.8	28640.7	36722.8	ø 12/20.0'
2.50	3.01	23422.8	73445.6	28640.7	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
65	Ft. 38	-72059.1	-1220.3	164.3	-292.0
	Fc. 36	-74457.1	-1286.6	164.3	-427.8
	ClsMax 36	-74457.1	-1286.6	164.3	-29.4
	ClsMed 36	-74457.1	-1286.6	164.3	-24.3
165	Ft. 38	-70027.8	2924.5	-344.9	-199.6
	Fc. 36	-72425.8	3082.8	-344.9	-504.4
	ClsMax 36	-72425.8	3082.8	-344.9	-35.7
	ClsMed 36	-72425.8	3082.8	-344.9	-23.6
Combinazioni Frequenti					
65	Ft. 40	-70749.4	-1197.8	164.3	-286.6
	Fc. 39	-71421.2	-1219.8	164.3	-410.0
	ClsMax 39	-71421.2	-1219.8	164.3	-28.2
	ClsMed 39	-71421.2	-1219.8	164.3	-23.3
165	Ft. 40	-68718.2	2869.9	-344.9	-195.6
	Fc. 39	-69389.9	2922.2	-344.9	-482.5
	ClsMax 39	-69389.9	2922.2	-344.9	-34.1
	ClsMed 39	-69389.9	2922.2	-344.9	-22.6
Combinazioni Quasi Permanenti					
65	Ft. 41	-70621.9	-1197.7	164.3	-286.0
	Fc. 41	-70621.9	-1197.7	164.3	-405.2
	ClsMax 41	-70621.9	-1197.7	164.3	-27.8
	ClsMed 41	-70621.9	-1197.7	164.3	-23.0
165	Ft. 41	-68590.6	2869.4	-344.9	-195.0
	Fc. 41	-68590.6	2869.4	-344.9	-476.3
	ClsMax 41	-68590.6	2869.4	-344.9	-33.7
	ClsMed 41	-68590.6	2869.4	-344.9	-22.4

- Pilastro: 165/265 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.7 + \phi 12/20.0' \times 238.7 + \phi 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
165	11	-12493.1	-12265.2	-17175.4	19.10	1.00	0.83
265	11	-9949.4	15764.1	18041.3	15.74	1.19	0.96

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	16049.1	73445.6	22196.9	73445.6	ø 12/10.0'
0.84	3.23	16049.1	36722.8	22196.9	36722.8	ø 12/20.0'
3.23	3.83	16049.1	73445.6	22196.9	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
165	Ft. 37	-61873.9	-3507.9	401.2	-133.5
	Fc. 36	-62191.7	-3509.7	401.2	-513.4
	ClsMax 36	-62191.7	-3509.7	401.2	-36.8
	ClsMed 36	-62191.7	-3509.7	401.2	-21.6
265	Ft. 37	-59330.2	3556.6	-385.8	-118.7
	Fc. 36	-59648.0	3559.6	-385.8	-501.8
	ClsMax 36	-59648.0	3559.6	-385.8	-36.1
	ClsMed 36	-59648.0	3559.6	-385.8	-20.7
Combinazioni Frequenti					
165	Ft. 39	-59620.4	-3326.3	401.2	-130.6
	Fc. 39	-59620.4	-3326.3	401.2	-491.1
	ClsMax 39	-59620.4	-3326.3	401.2	-35.2
	ClsMed 39	-59620.4	-3326.3	401.2	-20.7
265	Ft. 39	-57076.7	3372.2	-385.8	-115.8
	Fc. 39	-57076.7	3372.2	-385.8	-479.3
	ClsMax 39	-57076.7	3372.2	-385.8	-34.5
	ClsMed 39	-57076.7	3372.2	-385.8	-19.8
Combinazioni Quasi Permanenti					
165	Ft. 41	-58975.2	-3266.3	401.2	-130.1
	Fc. 41	-58975.2	-3266.3	401.2	-484.9
	ClsMax 41	-58975.2	-3266.3	401.2	-34.8
	ClsMed 41	-58975.2	-3266.3	401.2	-20.5
265	Ft. 41	-56431.4	3311.7	-385.8	-115.4
	Fc. 41	-56431.4	3311.7	-385.8	-473.1
	ClsMax 41	-56431.4	3311.7	-385.8	-34.0
	ClsMed 41	-56431.4	3311.7	-385.8	-19.6

- Pilastro: 265/365 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4$ V + $1\varnothing 20 \times 2$ B + $1\varnothing 20 \times 2$ H >

Staffe: $\varnothing 12/10.0'$ x 59.3 + $\varnothing 12/20.0'$ x 237.3 + $\varnothing 12/10.0'$ x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
265	11	-14441.8	-15841.9	-18130.4	10.87	1.33	0.94
365	11	-11910.5	13812.5	15556.1	10.80	1.08	0.81

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	13844.2	73445.6	20394.2	73445.6	$\varnothing 12/10.0'$
0.84	3.21	13844.2	36722.8	20394.2	36722.8	$\varnothing 12/20.0'$
3.21	3.81	13844.2	73445.6	20394.2	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
265	Ft. 37	-48914.9	-3566.8	374.4	-64.4
	Fc. 36	-49230.2	-3570.1	374.4	-447.5
	ClsMax 36	-49230.2	-3570.1	374.4	-32.5
	ClsMed 36	-49230.2	-3570.1	374.4	-17.1
365	Ft. 37	-46383.6	3685.8	-375.7	-45.4
	Fc. 36	-46698.9	3689.3	-375.7	-440.1
	ClsMax 36	-46698.9	3689.3	-375.7	-32.1
	ClsMed 36	-46698.9	3689.3	-375.7	-16.2
Combinazioni Frequenti					
265	Ft. 39	-47135.0	-3381.8	374.4	-64.1
	Fc. 39	-47135.0	-3381.8	374.4	-427.4
	ClsMax 39	-47135.0	-3381.8	374.4	-31.0
	ClsMed 39	-47135.0	-3381.8	374.4	-16.4
365	Ft. 39	-44603.8	3494.6	-375.7	-45.4
	Fc. 39	-44603.8	3494.6	-375.7	-419.7
	ClsMax 39	-44603.8	3494.6	-375.7	-30.6
	ClsMed 39	-44603.8	3494.6	-375.7	-15.5
Combinazioni Quasi Permanenti					
265	Ft. 41	-46646.8	-3321.2	374.4	-64.5
	Fc. 41	-46646.8	-3321.2	374.4	-421.9
	ClsMax 41	-46646.8	-3321.2	374.4	-30.6
	ClsMed 41	-46646.8	-3321.2	374.4	-16.2
365	Ft. 41	-44115.6	3432.0	-375.7	-45.8
	Fc. 41	-44115.6	3432.0	-375.7	-414.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-44115.6	3432.0	-375.7	-30.2
	ClsMed 41	-44115.6	3432.0	-375.7	-15.3

- Pilastro: 365/465 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1φ20 x 4 V + 1φ20 x 2 B + 1φ20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
365	28	-23651.0	10651.2	18992.4	2.57	55.44	0.80
465	11	-12123.6	11876.0	12377.0	6.55	1.00	0.65

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	14018.0	73445.6	16788.2	73445.6	ø 12/10.0'
0.84	3.21	14018.0	36722.8	16788.2	36722.8	ø 12/20.0'
3.21	3.81	14018.0	73445.6	16788.2	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
365	Ft. 37	-35833.8	-3770.3	383.2	20.8
	Fc. 36	-36144.9	-3777.5	383.2	-392.9
	ClsMax 36	-36144.9	-3777.5	383.2	-29.0
	ClsMed 36	-36144.9	-3777.5	383.2	-13.7
465	Ft. 37	-33302.5	3848.5	-389.7	46.8
	Fc. 36	-33613.7	3860.6	-389.7	-387.6
	ClsMax 36	-33613.7	3860.6	-389.7	-28.8
	ClsMed 36	-33613.7	3860.6	-389.7	-13.6
Combinazioni Frequenti					
365	Ft. 39	-34534.7	-3574.4	383.2	16.9
	Fc. 39	-34534.7	-3574.4	383.2	-374.3
	ClsMax 39	-34534.7	-3574.4	383.2	-27.7
	ClsMed 39	-34534.7	-3574.4	383.2	-13.1
465	Ft. 39	-32003.4	3647.9	-389.7	41.9
	Fc. 39	-32003.4	3647.9	-389.7	-368.3
	ClsMax 39	-32003.4	3647.9	-389.7	-27.4
	ClsMed 39	-32003.4	3647.9	-389.7	-12.9
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

365	Ft. 41	-34205.4	-3511.5	383.2	15.1
	Fc. 41	-34205.4	-3511.5	383.2	-369.3
	ClsMax 41	-34205.4	-3511.5	383.2	-27.3
	ClsMed 41	-34205.4	-3511.5	383.2	-12.9
465	Ft. 41	-31674.1	3585.1	-389.7	39.7
	Fc. 41	-31674.1	3585.1	-389.7	-363.3
	ClsMax 41	-31674.1	3585.1	-389.7	-27.0
	ClsMed 41	-31674.1	3585.1	-389.7	-12.7

- Pilastro: 465/565 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 59.3+ø 12/20.0' x 237.3+ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
465	12	-24739.8	-11876.0	14181.3	1.57	47.20	0.64
565	28	-14099.7	-9394.6	-10329.5	2.36	35.82	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	14447.8	73445.6	14957.8	73445.6	ø 12/10.0'
0.84	3.21	14447.8	36722.8	14957.8	36722.8	ø 12/20.0'
3.21	3.80	14447.8	73445.6	14957.8	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
465	Ft. 37	-22655.4	-3852.4	363.1	181.4
	Fc. 36	-22962.0	-3850.1	363.1	-354.0
	ClsMax 37	-22655.4	-3852.4	363.1	-27.3
	ClsMed 36	-22962.0	-3850.1	363.1	-12.7
565	Ft. 37	-20124.1	3838.7	-328.3	227.9
	Fc. 37	-20124.1	3838.7	-328.3	-345.8
	ClsMax 37	-20124.1	3838.7	-328.3	-27.0
	ClsMed 37	-20124.1	3838.7	-328.3	-12.6
Combinazioni Frequenti					
465	Ft. 39	-21842.2	-3653.2	363.1	166.8
	Fc. 39	-21842.2	-3653.2	363.1	-337.2
	ClsMax 39	-21842.2	-3653.2	363.1	-26.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMed 39	-21842.2	-3653.2	363.1	-12.0
565	Ft. 39	-19310.9	3642.2	-328.3	212.8
	Fc. 39	-19310.9	3642.2	-328.3	-329.6
	ClsMax 39	-19310.9	3642.2	-328.3	-25.7
	ClsMed 39	-19310.9	3642.2	-328.3	-11.9

Combinazioni Quasi Permanenti

465	Ft. 41	-21673.3	-3586.1	363.1	160.1
	Fc. 41	-21673.3	-3586.1	363.1	-331.9
	ClsMax 41	-21673.3	-3586.1	363.1	-25.5
	ClsMed 41	-21673.3	-3586.1	363.1	-11.8
565	Ft. 41	-19142.1	3569.9	-328.3	204.5
	Fc. 41	-19142.1	3569.9	-328.3	-323.9
	ClsMax 41	-19142.1	3569.9	-328.3	-25.3
	ClsMed 41	-19142.1	3569.9	-328.3	-11.7

- Pilastro: 565/665 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
565	32	-7297.5	-10627.1	11631.5	4.07	31.28	0.63
665	18	-8270.6	7540.6	-2947.9	1.00	1.00	0.30

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	19643.5	73445.6	15872.1	73445.6	$\varnothing 12/10.0'$
0.84	3.21	19643.5	36722.8	15872.1	36722.8	$\varnothing 12/20.0'$
3.21	3.80	19643.5	73445.6	15872.1	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
565	Ft. 36	-9683.6	-4164.1	456.6	623.5
	Fc. 36	-9683.6	-4164.1	456.6	-360.8
	ClsMax 36	-9683.6	-4164.1	456.6	-30.9
	ClsMed 36	-9683.6	-4164.1	456.6	-13.7
665	Ft. 36	-7152.4	4541.7	-627.7	824.7
	Fc. 36	-7152.4	4541.7	-627.7	-395.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 36	-7152.4	4541.7	-627.7	-34.8
	ClsMed 36	-7152.4	4541.7	-627.7	-14.9

Combinazioni Frequenti

565	Ft. 39	-9066.4	-3887.5	456.6	584.3
	Fc. 39	-9066.4	-3887.5	456.6	-339.8
	ClsMax 39	-9066.4	-3887.5	456.6	-29.1
	ClsMed 39	-9066.4	-3887.5	456.6	-12.8
665	Ft. 40	-6644.3	4169.7	-627.7	759.9
	Fc. 40	-6644.3	4169.7	-627.7	-368.3
	ClsMax 40	-6644.3	4169.7	-627.7	-32.4
	ClsMed 40	-6644.3	4169.7	-627.7	-13.7

Combinazioni Quasi Permanenti

565	Ft. 41	-9057.5	-3833.7	456.6	572.6
	Fc. 41	-9057.5	-3833.7	456.6	-336.0
	ClsMax 41	-9057.5	-3833.7	456.6	-28.7
	ClsMed 41	-9057.5	-3833.7	456.6	-12.6
665	Ft. 41	-6526.2	4101.9	-627.7	749.1
	Fc. 41	-6526.2	4101.9	-627.7	-363.3
	ClsMax 41	-6526.2	4101.9	-627.7	-31.9
	ClsMed 41	-6526.2	4101.9	-627.7	-13.5

- Pilastro: 66/166 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \text{ } \phi \text{ } 20 \text{ Af}=37.70 \text{ [cm}^2\text{]} < 2\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 50.1 + \phi 12/20.0' \times 200.3 + \phi 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
66	22	-11721.6	15359.8	20243.6	6.23	1.00	0.71
166	22	-9690.4	15359.8	-17298.7	8.82	2.28	0.64

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	23422.8	73445.6	28640.7	73445.6	$\phi 12/10.0'$
0.50	2.50	23422.8	36722.8	28640.7	36722.8	$\phi 12/20.0'$
2.50	3.01	23422.8	73445.6	28640.7	73445.6	$\phi 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

66	Ft. 38	-72059.1	-1220.3	-164.3	-292.0
	Fc. 36	-74457.1	-1286.6	-164.3	-427.8
	ClsMax 36	-74457.1	-1286.6	-164.3	-29.4
	ClsMed 36	-74457.1	-1286.6	-164.3	-24.3
166	Ft. 38	-70027.8	2924.5	344.9	-199.6
	Fc. 36	-72425.8	3082.8	344.9	-504.4
	ClsMax 36	-72425.8	3082.8	344.9	-35.7
	ClsMed 36	-72425.8	3082.8	344.9	-23.6

Combinazioni Frequenti

66	Ft. 40	-70749.4	-1197.8	-164.3	-286.6
	Fc. 39	-71421.2	-1219.8	-164.3	-410.0
	ClsMax 39	-71421.2	-1219.8	-164.3	-28.2
	ClsMed 39	-71421.2	-1219.8	-164.3	-23.3
166	Ft. 40	-68718.2	2869.9	344.9	-195.6
	Fc. 39	-69389.9	2922.2	344.9	-482.5
	ClsMax 39	-69389.9	2922.2	344.9	-34.1
	ClsMed 39	-69389.9	2922.2	344.9	-22.6

Combinazioni Quasi Permanenti

66	Ft. 41	-70621.9	-1197.7	-164.3	-286.0
	Fc. 41	-70621.9	-1197.7	-164.3	-405.2
	ClsMax 41	-70621.9	-1197.7	-164.3	-27.8
	ClsMed 41	-70621.9	-1197.7	-164.3	-23.0
166	Ft. 41	-68590.6	2869.4	344.9	-195.0
	Fc. 41	-68590.6	2869.4	344.9	-476.3
	ClsMax 41	-68590.6	2869.4	344.9	-33.7
	ClsMed 41	-68590.6	2869.4	344.9	-22.4

- Pilastro: 166/266 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.7 + \phi 12/20.0' \times 238.7 + \phi 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
166	22	-12492.8	-12265.2	17175.4	19.10	1.00	0.83
266	22	-9949.1	15764.1	-18041.3	15.74	1.19	0.96

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	16049.1	73445.6	22196.9	73445.6	$\phi 12/10.0'$
0.84	3.23	16049.1	36722.8	22196.9	36722.8	$\phi 12/20.0'$
3.23	3.83	16049.1	73445.6	22196.9	73445.6	$\phi 12/10.0'$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
166	Ft. 37	-61873.9	-3507.9	-401.2	-133.5
	Fc. 36	-62191.7	-3509.7	-401.2	-513.4
	ClsMax 36	-62191.7	-3509.7	-401.2	-36.8
	ClsMed 36	-62191.7	-3509.7	-401.2	-21.6
266	Ft. 37	-59330.2	3556.6	385.8	-118.7
	Fc. 36	-59648.0	3559.6	385.8	-501.8
	ClsMax 36	-59648.0	3559.6	385.8	-36.1
	ClsMed 36	-59648.0	3559.6	385.8	-20.7
Combinazioni Frequenti					
166	Ft. 39	-59620.4	-3326.3	-401.2	-130.6
	Fc. 39	-59620.4	-3326.3	-401.2	-491.1
	ClsMax 39	-59620.4	-3326.3	-401.2	-35.2
	ClsMed 39	-59620.4	-3326.3	-401.2	-20.7
266	Ft. 39	-57076.7	3372.2	385.8	-115.8
	Fc. 39	-57076.7	3372.2	385.8	-479.3
	ClsMax 39	-57076.7	3372.2	385.8	-34.5
	ClsMed 39	-57076.7	3372.2	385.8	-19.8
Combinazioni Quasi Permanenti					
166	Ft. 41	-58975.2	-3266.3	-401.2	-130.1
	Fc. 41	-58975.2	-3266.3	-401.2	-484.9
	ClsMax 41	-58975.2	-3266.3	-401.2	-34.8
	ClsMed 41	-58975.2	-3266.3	-401.2	-20.5
266	Ft. 41	-56431.4	3311.7	385.8	-115.4
	Fc. 41	-56431.4	3311.7	385.8	-473.1
	ClsMax 41	-56431.4	3311.7	385.8	-34.0
	ClsMed 41	-56431.4	3311.7	385.8	-19.6

- Pilastro: 266/366 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
266	22	-14441.6	-15841.9	18130.4	10.87	1.33	0.94
366	22	-11910.4	13812.5	-15556.1	10.80	1.08	0.81

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	13844.2	73445.6	20394.2	73445.6	ø 12/10.0'
0.84	3.21	13844.2	36722.8	20394.2	36722.8	ø 12/20.0'
3.21	3.81	13844.2	73445.6	20394.2	73445.6	ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
266	Ft. 37	-48914.9	-3566.8	-374.4	-64.4
	Fc. 36	-49230.2	-3570.1	-374.4	-447.5
	ClsMax 36	-49230.2	-3570.1	-374.4	-32.5
	ClsMed 36	-49230.2	-3570.1	-374.4	-17.1
366	Ft. 37	-46383.6	3685.8	375.7	-45.4
	Fc. 36	-46698.9	3689.3	375.7	-440.1
	ClsMax 36	-46698.9	3689.3	375.7	-32.1
	ClsMed 36	-46698.9	3689.3	375.7	-16.2
Combinazioni Frequenti					
266	Ft. 39	-47135.0	-3381.8	-374.4	-64.1
	Fc. 39	-47135.0	-3381.8	-374.4	-427.4
	ClsMax 39	-47135.0	-3381.8	-374.4	-31.0
	ClsMed 39	-47135.0	-3381.8	-374.4	-16.4
366	Ft. 39	-44603.8	3494.6	375.7	-45.4
	Fc. 39	-44603.8	3494.6	375.7	-419.7
	ClsMax 39	-44603.8	3494.6	375.7	-30.6
	ClsMed 39	-44603.8	3494.6	375.7	-15.5
Combinazioni Quasi Permanenti					
266	Ft. 41	-46646.8	-3321.2	-374.4	-64.5
	Fc. 41	-46646.8	-3321.2	-374.4	-421.9
	ClsMax 41	-46646.8	-3321.2	-374.4	-30.6
	ClsMed 41	-46646.8	-3321.2	-374.4	-16.2
366	Ft. 41	-44115.6	3432.0	375.7	-45.8
	Fc. 41	-44115.6	3432.0	375.7	-414.2
	ClsMax 41	-44115.6	3432.0	375.7	-30.2
	ClsMed 41	-44115.6	3432.0	375.7	-15.3

- Pilastro: 366/466 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
366	35	-23651.0	10651.2	-18992.4	2.57	55.45	0.80
466	22	-12123.5	11876.0	-12377.1	6.55	1.00	0.65

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	14018.0	73445.6	16788.2	73445.6	Ø 12/10.0'
0.84	3.21	14018.0	36722.8	16788.2	36722.8	Ø 12/20.0'
3.21	3.81	14018.0	73445.6	16788.2	73445.6	Ø 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
366	Ft. 37	-35833.8	-3770.3	-383.2	20.8
	Fc. 36	-36144.9	-3777.5	-383.2	-392.9
	ClSMax 36	-36144.9	-3777.5	-383.2	-29.0
	ClSMed 36	-36144.9	-3777.5	-383.2	-13.7
466	Ft. 37	-33302.5	3848.5	389.7	46.8
	Fc. 36	-33613.7	3860.6	389.7	-387.6
	ClSMax 36	-33613.7	3860.6	389.7	-28.8
	ClSMed 36	-33613.7	3860.6	389.7	-13.6
Combinazioni Frequenti					
366	Ft. 39	-34534.7	-3574.4	-383.2	16.9
	Fc. 39	-34534.7	-3574.4	-383.2	-374.3
	ClSMax 39	-34534.7	-3574.4	-383.2	-27.7
	ClSMed 39	-34534.7	-3574.4	-383.2	-13.1
466	Ft. 39	-32003.4	3647.9	389.7	41.9
	Fc. 39	-32003.4	3647.9	389.7	-368.3
	ClSMax 39	-32003.4	3647.9	389.7	-27.4
	ClSMed 39	-32003.4	3647.9	389.7	-12.9
Combinazioni Quasi Permanenti					
366	Ft. 41	-34205.4	-3511.5	-383.2	15.1
	Fc. 41	-34205.4	-3511.5	-383.2	-369.3
	ClSMax 41	-34205.4	-3511.5	-383.2	-27.3
	ClSMed 41	-34205.4	-3511.5	-383.2	-12.9
466	Ft. 41	-31674.1	3585.1	389.7	39.7
	Fc. 41	-31674.1	3585.1	389.7	-363.3
	ClSMax 41	-31674.1	3585.1	389.7	-27.0
	ClSMed 41	-31674.1	3585.1	389.7	-12.7

- Pilastro: 466/566 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
466	19	-24739.8	-11876.0	-14181.3	1.57	47.19	0.64
566	35	-14099.7	-9394.6	10329.5	2.36	35.82	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	14447.8	73445.6	14957.8	73445.6	$\varnothing 12/10.0'$
0.84	3.21	14447.8	36722.8	14957.8	36722.8	$\varnothing 12/20.0'$
3.21	3.80	14447.8	73445.6	14957.8	73445.6	$\varnothing 12/10.0'$

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
466	Ft. 37	-22655.4	-3852.4	-363.1	181.4
	Fc. 36	-22962.0	-3850.1	-363.1	-354.0
	ClSMax 37	-22655.4	-3852.4	-363.1	-27.3
	ClSMed 36	-22962.0	-3850.1	-363.1	-12.7
566	Ft. 37	-20124.1	3838.7	328.3	227.9
	Fc. 37	-20124.1	3838.7	328.3	-345.8
	ClSMax 37	-20124.1	3838.7	328.3	-27.0
	ClSMed 37	-20124.1	3838.7	328.3	-12.6
Combinazioni Frequenti					
466	Ft. 39	-21842.2	-3653.2	-363.1	166.8
	Fc. 39	-21842.2	-3653.2	-363.1	-337.2
	ClSMax 39	-21842.2	-3653.2	-363.1	-26.0
	ClSMed 39	-21842.2	-3653.2	-363.1	-12.0
566	Ft. 39	-19310.9	3642.2	328.3	212.8
	Fc. 39	-19310.9	3642.2	328.3	-329.6
	ClSMax 39	-19310.9	3642.2	328.3	-25.7
	ClSMed 39	-19310.9	3642.2	328.3	-11.9
Combinazioni Quasi Permanenti					
466	Ft. 41	-21673.3	-3586.1	-363.1	160.1
	Fc. 41	-21673.3	-3586.1	-363.1	-331.9
	ClSMax 41	-21673.3	-3586.1	-363.1	-25.5
	ClSMed 41	-21673.3	-3586.1	-363.1	-11.8
566	Ft. 41	-19142.1	3569.9	328.3	204.5
	Fc. 41	-19142.1	3569.9	328.3	-323.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	ClsMax 41	-19142.1	3569.9	328.3	-25.3
	ClsMed 41	-19142.1	3569.9	328.3	-11.7

- Pilastro: 566/666 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ϕ 20 Af=25.13 [cm²] < 1 ϕ 20 x 4 V + 1 ϕ 20 x 2 B + 1 ϕ 20 x 2 H >

Staffe: ϕ 12/10.0' x 59.3+ ϕ 12/20.0' x 237.3+ ϕ 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
566	31	-7297.5	-10627.1	-11631.5	4.07	31.28	0.63
666	13	-8270.6	7540.6	2947.9	1.00	1.00	0.30

- Verifiche a Taglio

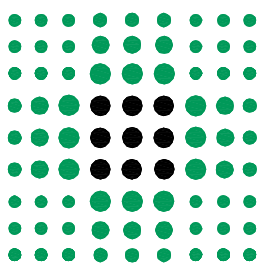
Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	19643.6	73445.6	15872.0	73445.6	ϕ 12/10.0'
0.84	3.21	19643.6	36722.8	15872.0	36722.8	ϕ 12/20.0'
3.21	3.80	19643.6	73445.6	15872.0	73445.6	ϕ 12/10.0'

- Verifiche a Presso-Flessione S.L.E.

Nodo	Comb	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Combinazioni Rare					
566	Ft. 36	-9683.6	-4164.1	-456.6	623.5
	Fc. 36	-9683.6	-4164.1	-456.6	-360.8
	ClsMax 36	-9683.6	-4164.1	-456.6	-30.9
	ClsMed 36	-9683.6	-4164.1	-456.6	-13.7
666	Ft. 36	-7152.4	4541.7	627.7	824.7
	Fc. 36	-7152.4	4541.7	627.7	-395.2
	ClsMax 36	-7152.4	4541.7	627.7	-34.8
	ClsMed 36	-7152.4	4541.7	627.7	-14.9
Combinazioni Frequenti					
566	Ft. 39	-9066.4	-3887.5	-456.6	584.3
	Fc. 39	-9066.4	-3887.5	-456.6	-339.8
	ClsMax 39	-9066.4	-3887.5	-456.6	-29.1
	ClsMed 39	-9066.4	-3887.5	-456.6	-12.8
666	Ft. 40	-6644.3	4169.7	627.7	759.9
	Fc. 40	-6644.3	4169.7	627.7	-368.3
	ClsMax 40	-6644.3	4169.7	627.7	-32.4
	ClsMed 40	-6644.3	4169.7	627.7	-13.7
Combinazioni Quasi Permanenti					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

566	Ft. 41	-9057.5	-3833.7	-456.6	572.6
	Fc. 41	-9057.5	-3833.7	-456.6	-336.0
	ClsMax 41	-9057.5	-3833.7	-456.6	-28.7
	ClsMed 41	-9057.5	-3833.7	-456.6	-12.6
666	Ft. 41	-6526.2	4101.9	627.7	749.1
	Fc. 41	-6526.2	4101.9	627.7	-363.3
	ClsMax 41	-6526.2	4101.9	627.7	-31.9
	ClsMed 41	-6526.2	4101.9	627.7	-13.5



GRUPPO DI LAVORO:

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geom. Lara Biavardi
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ing. Federica Ceresa
per. ind. Paolo Crovini
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ing. jr. Roberto Degiovanni
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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 4
PROGETTO E VERIFICA NUCLEI VANI SCALA**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
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ELABORATO

RS. 05

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

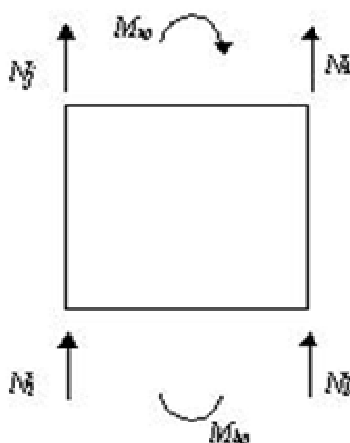
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1 VERIFICHE SETTI IN C.A.

Modalità di verifica

I setti in c.a. vengono verificati, in ottemperanza al punto 5.3.4. del *D.M. 27 luglio 1985*, come setti o pareti.



Viene calcolato lo sforzo normale medio agente sul setto e il momento ad esso associato.

La sezione viene armata rispettando gli interassi minimi da regolamento e la verifica procede a presso-flessione retta via via incrementando il diametro dei ferri di parete.

Quando necessario vengono inoltre introdotti ferri laterali di completamento da disporsi sulle estremità del setto stesso.

Nelle verifiche vengono riportate, nelle sezioni di base e di sommità del setto, le tensioni massima e media dovuta al solo sforzo normale nel calcestruzzo (e la combinazione di carico che le produce) e le tensioni nei ferri tesi e compressi (nonché indicazione della combinazione di carico che le produce).

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

2 VANO SCALA "A"

- Sezioni Impiegate:

Sezione Numero	Dimensioni	Calcestruzzo	f_{cd} [kg/cm ²]	τ_{rd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{FREQ} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yFREQ} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro [cm]
5	s 30 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
6	s 25 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
7	s 20 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
8	s 40 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50

- **Fattore di sovraresistenza $\gamma_{R,d}=1.00$**
- **Per nuclei e diaframmi i momenti di progetto sono traslati e involuppati**
- **Per nuclei e diaframmi i tagli di progetto sono traslati e involuppati**
- **Per nuclei e diaframmi si considera una variazione +-50% dello sforzo assiale nelle combinazioni sismiche.**
- **Taglio di progetto pari a 1.5 taglio di calcolo**
- **EC2. 4.3.2.4.4. Verifica a taglio con il metodo dell'inclinazione variabile del traliccio. $\cotg \theta = 1.00$**

- Verifiche Setti:

- NUCLEO 1007 1006 1004 1005 1003 1083 1073 1001 1002 / Nodi: 1007 1006 1004 1005 1003 1083 1073 1001 1002

- *Armature Nucleo*

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1007 1006	6	191	325	25	2x \emptyset 20 15'	2x \emptyset 12 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1006 1004	6	244	325	25	2x ø 20 15'	2x ø 12 15'
1005 1004	7	100	325	20	2x ø 16 15'	2x ø 10 15'
1004 1003	6	142	325	25	2x ø 20 15'	2x ø 12 15'
1003 1083	6	41	325	25	2x ø 20 15'	2x ø 12 15'
1073 1001	5	60	325	30	2x ø 20 15'	2x ø 12 15'
1002 1001	6	192	325	25	2x ø 20 15'	2x ø 12 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	27	-306533.1	-525125.8	-149204.7	0.58
Som.	4	-173783.2	578924.5	72130.1	0.25

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-253119.0	191531.8	1157.7	-12.0
Cls.Med	41	-253119.0	191531.8	1157.7	-8.3
Ft.	41	-253119.0	191531.8	1157.7	-73.6
Fc.	41	-253119.0	191531.8	1157.7	-179.3
Sommita					
Cls.	41	-253119.0	191531.8	1157.7	-12.0
Cls.Med	41	-253119.0	191531.8	1157.7	-8.3
Ft.	41	-253119.0	191531.8	1157.7	-73.6
Fc.	41	-253119.0	191531.8	1157.7	-179.3

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1002-1001	1.92	3.25	33	-26533.1	1.50	-39799.7	-118130.6	3261.9	175638.6	100742.1	288457.5	0.40

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1073-1001	0.60	3.25	26	-7979.1	1.50	-11968.6	-57765.0	36984.2	63885.4	30536.0	27870.4	0.43
1007-1006-1004-1003-1083	6.18	3.25	15	159628.5	1.50	239442.8	-141871.3	-48077.9	569691.1	326761.2	530230.8	0.73
1005-1004	1.00	3.25	26	-12655.9	1.50	-18983.8	-175608.0	194615.8	72218.2	35957.2	26225.2	0.72

- NUCLEO 1183 1102 1106 1104 1105 1103 1173 1101 / Nodi: 1183 1102 1106 1104 1105 1103 1173 1101

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1183 1102	6	160	407	25	2x ø 20 15'	2x ø 12 15'
1106 1104	6	244	407	25	2x ø 20 15'	2x ø 12 15'
1105 1104	7	100	407	20	2x ø 16 15'	2x ø 10 15'
1103 1183	6	41	407	25	2x ø 20 15'	2x ø 12 15'
1173 1101	5	60	407	30	2x ø 20 15'+ Sx: 2 x 2 ø 20 30'+ Dx: 2 x 2 ø 20 30'	2x ø 12 15'
1102 1101	6	192	407	25	2x ø 20 15'	2x ø 12 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-35359.0	766302.4	-91619.2	0.42
Som.	9	-16547.2	477814.2	-91619.2	0.42

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-195012.2	19153.9	2192.2	-9.2
Cls.Med	41	-195012.2	19153.9	2192.2	-7.6
Ft.	41	-195012.2	19153.9	2192.2	-102.4
Fc.	41	-195012.2	19153.9	2192.2	-137.3
Sommita					
Cls.	41	-195012.2	19153.9	2192.2	-9.2
Cls.Med	41	-195012.2	19153.9	2192.2	-7.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Ft.	41	-195012.2	19153.9	2192.2	-102.4
Fc.	41	-195012.2	19153.9	2192.2	-137.3

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
1103-1183-1102-1101	3.93	4.07	7	78730.7	1.50	118096.0	-13696.0	-69608.3	361739.5	207485.2	161121.0	0.73
1173-1101	0.60	4.07	4	8282.8	1.50	12424.3	-48811.8	27806.3	63885.4	30536.0	53748.6	0.41
1105-1104	1.00	4.07	9	13497.6	1.50	20246.4	-72121.8	79163.0	72218.2	35957.2	26549.6	0.76
1106-1104	2.44	4.07	11	60441.0	1.50	90661.4	48981.9	20178.7	223598.9	128251.0	99983.5	0.91

- NUCLEO 1204 1203 1283 1202 1206 1205 1273 1201 / Nodi: 1204 1203 1283 1202 1206 1205 1273 1201

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1204 1203	6	142	405	25	2x ø 16 15'	2x ø 10 15'
1283 1202	6	160	405	25	2x ø 16 15'	2x ø 10 15'
1206 1204	6	244	405	25	2x ø 16 15'	2x ø 10 15'
1205 1204	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1203 1283	6	41	405	25	2x ø 16 15'	2x ø 10 15'
1273 1201	5	60	405	30	2x ø 20 15'+ Sx: 2 x 2 ø 20 30'+ Dx: 2 x 2 ø 20 30'	2x ø 12 15'
1202 1201	6	192	405	25	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-65168.8	-418622.4	69405.8	0.30
Som.	7	-39967.1	-418622.4	57807.5	0.26

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-158260.0	47244.8	3512.8	-8.3
Cls.Med	41	-158260.0	47244.8	3512.8	-5.6
Ft.	41	-158260.0	47244.8	3512.8	-60.6
Fc.	41	-158260.0	47244.8	3512.8	-123.7
Sommita					
Cls.	41	-158260.0	47244.8	3512.8	-8.3
Cls.Med	41	-158260.0	47244.8	3512.8	-5.6
Ft.	41	-158260.0	47244.8	3512.8	-60.6
Fc.	41	-158260.0	47244.8	3512.8	-123.7

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1206-1204-1203-1283-1202-1201	7.79	4.05	4	106352.7	1.50	159529.0	-153107.4	-337298.1	718942.1	286366.7	0.0	0.56
1273-1201	0.60	4.05	4	7108.0	1.50	10662.0	-21241.8	13326.1	63885.4	30536.0	0.0	0.35
1205-1204	1.00	4.05	4	13556.8	1.50	20335.3	-93376.0	100867.9	72218.2	35957.2	0.0	0.57

- NUCLEO 1304 1303 1383 1302 1306 1305 1373 1301 / Nodi: 1304 1303 1383 1302 1306 1305 1373 1301

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1304 1303	6	142	405	25	2x \emptyset 16 15'	2x \emptyset 10 15'
1383 1302	6	160	405	25	2x \emptyset 16 15'	2x \emptyset 10 15'
1306 1304	6	244	405	25	2x \emptyset 16 15'	2x \emptyset 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1305 1304	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1303 1383	6	41	405	25	2x ø 12 15'	2x ø 10 20'
1373 1301	5	60	405	30	2x ø 20 15'	2x ø 12 15'
1302 1301	6	192	405	25	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-32944.3	484107.8	-52079.4	0.30
Som.	9	-20649.2	279279.4	-49623.3	0.28

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-117960.1	40785.7	-167.6	-5.4
Cls.Med	41	-117960.1	40785.7	-167.6	-4.3
Ft.	41	-117960.1	40785.7	-167.6	-48.3
Fc.	41	-117960.1	40785.7	-167.6	-80.4
Sommita					
Cls.	41	-117960.1	40785.7	-167.6	-5.4
Cls.Med	41	-117960.1	40785.7	-167.6	-4.3
Ft.	41	-117960.1	40785.7	-167.6	-48.3
Fc.	41	-117960.1	40785.7	-167.6	-80.4

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1306-1304-1303-1383-1302-1301	7.79	4.05	4	106352.7	1.50	159529.0	-147693.4	-334229.8	718942.1	282598.7	0.0	0.56
1373-1301	0.60	4.05	4	7108.0	1.50	10662.0	-22219.7	13776.9	63885.4	30536.0	0.0	0.35
1305-1304	1.00	4.05	4	13556.8	1.50	20335.3	-81322.3	87578.4	72218.2	35957.2	0.0	0.57

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- NUCLEO 1404 1403 1483 1402 1406 1405 1473 1401 / Nodi: 1404 1403 1483 1402 1406 1405 1473 1401

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1404 1403	6	142	405	25	2x ø 12 15'	2x ø 10 20'
1483 1402	6	160	405	25	2x ø 12 15'	2x ø 10 20'
1406 1404	6	244	405	25	2x ø 12 15'	2x ø 10 20'
1405 1404	7	100	405	20	2x ø 12 15'	2x ø 10 20'
1403 1483	6	41	405	25	2x ø 12 15'	2x ø 10 20'
1473 1401	5	60	405	30	2x ø 14 15'	2x ø 10 15'
1402 1401	6	192	405	25	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-31288.1	279279.4	-49623.3	0.46
Som.	9	-12585.7	121026.9	-31477.7	0.30

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-77552.2	27555.3	1581.1	-4.6
Cls.Med	41	-77552.2	27555.3	1581.1	-3.0
Ft.	39	-78139.1	28435.3	1632.2	-30.3
Fc.	41	-77552.2	27555.3	1581.1	-68.4
Sommita					
Cls.	41	-77552.2	27555.3	1581.1	-4.6
Cls.Med	41	-77552.2	27555.3	1581.1	-3.0
Ft.	39	-78139.1	28435.3	1632.2	-30.3
Fc.	41	-77552.2	27555.3	1581.1	-68.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1406-1404-1403-1483-1402-1401	7.79	4.05	4	80646.3	1.50	120969.4	-50064.8	-198121.2	718942.1	214775.0	0.0	0.56
1473-1401	0.60	4.05	4	7108.0	1.50	10662.0	-21057.1	13044.1	63885.4	21205.5	0.0	0.50
1405-1404	1.00	4.05	4	12040.4	1.50	18060.6	-65674.2	71654.3	72218.2	26967.9	0.0	0.67

- NUCLEO 1504 1503 1583 1502 1506 1505 1573 1501 / Nodi: 1504 1503 1583 1502 1506 1505 1573 1501

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1504 1503	6	142	130	25	2x ø 12 15'	2x ø 10 20'
1583 1502	6	160	130	25	2x ø 12 15'	2x ø 10 20'
1506 1504	6	244	130	25	2x ø 12 15'	2x ø 10 20'
1505 1504	7	100	130	20	2x ø 12 15'	2x ø 10 20'
1503 1583	6	41	130	25	2x ø 12 15'	2x ø 10 20'
1573 1501	5	60	130	30	2x ø 14 15'	2x ø 10 15'
1502 1501	6	192	130	25	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	M _x [kgm]	M _y [kgm]	Sd/Sr
Base	9inv.	-14212.3	121026.9	-31477.7	0.29
Som.	9	-9441.3	82178.7	-28171.3	0.27

S.L.E.	Combinazione	N [kg]	M _x [kgm]	M _y [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-37140.0	11348.8	-125.7	-1.8
Cls.Med	41	-37140.0	11348.8	-125.7	-1.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Ft.	39	-37160.1	11752.0	-142.3	-16.7
Fc.	41	-37140.0	11348.8	-125.7	-26.8
Sommita					
Cls.	41	-37140.0	11348.8	-125.7	-1.8
Cls.Med	41	-37140.0	11348.8	-125.7	-1.5
Ft.	39	-37160.1	11752.0	-142.3	-16.7
Fc.	41	-37140.0	11348.8	-125.7	-26.8

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1506-1504-1503-1583-1502-1501	7.79	1.30	4	66911.3	1.50	100367.0	-14793.5	-96401.9	718942.1	214775.0	0.0	0.47
1573-1501	0.60	1.30	4	4414.1	1.50	6621.1	-13805.7	8473.7	63885.4	21205.5	0.0	0.31
1505-1504	1.00	1.30	4	8529.2	1.50	12793.8	-39249.2	43044.7	72218.2	26967.9	0.0	0.47

- NUCLEO 1704 1703 1783 1702 1706 1705 1773 1701 / Nodi: 1704 1703 1783 1702 1706 1705 1773 1701

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1704 1703	6	142	140	25	2x ø 12 15'	2x ø 10 20'
1783 1702	6	160	140	25	2x ø 12 15'	2x ø 10 20'
1706 1704	6	244	140	25	2x ø 12 15'	2x ø 10 20'
1705 1704	7	100	140	20	2x ø 12 15'	2x ø 10 20'
1703 1783	6	41	140	25	2x ø 12 15'	2x ø 10 20'
1773 1701	5	60	140	30	2x ø 14 15'	2x ø 10 15'
1702 1701	6	192	140	25	2x ø 12 15'	2x ø 10 20'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-9085.8	82178.7	-28171.3	0.27
Som.	9	-2867.0	42071.9	-24610.5	0.24

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-29575.6	4760.7	-20.1	-1.3
Cls.Med	41	-29575.6	4760.7	-20.1	-1.2
Ft.	39	-29595.7	5020.4	-25.1	-15.2
Fc.	41	-29575.6	4760.7	-20.1	-19.4
Sommita					
Cls.	41	-29575.6	4760.7	-20.1	-1.3
Cls.Med	41	-29575.6	4760.7	-20.1	-1.2
Ft.	39	-29595.7	5020.4	-25.1	-15.2
Fc.	41	-29575.6	4760.7	-20.1	-19.4

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1706-1704-1703-1783-1702-1701	7.79	1.40	4	62502.6	1.50	93753.8	-12692.4	-70626.9	718942.1	214775.0	0.0	0.44
1773-1701	0.60	1.40	4	5781.3	1.50	8672.0	-13109.5	7684.4	63885.4	21205.5	0.0	0.41
1705-1704	1.00	1.40	4	10118.0	1.50	15177.0	-29782.3	32742.7	72218.2	26967.9	0.0	0.56

- NUCLEO 1804 1803 1883 1802 1806 1805 1873 1801 / Nodi: 1804 1803 1883 1802 1806 1805 1873 1801

- Armature Nucleo

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1804 1803	6	142	135	25	2x ø 12 15'	2x ø 10 20'
1883 1802	6	160	135	25	2x ø 12 15'	2x ø 10 20'
1806 1804	6	244	135	25	2x ø 12 15'	2x ø 10 20'
1805 1804	7	100	135	20	2x ø 12 15'	2x ø 10 20'
1803 1883	6	41	135	25	2x ø 12 15'	2x ø 10 20'
1873 1801	5	60	135	30	2x ø 14 15'	2x ø 10 15'
1802 1801	6	192	135	25	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	9inv.	-6026.2	42071.9	-24610.5	0.23	
Som.	9	13853.9	0.0	-21176.9	0.23	

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-21429.3	-2334.2	93.7	-1.0
Cls.Med	41	-21429.3	-2334.2	93.7	-0.8
Ft.	41	-21429.3	-2334.2	93.7	-11.4
Fc.	41	-21429.3	-2334.2	93.7	-14.4
Sommita					
Cls.	41	-21429.3	-2334.2	93.7	-1.0
Cls.Med	41	-21429.3	-2334.2	93.7	-0.8
Ft.	41	-21429.3	-2334.2	93.7	-11.4
Fc.	41	-21429.3	-2334.2	93.7	-14.4

- Verifiche a taglio dei diaframmi

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1806-1804-1803-1883-1802-1801	7.79	1.35	4	57754.7	1.50	86632.0	-4266.1	-42916.3	718942.1	214775.0	0.0	0.40
1873-1801	0.60	1.35	4	5781.3	1.50	8672.0	-12368.6	7342.8	63885.4	21205.5	0.0	0.41
1805-1804	1.00	1.35	4	10118.0	1.50	15177.0	-29062.0	32026.2	72218.2	26967.9	0.0	0.56

**- NUCLEO 1016 1017 1018 1015 1014 1013 1012 1011 1010 1009 1008 1007 / Nodi: 1016 1017 1018 1015 1014 1013 1012
1011 1010 1009 1008 1007**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1016 1017	7	100	325	20	2x ø 16 15'	2x ø 10 15'
1018 1016	7	60	325	20	2x ø 20 15'	2x ø 10 15'
1016 1015	7	190	325	20	2x ø 20 15'	2x ø 10 15'
1015 1014	7	535	325	20	2x ø 20 15'	2x ø 10 15'
1014 1013	8	157	325	40	2x ø 24 10'	2x ø 16 15'
1013 1012	8	101	325	40	2x ø 24 10'	2x ø 16 15'
1012 1011	8	157	325	40	2x ø 24 10'	2x ø 16 15'
1011 1010	6	535	325	25	2x ø 20 15'	2x ø 12 15'
1009 1008	7	100	325	20	2x ø 16 15'	2x ø 10 15'
1010 1008	6	190	325	25	2x ø 20 15'	2x ø 12 15'
1008 1007	6	65	325	25	2x ø 20 15'	2x ø 12 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	33	-472275.8	3077333.8	1641510.6	0.23
Som.	7	-454190.3	671923.8	1595292.0	0.13

S.L.E.	Combinazione	N	Mx	My	σ
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[kg]	[kgm]	[kgm]	[kg/cm ²]
Base					
Cls.	41	-586467.7	404970.1	275985.8	-14.3
Cls.Med	41	-586467.7	404970.1	275985.8	-8.0
Ft.	41	-586467.7	404970.1	275985.8	-49.5
Fc.	41	-586467.7	404970.1	275985.8	-213.6
Sommita					
Cls.	41	-586467.7	404970.1	275985.8	-14.3
Cls.Med	41	-586467.7	404970.1	275985.8	-8.0
Ft.	41	-586467.7	404970.1	275985.8	-49.5
Fc.	41	-586467.7	404970.1	275985.8	-213.6

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
1011-1010-1008-1007	7.90	3.25	7	120648.0	1.50	180972.0	-508068.9	139125.8	729126.6	418209.8	323717.1	0.56
1009-1008	1.00	3.25	14	9072.1	1.50	13608.2	30229.2	83014.4	72218.2	35957.2	26225.2	0.52
1014-1013-1012-1011	4.15	3.25	33	231486.3	1.50	347229.5	226379.5	-273025.2	611077.4	389443.8	367316.4	0.95
1018-1016-1015-1014	7.85	3.25	12	-176887.5	1.50	-265331.3	-129678.0	404165.7	579301.5	288431.9	663576.6	0.92
1016-1017	1.00	3.25	12	11148.2	1.50	16722.4	16507.9	-55263.7	72218.2	35957.2	26225.2	0.64

- NUCLEO 1116 1117 1118 1115 1114 1113 1112 1111 1110 1109 1108 1107 / Nodi: 1116 1117 1118 1115 1114 1113 1112

1111 1110 1109 1108 1107

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1116 1117	7	100	407	20	2x ø 16 15'	2x ø 10 15'
1118 1116	7	60	407	20	2x ø 20 15'	2x ø 10 15'
1116 1115	7	190	407	20	2x ø 20 15'	2x ø 10 15'
1115 1114	7	535	407	20	2x ø 20 15'	2x ø 10 15'
1114 1113	5	157	407	30	2x ø 24 10'	2x ø 14 15'
1112 1111	5	157	407	30	2x ø 24 10'	2x ø 14 15'
1111 1110	6	535	407	25	2x ø 20 15'	2x ø 12 15'
1109 1108	7	100	407	20	2x ø 16 15'	2x ø 10 15'
1110 1108	6	190	407	25	2x ø 20 15'	2x ø 12 15'
1108 1107	6	65	407	25	2x ø 20 15'	2x ø 12 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	10inv.	-970991.3	1589031.3	1543020.4	0.20
Som.	10	-710795.8	1589031.3	1543020.4	0.19

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-505984.2	217059.3	193396.0	-11.9
Cls.Med	41	-505984.2	217059.3	193396.0	-7.9
Ft.	41	-505984.2	217059.3	193396.0	-68.1
Fc.	41	-505984.2	217059.3	193396.0	-177.5
Sommita					
Cls.	41	-505984.2	217059.3	193396.0	-11.9
Cls.Med	41	-505984.2	217059.3	193396.0	-7.9
Ft.	41	-505984.2	217059.3	193396.0	-68.1
Fc.	41	-505984.2	217059.3	193396.0	-177.5

- Verifiche a taglio dei diaframmi

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1111-1110-1108-1107	7.90	4.07	7	159405.5	1.50	239108.3	-367261.0	-337593.5	729126.6	418209.8	323717.1	0.74
1109-1108	1.00	4.07	5	11172.5	1.50	16758.7	29692.0	80317.0	72218.2	35957.2	26225.2	0.64
1112-1111	1.57	4.07	4	65615.1	1.50	98422.7	-111445.2	-243295.5	171657.2	111677.4	344515.0	0.88
1114-1113	1.57	4.07	4	64203.7	1.50	96305.6	-189588.8	561093.2	171657.2	111677.4	344515.4	0.86
1118-1116-1115-1114	7.85	4.07	4	180803.0	1.50	271204.6	-511679.2	247537.8	579301.5	288431.9	588423.3	0.94
1116-1117	1.00	4.07	4	13112.1	1.50	19668.2	-33910.8	115879.1	72218.2	35957.2	26225.2	0.75

**- NUCLEO 1216 1217 1218 1215 1214 1213 1212 1211 1210 1209 1208 1207 / Nodi: 1216 1217 1218 1215 1214 1213 1212
1211 1210 1209 1208 1207**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1216 1217	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1218 1216	7	60	405	20	2x ø 16 15'	2x ø 10 15'
1216 1215	7	190	405	20	2x ø 16 15'	2x ø 10 15'
1215 1214	7	535	405	20	2x ø 16 15'	2x ø 10 15'
1214 1213	5	157	405	30	2x ø 20 15'	2x ø 14 15'
1212 1211	5	157	405	30	2x ø 20 15'	2x ø 14 15'
1211 1210	6	535	405	25	2x ø 16 15'	2x ø 10 15'
1209 1208	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1210 1208	6	190	405	25	2x ø 16 15'	2x ø 10 15'
1208 1207	6	65	405	25	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	11inv.	-173966.1	1589031.3	1543020.4	0.24
Som.	7	-131154.3	-929726.1	1237344.0	0.20

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-398719.4	160606.6	146067.7	-10.1
Cls.Med	41	-398719.4	160606.6	146067.7	-6.8
Ft.	41	-398719.4	160606.6	146067.7	-61.2
Fc.	41	-398719.4	160606.6	146067.7	-151.5
Sommita					
Cls.	41	-398719.4	160606.6	146067.7	-10.1
Cls.Med	41	-398719.4	160606.6	146067.7	-6.8
Ft.	41	-398719.4	160606.6	146067.7	-61.2
Fc.	41	-398719.4	160606.6	146067.7	-151.5

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1211-1210-1208-1207	7.90	4.05	4	159405.5	1.50	239108.3	-2603.1	-315877.8	729126.7	290423.5	0.0	0.82
1209-1208	1.00	4.05	4	14962.9	1.50	22444.4	11909.4	32644.5	72218.2	35957.2	0.0	0.62
1212-1211	1.57	4.05	4	65615.1	1.50	98422.7	-82576.3	-178653.3	171657.2	111677.4	0.0	0.88
1214-1213	1.57	4.05	4	64203.7	1.50	96305.6	-160719.8	476614.6	171657.2	111677.4	0.0	0.86
1218-1216-1215-1214	7.85	4.05	4	180803.0	1.50	271204.6	-416724.3	247537.8	579301.5	288431.9	0.0	0.94
1216-1217	1.00	4.05	4	14447.6	1.50	21671.4	-22878.1	78432.3	72218.2	35957.2	0.0	0.60

- NUCLEO 1316 1317 1318 1315 1314 1313 1312 1311 1310 1309 1308 1307 / Nodi: 1316 1317 1318 1315 1314 1313 1312

1311 1310 1309 1308 1307

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1316 1317	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1318 1316	7	60	405	20	2x ø 16 15'	2x ø 10 15'
1316 1315	7	190	405	20	2x ø 16 15'	2x ø 10 15'
1315 1314	7	535	405	20	2x ø 16 15'	2x ø 10 15'
1314 1313	5	157	405	30	2x ø 20 15'	2x ø 14 15'
1312 1311	5	157	405	30	2x ø 20 15'	2x ø 14 15'
1311 1310	6	535	405	25	2x ø 16 15'	2x ø 10 15'
1309 1308	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1310 1308	6	190	405	25	2x ø 16 15'	2x ø 10 15'
1308 1307	6	65	405	25	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-96502.2	-929726.1	1237344.0	0.21
Som.	7	-89886.4	-704544.4	931667.2	0.15

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-291656.7	109823.3	102209.1	-7.3
Cls.Med	41	-291656.7	109823.3	102209.1	-5.0
Ft.	41	-291656.7	109823.3	102209.1	-46.4
Fc.	41	-291656.7	109823.3	102209.1	-108.9
Sommita					
Cls.	41	-291656.7	109823.3	102209.1	-7.3
Cls.Med	41	-291656.7	109823.3	102209.1	-5.0
Ft.	41	-291656.7	109823.3	102209.1	-46.4
Fc.	41	-291656.7	109823.3	102209.1	-108.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1311-1310-1308-1307	7.90	4.05	4	140606.2	1.50	210909.3	-19978.1	-254315.5	729126.6	290423.4	0.0	0.73
1309-1308	1.00	4.05	4	14962.9	1.50	22444.4	8002.5	22029.0	72218.2	35957.2	0.0	0.62
1312-1311	1.57	4.05	4	54884.6	1.50	82326.8	-70730.4	-153365.2	171657.2	111677.4	0.0	0.74
1314-1313	1.57	4.05	4	53699.4	1.50	80549.1	-133408.9	395447.9	171657.2	111677.4	0.0	0.72
1318-1316-1315-1314	7.85	4.05	4	163455.5	1.50	245183.2	-348469.6	199293.7	579301.5	288431.9	0.0	0.85
1316-1317	1.00	4.05	4	14447.6	1.50	21671.4	-19944.5	68321.0	72218.2	35957.2	0.0	0.60

**- NUCLEO 1416 1417 1418 1415 1414 1413 1412 1411 1410 1409 1408 1407 / Nodi: 1416 1417 1418 1415 1414 1413 1412
1411 1410 1409 1408 1407**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1416 1417	7	100	405	20	2x ø 12 15'	2x ø 10 20'
1418 1416	7	60	405	20	2x ø 12 15'	2x ø 10 20'
1416 1415	7	190	405	20	2x ø 12 15'	2x ø 10 20'
1415 1414	7	535	405	20	2x ø 12 15'	2x ø 10 20'
1414 1413	5	157	405	30	2x ø 20 15'	2x ø 12 15'
1412 1411	5	157	405	30	2x ø 20 15'	2x ø 12 15'
1411 1410	6	535	405	25	2x ø 12 15'	2x ø 10 20'
1409 1408	7	100	405	20	2x ø 12 15'	2x ø 10 20'
1410 1408	6	190	405	25	2x ø 12 15'	2x ø 10 20'
1408 1407	6	65	405	25	2x ø 12 15'	2x ø 10 20'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-88623.9	-704544.4	931667.2	0.23
Som.	7	-46034.7	-479362.9	625990.7	0.16

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-184593.7	59133.5	54581.3	-4.7
Cls.Med	41	-184593.7	59133.5	54581.3	-3.4
Ft.	41	-184593.7	59133.5	54581.3	-34.2
Fc.	41	-184593.7	59133.5	54581.3	-69.9
Sommita					
Cls.	41	-184593.7	59133.5	54581.3	-4.7
Cls.Med	41	-184593.7	59133.5	54581.3	-3.4
Ft.	41	-184593.7	59133.5	54581.3	-34.2
Fc.	41	-184593.7	59133.5	54581.3	-69.9

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1411-1410-1408-1407	7.90	4.05	4	119628.9	1.50	179443.3	46732.7	-192753.0	729126.7	217817.6	0.0	0.82
1409-1408	1.00	4.05	4	10711.1	1.50	16066.6	11641.9	31643.5	72218.2	26967.9	0.0	0.60
1412-1411	1.57	4.05	4	47525.6	1.50	71288.3	-38574.6	-82599.8	171657.2	82048.7	0.0	0.87
1414-1413	1.57	4.05	4	46500.2	1.50	69750.3	-85788.0	254848.4	171657.2	82048.7	0.0	0.85
1418-1416-1415-1414	7.85	4.05	4	135950.7	1.50	203926.0	-213411.9	151049.6	579301.5	216324.0	0.0	0.94
1416-1417	1.00	4.05	4	11206.7	1.50	16810.0	-9249.3	31865.1	72218.2	26967.9	0.0	0.62

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

**- NUCLEO 1516 1517 1518 1515 1514 1513 1512 1511 1510 1509 1508 1507 / Nodi: 1516 1517 1518 1515 1514 1513 1512
1511 1510 1509 1508 1507**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1516 1517	7	100	130	20	2x ø 12 15'	2x ø 10 20'
1516 1518	7	60	130	20	2x ø 12 15'	2x ø 10 20'
1515 1516	7	190	130	20	2x ø 12 15'	2x ø 10 20'
1514 1515	7	535	130	20	2x ø 12 15'	2x ø 10 20'
1514 1513	5	157	130	30	2x ø 20 15'	2x ø 12 15'
1512 1511	5	157	130	30	2x ø 20 15'	2x ø 12 15'
1511 1510	6	535	130	25	2x ø 12 15'	2x ø 10 20'
1509 1508	7	100	130	20	2x ø 12 15'	2x ø 10 20'
1510 1508	6	190	130	25	2x ø 12 15'	2x ø 10 20'
1508 1507	6	65	130	25	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-37487.9	-479362.9	625990.7	0.17
Som.	7	-19298.5	-407082.5	527872.5	0.15

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-77236.9	18038.0	12904.3	-1.8
Cls.Med	41	-77236.9	18038.0	12904.3	-1.4
Ft.	39	-77222.9	18234.4	13009.7	-16.7
Fc.	41	-77236.9	18038.0	12904.3	-26.4
Sommita					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Cls.	41	-77236.9	18038.0	12904.3	-1.8
Cls.Med	41	-77236.9	18038.0	12904.3	-1.4
Ft.	39	-77222.9	18234.4	13009.7	-16.7
Fc.	41	-77236.9	18038.0	12904.3	-26.4

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1511-1510-1508-1507	7.90	1.30	4	99665.8	1.50	149498.7	61526.8	-131190.7	729126.6	217817.5	0.0	0.69
1509-1508	1.00	1.30	4	8272.4	1.50	12408.6	10622.1	28767.5	72218.2	26967.9	0.0	0.46
1512-1511	1.57	1.30	4	40166.6	1.50	60249.8	-18958.6	-39913.2	171657.2	82048.7	0.0	0.73
1514-1513	1.57	1.30	4	39301.0	1.50	58951.6	-50707.0	150944.2	171657.2	82048.7	0.0	0.72
1514-1515-1516-1518	7.85	1.30	4	113176.1	1.50	169764.1	-119599.9	-102805.5	579301.5	216323.9	0.0	0.78
1516-1517	1.00	1.30	4	8594.4	1.50	12891.6	-3346.3	11675.0	72218.2	26967.9	0.0	0.48

**- NUCLEO 1716 1717 1718 1715 2314 1713 1712 1711 1710 1709 1708 1707 / Nodi: 1716 1717 1718 1715 2314 1713 1712
1711 1710 1709 1708 1707**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1716 1717	7	100	140	20	2x ø 12 15'	2x ø 10 20'
1716 1718	7	60	140	20	2x ø 12 15'	2x ø 10 20'
1715 1716	7	190	140	20	2x ø 12 15'	2x ø 10 20'
2314 1715	7	535	140	20	2x ø 12 15'	2x ø 10 20'
2314 1713	5	157	140	30	2x ø 20 15'	2x ø 12 15'
1712 1711	5	157	140	30	2x ø 20 15'	2x ø 12 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1710 1711	6	535	140	25	2x ø 12 15'	2x ø 10 20'
1709 1708	7	100	140	20	2x ø 12 15'	2x ø 10 20'
1708 1710	6	190	140	25	2x ø 12 15'	2x ø 10 20'
1707 1708	6	65	140	25	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-18286.1	-407082.5	527872.5	0.15
Som.	7	-15015.7	-329241.5	422206.0	0.12

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-60211.9	24006.4	9756.1	-1.5
Cls.Med	41	-60211.9	24006.4	9756.1	-1.1
Ft.	39	-60194.6	24116.0	9838.7	-11.8
Fc.	41	-60211.9	24006.4	9756.1	-22.2
Sommita					
Cls.	41	-60211.9	24006.4	9756.1	-1.5
Cls.Med	41	-60211.9	24006.4	9756.1	-1.1
Ft.	39	-60194.6	24116.0	9838.7	-11.8
Fc.	41	-60211.9	24006.4	9756.1	-22.2

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1707-1708-1710-1711	7.90	1.40	4	93257.9	1.50	139886.9	41838.7	111429.9	729126.6	217817.5	0.0	0.64
1709-1708	1.00	1.40	4	8409.3	1.50	12613.9	7197.3	19491.7	72218.2	26967.9	0.0	0.47
1712-1711	1.57	1.40	4	37804.4	1.50	56706.6	-18564.5	-39427.8	171657.2	82048.7	0.0	0.69

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

2314-1713	1.57	1.40	4	36990.2	1.50	55485.3	-45348.9	134864.4	171657.2	82048.7	0.0	0.68
2314-1715-1716-1718	7.85	1.40	4	105865.7	1.50	158798.6	-108901.6	-87319.8	579301.5	216323.9	0.0	0.73
1716-1717	1.00	1.40	4	7940.1	1.50	11910.2	-3707.2	12850.4	72218.2	26967.9	0.0	0.44

**- NUCLEO 1816 1817 1818 1815 1814 1813 1812 1811 1810 1809 1808 1807 / Nodi: 1816 1817 1818 1815 1814 1813 1812
1811 1810 1809 1808 1807**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1816 1817	7	100	135	20	2x ø 12 15'	2x ø 10 20'
1816 1818	7	60	135	20	2x ø 12 15'	2x ø 10 20'
1815 1816	7	190	135	20	2x ø 12 15'	2x ø 10 20'
1814 1815	7	535	135	20	2x ø 12 15'	2x ø 10 20'
1814 1813	5	157	135	30	2x ø 20 15'	2x ø 12 15'
1812 1811	5	157	135	30	2x ø 20 15'	2x ø 12 15'
1810 1811	6	535	135	25	2x ø 12 15'	2x ø 10 20'
1809 1808	7	100	135	20	2x ø 12 15'	2x ø 10 20'
1808 1810	6	190	135	25	2x ø 12 15'	2x ø 10 20'
1807 1808	6	65	135	25	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-16467.8	-329241.5	422206.0	0.12
Som.	7	7698.9	-254181.5	320314.5	0.10

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-41819.0	22712.1	5630.3	-1.1

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Cls.Med	41	-41819.0	22712.1	5630.3	-0.8
Ft.	39	-41801.7	22718.2	5672.4	-7.6
Fc.	41	-41819.0	22712.1	5630.3	-16.2
Sommita					
Cls.	41	-41819.0	22712.1	5630.3	-1.1
Cls.Med	41	-41819.0	22712.1	5630.3	-0.8
Ft.	39	-41801.7	22718.2	5672.4	-7.6
Fc.	41	-41819.0	22712.1	5630.3	-16.2

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1807-1808-1810-1811	7.90	1.35	4	86357.1	1.50	129535.6	43497.0	90149.0	729126.6	217817.5	0.0	0.59
1809-1808	1.00	1.35	4	8409.3	1.50	12613.9	7439.0	20139.6	72218.2	26967.9	0.0	0.47
1812-1811	1.57	1.35	4	35260.5	1.50	52890.8	-12618.4	-26540.9	171657.2	82048.7	0.0	0.64
1814-1813	1.57	1.35	4	34501.6	1.50	51752.4	-34056.7	101389.3	171657.2	82048.7	0.0	0.63
1814-1815-1816-1818	7.85	1.35	4	97993.0	1.50	146989.5	-79218.1	-70642.7	579301.5	216323.9	0.0	0.68
1816-1817	1.00	1.35	4	7793.0	1.50	11689.6	-1985.7	6953.8	72218.2	26967.9	0.0	0.43

- NUCLEO 1074 1022 1020 1021 1019 / Nodi: 1074 1022 1020 1021 1019

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1074 1022	5	60	325	30	2x ø 20 15'	2x ø 12 15'
1020 1021	7	100	325	20	2x ø 16 15'	2x ø 10 15'
1022 1020	7	535	325	20	2x ø 16 15'	2x ø 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1020 1019	7	241	325	20	2x ø 16 15'	2x ø 10 15'
S.L.U.	Comb.	N		Mx	My	Sd/Sr
		[kg]		[kgm]	[kgm]	
Base	11inv.	-146774.5		1457136.3	155630.9	0.97
Som.	11	-135473.8		1381284.3	155630.9	0.97

S.L.E.	Combinazione	N	Mx	My	σ
		[kg]	[kgm]	[kgm]	[kg/cm²]
Base					
Cls.	41	-401088.9	123700.5	-1329.1	-21.2
Cls.Med	41	-401088.9	123700.5	-1329.1	-17.1
Ft.	41	-401088.9	123700.5	-1329.1	-197.9
Fc.	41	-401088.9	123700.5	-1329.1	-316.8
Sommita					
Cls.	41	-401088.9	123700.5	-1329.1	-21.2
Cls.Med	41	-401088.9	123700.5	-1329.1	-17.1
Ft.	41	-401088.9	123700.5	-1329.1	-197.9
Fc.	41	-401088.9	123700.5	-1329.1	-316.8

- Verifiche a taglio dei diaframmi

Diaframma	B	H	Comb.	V_{dc}	alpha	V_{Ed}	N_{Ed}	M_{Ed}	V_{Rcd}	V_{Rds}	V_{Rds,scorrimento}	V_s/V_R
	[m]	[m]	critica	[kg]		[kg]	[kg]	[kgm]	[kg]	[kg]	[kg]	
1022-1020-1019	7.76	3.25	4	156208.4	1.50	234312.6	-881206.5	829735.8	572635.2	285112.8	602118.6	0.82
1020-1021	1.00	3.25	6	11765.9	1.50	17648.9	-255069.2	-263764.3	72218.2	35957.2	26225.2	0.67
1074-1022	0.60	3.25	7	10093.5	1.50	15140.2	-16246.9	18212.8	63885.4	30536.0	24854.0	0.61

- NUCLEO 1174 1122 1120 1121 1119 / Nodi: 1174 1122 1120 1121 1119

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1174 1122	5	60	407	30	2x ø 20 15'	2x ø 12 15'
1120 1121	7	100	407	20	2x ø 16 15'	2x ø 10 15'
1122 1120	7	535	407	20	2x ø 16 15'	2x ø 10 15'
1120 1119	7	241	407	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	11inv.	-107613.0	1381284.3	155630.9	0.99
Som.	11	-100113.0	1134310.3	132404.1	0.84

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-328259.1	71634.6	-2935.0	-17.4
Cls.Med	41	-328259.1	71634.6	-2935.0	-14.0
Ft.	41	-328259.1	71634.6	-2935.0	-171.8
Fc.	41	-328259.1	71634.6	-2935.0	-260.8
Sommita					
Cls.	41	-328259.1	71634.6	-2935.0	-17.4
Cls.Med	41	-328259.1	71634.6	-2935.0	-14.0
Ft.	41	-328259.1	71634.6	-2935.0	-171.8
Fc.	41	-328259.1	71634.6	-2935.0	-260.8

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1122-1120-1119	7.76	4.07	4	156208.4	1.50	234312.6	-798656.8	785282.1	572635.2	285112.8	562948.4	0.82
1120-1121	1.00	4.07	6	11765.9	1.50	17648.9	-260932.6	-269284.4	72218.2	35957.2	26225.2	0.67
1174-1122	0.60	4.07	7	10093.5	1.50	15140.2	-13622.9	17068.9	63885.4	30536.0	24815.0	0.61

- NUCLEO 1274 1222 1220 1221 1219 / Nodi: 1274 1222 1220 1221 1219

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1274 1222	5	60	405	30	2x ø 20 15'	2x ø 12 15'
1220 1221	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1222 1220	7	535	405	20	2x ø 16 15'	2x ø 10 15'
1220 1219	7	241	405	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	11inv.	-96016.6	1134310.3	132404.1	0.84
Som.	11	-65990.5	888549.8	109291.4	0.70

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-257332.8	35860.7	-2457.2	-13.2
Cls.Med	41	-257332.8	35860.7	-2457.2	-11.0
Ft.	41	-257332.8	35860.7	-2457.2	-143.6
Fc.	41	-257332.8	35860.7	-2457.2	-197.4
Sommita					
Cls.	41	-257332.8	35860.7	-2457.2	-13.2
Cls.Med	41	-257332.8	35860.7	-2457.2	-11.0
Ft.	41	-257332.8	35860.7	-2457.2	-143.6
Fc.	41	-257332.8	35860.7	-2457.2	-197.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1222-1220-1219	7.76	4.05	4	151149.3	1.50	226723.9	-615069.3	646261.4	572635.2	285112.8	0.0	0.80
1220-1221	1.00	4.05	4	13632.4	1.50	20448.6	66782.4	82675.7	72218.2	35957.2	0.0	0.57
1274-1222	0.60	4.05	4	10668.3	1.50	16002.4	73759.6	-41402.6	63885.4	30536.0	0.0	0.52

- NUCLEO 1374 1322 1320 1321 1319 / Nodi: 1374 1322 1320 1321 1319

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1374 1322	5	60	405	30	2x ø 20 15'	2x ø 12 15'
1320 1321	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1322 1320	7	535	405	20	2x ø 16 15'	2x ø 10 15'
1320 1319	7	241	405	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	M _x [kgm]	M _y [kgm]	Sd/Sr
Base	11inv.	-75987.7	888549.8	109291.4	0.69
Som.	11	-56246.8	642789.4	86178.8	0.55

S.L.E.	Combinazione	N [kg]	M _x [kgm]	M _y [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-186403.2	7646.9	-2021.0	-9.6
Cls.Med	41	-186403.2	7646.9	-2021.0	-8.0
Ft.	41	-186403.2	7646.9	-2021.0	-111.9

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Fc.	41	-186403.2	7646.9	-2021.0	-144.5
Sommita					
Cls.	41	-186403.2	7646.9	-2021.0	-9.6
Cls.Med	41	-186403.2	7646.9	-2021.0	-8.0
Ft.	41	-186403.2	7646.9	-2021.0	-111.9
Fc.	41	-186403.2	7646.9	-2021.0	-144.5

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1322-1320-1319	7.76	4.05	4	130490.8	1.50	195736.2	-451942.5	507923.7	572635.2	285112.8	0.0	0.69
1320-1321	1.00	4.05	4	13632.4	1.50	20448.6	62525.3	75206.1	72218.2	35957.2	0.0	0.57
1374-1322	0.60	4.05	4	10668.3	1.50	16002.4	65121.1	-36021.4	63885.4	30536.0	0.0	0.52

- NUCLEO 1474 1422 1420 1421 1419 / Nodi: 1474 1422 1420 1421 1419

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1474 1422	5	60	405	30	2x ø 14 15'	2x ø 10 15'
1420 1421	7	100	405	20	2x ø 12 15'	2x ø 10 20'
1422 1420	7	535	405	20	2x ø 12 15'	2x ø 10 20'
1420 1419	7	241	405	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	M _x [kgm]	M _y [kgm]	Sd/Sr
Base	11inv.	-46725.4	642789.4	86178.8	0.95
Som.	11	-17364.1	397028.9	63130.9	0.72

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-115450.6	-13590.1	-3236.9	-8.8
Cls.Med	41	-115450.6	-13590.1	-3236.9	-5.4
Ft.	41	-115450.6	-13590.1	-3236.9	-64.5
Fc.	41	-115450.6	-13590.1	-3236.9	-131.5
Sommita					
Cls.	41	-115450.6	-13590.1	-3236.9	-8.8
Cls.Med	41	-115450.6	-13590.1	-3236.9	-5.4
Ft.	41	-115450.6	-13590.1	-3236.9	-64.5
Fc.	41	-115450.6	-13590.1	-3236.9	-131.5

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1422-1420-1419	7.76	4.05	4	113028.6	1.50	169542.9	-310953.3	369586.2	572635.2	213834.6	0.0	0.79
1420-1421	1.00	4.05	4	12947.0	1.50	19420.4	55665.8	65286.5	72218.2	26967.9	0.0	0.72
1474-1422	0.60	4.05	4	9422.6	1.50	14133.9	53880.3	-29505.9	63885.4	21205.5	0.0	0.67

- NUCLEO 1574 1522 1520 1521 1519 / Nodi: 1574 1522 1520 1521 1519

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1574 1522	5	60	130	30	2x \emptyset 14 15'	2x \emptyset 10 15'
1520 1521	7	100	130	20	2x \emptyset 12 15'	2x \emptyset 10 20'
1520 1522	7	535	130	20	2x \emptyset 12 15'	2x \emptyset 10 20'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1519 1520	7	241	130	20	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	11inv.	-17948.9	397028.9	63130.9	0.72	
Som.	11	-15714.2	318142.8	55817.3	0.63	

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm²]
Base					
Cls.	41	-44200.9	-37526.5	-2007.7	-4.7
Cls.Med	41	-44200.9	-37526.5	-2007.7	-2.1
Ft.	37	-47226.5	-41931.6	-2279.8	-6.4
Fc.	41	-44200.9	-37526.5	-2007.7	-69.7
Sommita					
Cls.	41	-44200.9	-37526.5	-2007.7	-4.7
Cls.Med	41	-44200.9	-37526.5	-2007.7	-2.1
Ft.	37	-47226.5	-41931.6	-2279.8	-6.4
Fc.	41	-44200.9	-37526.5	-2007.7	-69.7

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V_{dc} [kg]	alpha	V_{Ed} [kg]	N_{Ed} [kg]	M_{Ed} [kgm]	V_{Rcd} [kg]	V_{Rds} [kg]	V_{Rds,scorrimento} [kg]	V_S/ V_R
1519-1520-1522	7.76	1.30	4	95566.4	1.50	143349.6	-168082.3	-231248.5	572635.2	213834.6	0.0	0.67
1520-1521	1.00	1.30	4	8762.6	1.50	13143.9	49027.6	55575.1	72218.2	26967.9	0.0	0.49
1574-1522	0.60	1.30	4	9422.6	1.50	14133.9	42860.7	-23086.8	63885.4	21205.5	0.0	0.67

- NUCLEO 1774 2322 1720 1721 1719 / Nodi: 1774 2322 1720 1721 1719

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1774 2322	5	60	140	30	2x ø 14 15'	2x ø 10 15'
1720 1721	7	100	140	20	2x ø 12 15'	2x ø 10 20'
1720 2322	7	535	140	20	2x ø 12 15'	2x ø 10 20'
1719 1720	7	241	140	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	11inv.	-11900.2	318142.8	55817.3	0.64
Som.	11	-9094.8	233188.7	47941.2	0.55

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-36832.0	-37288.2	-389.2	-3.0
Cls.Med	41	-36832.0	-37288.2	-389.2	-1.7
Ft.	37	-39501.2	-42509.7	-449.2	-6.3
Fc.	41	-36832.0	-37288.2	-389.2	-44.5
Sommita					
Cls.	41	-36832.0	-37288.2	-389.2	-3.0
Cls.Med	41	-36832.0	-37288.2	-389.2	-1.7
Ft.	37	-39501.2	-42509.7	-449.2	-6.3
Fc.	41	-36832.0	-37288.2	-389.2	-44.5

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1719-1720-2322	7.76	1.40	4	89961.3	1.50	134941.9	-151817.2	-186843.8	572635.2	213834.6	0.0	0.63
1720-1721	1.00	1.40	4	10973.9	1.50	16460.9	38232.0	43103.8	72218.2	26967.9	0.0	0.61
1774-2322	0.60	1.40	4	9420.4	1.50	14130.7	29144.3	-16030.7	63885.4	21205.5	0.0	0.67

- NUCLEO 1874 1822 1820 1821 1819 / Nodi: 1874 1822 1820 1821 1819

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1874 1822	5	60	135	30	2x ø 14 15'	2x ø 10 15'
1820 1821	7	100	135	20	2x ø 12 15'	2x ø 10 20'
1820 1822	7	535	135	20	2x ø 12 15'	2x ø 10 20'
1819 1820	7	241	135	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	11inv.	-9416.3	233188.7	47941.2	0.55
Som.	11	18346.2	151268.5	40079.6	0.50

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-28800.2	-29641.1	620.2	-2.4
Cls.Med	41	-28800.2	-29641.1	620.2	-1.3
Ft.	36	-32623.0	-34057.4	763.0	-1.3
Fc.	41	-28800.2	-29641.1	620.2	-36.3
Sommita					
Cls.	41	-28800.2	-29641.1	620.2	-2.4
Cls.Med	41	-28800.2	-29641.1	620.2	-1.3
Ft.	36	-32623.0	-34057.4	763.0	-1.3
Fc.	41	-28800.2	-29641.1	620.2	-36.3

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V_{dc} [kg]	alpha	V_{Ed} [kg]	N_{Ed} [kg]	M_{Ed} [kgm]	V_{Rcd} [kg]	V_{Rds} [kg]	V_{Rds,scorrimento} [kg]	V_S/ V_R
1819-1820-1822	7.76	1.35	4	83924.9	1.50	125887.4	-124384.0	-139023.5	572635.2	213834.6	0.0	0.59
1820-1821	1.00	1.35	4	10973.9	1.50	16460.9	38542.2	43395.8	72218.2	26967.9	0.0	0.61
1874-1822	0.60	1.35	4	9420.4	1.50	14130.7	29454.5	-16165.9	63885.4	21205.5	0.0	0.67

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3 VANO SCALA "B"

- Sezioni Impiegate:

Sezione Numero	Dimensioni	Calcestruzzo	f_{cd} [kg/cm ²]	τ_{rd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{FREQ} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yFREQ} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro [cm]
5	s 30 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
6	s 25 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
7	s 20 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
8	s 40 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50

- **Fattore di sovraresistenza $\gamma_{R,d}=1.00$**
- **Per nuclei e diaframmi i momenti di progetto sono traslati e involuppati**
- **Per nuclei e diaframmi i tagli di progetto sono traslati e involuppati**
- **Per nuclei e diaframmi si considera una variazione +/-50% dello sforzo assiale nelle combinazioni sismiche.**
- **Taglio di progetto pari a 1.5 taglio di calcolo**
- **EC2. 4.3.2.4.4. Verifica a taglio con il metodo dell'inclinazione variabile del traliccio. $\cotg \theta = 1.00$**

- Verifiche Setti:

- NUCLEO 1081 1051 1082 1052 1056 1053 1054 1057 1055 1059 1058 1060 1061 1062 1063 1064 1066 1080 1079 1085 1084 /
Nodi: 1081 1051 1082 1052 1056 1053 1054 1057 1055 1059 1058 1060 1061 1062 1063 1064 1066 1080 1079 1085 1084

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1081 1051	3	85	325	20	2x ø 20 10'	2x ø 14 15'
1082 1052	3	85	325	20	2x ø 16 15'	2x ø 10 15'
1056 1053	2	300	325	25	2x ø 24 15'	2x ø 12 15'
1054 1081	3	215	325	20	2x ø 20 10'	2x ø 14 15'
1057 1054	3	235	325	20	2x ø 20 10'	2x ø 14 15'
1055 1082	3	215	325	20	2x ø 16 15'	2x ø 10 15'
1059 1056	2	235	325	25	2x ø 24 15'	2x ø 12 15'
1058 1057	3	195	325	20	2x ø 20 15'	2x ø 12 15'
1060 1057	3	149	325	20	2x ø 20 10'	2x ø 14 15'
1058 1061	3	149	325	20	2x ø 16 15'	2x ø 12 15'
1062 1059	2	149	325	25	2x ø 24 15'	2x ø 12 15'
1063 1060	3	134	325	20	2x ø 20 10'	2x ø 14 15'
1064 1062	2	106	325	25	2x ø 24 15'	2x ø 12 15'
1066 1064	2	190	325	25	2x ø 24 15'	2x ø 12 15'
1056 1080	3	50	325	20	2x ø 16 15'	2x ø 10 15'
1079 1054	3	50	325	20	2x ø 16 15'	2x ø 12 15'
1053 1085	4	80	325	40	2x ø 26 9'	2x ø 20 15'
1052 1084	4	115	325	40	2x ø 26 9'	2x ø 20 15'
1085 1052	4	132	325	40	2x ø 26 9'	2x ø 20 15'
1084 1051	4	80	325	40	2x ø 26 9'	2x ø 20 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	24	-538385.6	-1301793.8	-7023923.5	0.41
Som.	24	-461719.8	-860364.5	-5356350.0	0.31

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-645831.0	15517.0	-263945.0	-8.7
Cls.Med	41	-645831.0	15517.0	-263945.0	-6.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Ft.	36	-676124.8	-1452.4	-293607.7	-65.4
Fc.	41	-645831.0	15517.0	-263945.0	-130.6
Sommita					
Cls.	41	-645831.0	15517.0	-263945.0	-8.7
Cls.Med	41	-645831.0	15517.0	-263945.0	-6.4
Ft.	36	-676124.8	-1452.4	-293607.7	-65.4
Fc.	41	-645831.0	15517.0	-263945.0	-130.6

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1053-1085-1052-1084-1051	4.08	3.25	7	389145.6	1.50	583718.4	-242690.8	-816779.5	599226.9	596705.5	780618.3	0.98
1079-1054	0.50	3.25	34	642.3	1.50	963.5	-12151.4	-46367.8	34812.9	24959.8	13112.6	0.07
1056-1080	0.50	3.25	24	-719.0	1.50	-1078.5	-46917.4	146288.3	34812.9	17333.2	13112.6	0.08
1066-1064-1062-1059-1056-1053	9.80	3.25	5	172189.6	1.50	258284.4	817268.7	-413786.3	904116.9	518580.0	1493835.9	0.50
1063-1060-1057-1054-1081-1051	8.17	3.25	7	-219361.4	1.50	-329042.0	-1317568.1	-19286.0	603226.1	588674.0	502417.2	0.65
1058-1061	1.49	3.25	9	21123.8	1.50	31685.7	-64031.7	1119.7	107771.9	77269.3	38944.4	0.81
1058-1057	1.95	3.25	6	38971.1	1.50	58456.7	-181535.8	-462944.0	142214.7	101963.7	79905.0	0.73
1055-1082-1052	3.00	3.25	18	30001.0	1.50	45001.5	10532.3	-9900.4	219987.9	109531.1	78675.5	0.57

- NUCLEO 1181 1151 1182 1152 1156 1153 1154 1157 1155 1159 1160 1158 1161 1162 1163 1164 1180 1179 1185 1184 /

Nodi: 1181 1151 1182 1152 1156 1153 1154 1157 1155 1159 1160 1158 1161 1162 1163 1164 1180 1179 1185 1184

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1181 1151	3	85	407	20	2x ø 20 10'	2x ø 14 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1182 1152	3	85	407	20	2x ø 16 15'	2x ø 10 15'
1156 1153	2	300	407	25	2x ø 24 15'	2x ø 12 15'
1154 1181	3	215	407	20	2x ø 20 10'	2x ø 14 15'
1154 1157	3	235	407	20	2x ø 20 10'	2x ø 14 15'
1155 1182	3	215	407	20	2x ø 16 15'	2x ø 10 15'
1159 1156	2	235	407	25	2x ø 24 15'	2x ø 12 15'
1157 1160	3	149	407	20	2x ø 20 10'	2x ø 14 15'
1158 1161	3	149	407	20	2x ø 16 15'	2x ø 12 15'
1162 1159	2	149	407	25	2x ø 24 15'	2x ø 12 15'
1160 1163	3	134	407	20	2x ø 20 10'	2x ø 14 15'
1164 1162	2	106	407	25	2x ø 24 15'	2x ø 12 15'
1161 1160	3	195	407	20	2x ø 16 15'	2x ø 12 15'
1182 1181	3	195	407	20	2x ø 20 10'	2x ø 14 15'
1156 1180	3	50	407	20	2x ø 16 15'	2x ø 10 15'
1179 1154	3	50	407	20	2x ø 16 15'	2x ø 10 15'
1153 1185	4	80	407	40	2x ø 26 9'	2x ø 20 15'
1152 1184	4	115	407	40	2x ø 26 9'	2x ø 20 15'
1185 1152	4	132	407	40	2x ø 26 9'	2x ø 20 15'
1184 1151	4	80	407	40	2x ø 26 9'	2x ø 20 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-127806.7	1553213.5	-5441407.5	0.41
Som.	9	-78413.7	1553213.5	-5441407.5	0.41

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-529022.9	-83278.8	-144285.5	-7.1
Cls.Med	41	-529022.9	-83278.8	-144285.5	-5.3
Ft.	38	-537602.2	-87944.3	-152844.9	-57.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Fc.	41	-529022.9	-83278.8	-144285.5	-105.7
Sommita					
Cls.	41	-529022.9	-83278.8	-144285.5	-7.1
Cls.Med	41	-529022.9	-83278.8	-144285.5	-5.3
Ft.	38	-537602.2	-87944.3	-152844.9	-57.5
Fc.	41	-529022.9	-83278.8	-144285.5	-105.7

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1153-1185-1152-1184-1151	4.08	4.07	7	364159.8	1.50	546239.6	131757.0	-626915.9	599226.9	596705.5	591304.1	0.92
1179-1154	0.50	4.07	6	2708.3	1.50	4062.5	-51702.9	-177907.9	34812.9	17333.2	13112.6	0.31
1156-1180	0.50	4.07	4	2194.4	1.50	3291.6	-51305.8	179298.6	34812.9	17333.2	13112.6	0.25
1182-1181	1.95	4.07	6	57266.5	1.50	85899.7	-137016.7	-310241.4	142214.7	138784.0	119857.5	0.72
1161-1160	1.95	4.07	4	50249.6	1.50	75374.3	-2653.5	25721.7	142214.7	101963.7	0.0	0.74
1164-1162-1159-1156-1153	7.90	4.07	4	262970.3	1.50	394455.5	-1582156.4	-383834.1	728200.8	417678.7	465857.6	0.94
1151-1181-1154-1157-1160-1163	8.17	4.07	6	279968.0	1.50	419952.0	-1204700.1	280394.4	603226.1	588674.1	502417.2	0.84
1158-1161	1.49	4.07	5	20454.1	1.50	30681.2	-35176.7	2222.5	107771.9	77269.3	38944.4	0.79
1155-1182-1152	3.00	4.07	5	12850.0	1.50	19275.0	27208.1	-13214.2	219987.9	109531.1	78675.5	0.24

- NUCLEO 1281 1251 1282 1252 1256 1253 1254 1279 1257 1255 1280 1259 1260 1258 1261 1262 1263 1264 1285 1284 /

Nodi: 1281 1251 1282 1252 1256 1253 1254 1279 1257 1255 1280 1259 1260 1258 1261 1262 1263 1264 1285 1284

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1281 1251	3	85	405	20	2x ø 20 10'	2x ø 14 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1282 1252	3	85	405	20	2x ø 16 15'	2x ø 10 15'
1256 1253	2	300	405	25	2x ø 16 15'	2x ø 12 15'
1254 1281	3	215	405	20	2x ø 20 10'	2x ø 14 15'
1279 1254	3	50	405	20	2x ø 16 15'	2x ø 10 15'
1254 1257	3	235	405	20	2x ø 20 10'	2x ø 14 15'
1255 1282	3	215	405	20	2x ø 16 15'	2x ø 10 15'
1256 1280	3	50	405	20	2x ø 16 15'	2x ø 10 15'
1259 1256	2	235	405	25	2x ø 16 15'	2x ø 12 15'
1257 1260	3	149	405	20	2x ø 20 10'	2x ø 14 15'
1258 1261	3	149	405	20	2x ø 16 15'	2x ø 10 15'
1262 1259	2	149	405	25	2x ø 16 15'	2x ø 12 15'
1260 1263	3	134	405	20	2x ø 20 10'	2x ø 14 15'
1264 1262	2	106	405	25	2x ø 16 15'	2x ø 12 15'
1261 1260	3	195	405	20	2x ø 16 15'	2x ø 12 15'
1282 1281	3	195	405	20	2x ø 16 15'	2x ø 12 15'
1253 1285	4	80	405	40	2x ø 26 9'	2x ø 20 15'
1252 1284	4	115	405	40	2x ø 26 9'	2x ø 20 15'
1285 1252	4	132	405	40	2x ø 26 9'	2x ø 20 15'
1284 1251	4	80	405	40	2x ø 26 9'	2x ø 20 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-155652.3	1553213.5	-5441407.5	0.60
Som.	9	-108013.4	1280530.1	-4144437.5	0.46

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-416233.1	-52338.7	-107152.4	-5.7
Cls.Med	41	-416233.1	-52338.7	-107152.4	-4.4
Ft.	38	-423533.0	-56036.6	-114584.3	-49.2

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Fc.	41	-416233.1	-52338.7	-107152.4	-84.7
Sommita					
Cls.	41	-416233.1	-52338.7	-107152.4	-5.7
Cls.Med	41	-416233.1	-52338.7	-107152.4	-4.4
Ft.	38	-423533.0	-56036.6	-114584.3	-49.2
Fc.	41	-416233.1	-52338.7	-107152.4	-84.7

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1253-1285-1252-1284-1251	4.08	4.05	4	364159.8	1.50	546239.6	-12191.8	660370.0	599226.9	596705.5	0.0	0.92
1282-1281	1.95	4.05	4	57266.5	1.50	85899.7	94740.5	223617.4	142214.7	101963.7	0.0	0.84
1261-1260	1.95	4.05	4	50249.6	1.50	75374.3	11067.0	52936.4	142214.7	101963.7	0.0	0.74
1264-1262-1259-1256-1253	7.90	4.05	4	262970.3	1.50	394455.5	-1464204.6	-383834.1	728200.8	417678.7	0.0	0.94
1251-1281-1254-1257-1260-1263	8.17	4.05	4	303394.5	1.50	455091.7	681616.1	331301.6	603226.1	588674.1	0.0	0.77
1258-1261	1.49	4.05	4	20454.1	1.50	30681.2	-63039.4	2222.5	107771.9	53659.2	0.0	0.57
1256-1280	0.50	4.05	4	2194.4	1.50	3291.6	-46766.3	163457.0	34812.9	17333.2	0.0	0.19
1255-1282-1252	3.00	4.05	4	14135.4	1.50	21203.1	-18045.9	-10698.5	219987.9	109531.1	0.0	0.19
1279-1254	0.50	4.05	4	2708.3	1.50	4062.5	30915.6	106515.6	34812.9	17333.2	0.0	0.23

- NUCLEO 1381 1351 1382 1352 1356 1353 1354 1379 1357 1355 1380 1359 1360 1358 1361 1362 1363 1364 1385 1384 /

Nodi: 1381 1351 1382 1352 1356 1353 1354 1379 1357 1355 1380 1359 1360 1358 1361 1362 1363 1364 1385 1384

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1381 1351	3	85	405	20	2x ø 20 10'	2x ø 14 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1382 1352	3	85	405	20	2x ø 16 15'	2x ø 10 15'
1356 1353	2	300	405	25	2x ø 16 15'	2x ø 12 15'
1354 1381	3	215	405	20	2x ø 20 10'	2x ø 14 15'
1379 1354	3	50	405	20	2x ø 16 15'	2x ø 10 15'
1354 1357	3	235	405	20	2x ø 20 10'	2x ø 14 15'
1355 1382	3	215	405	20	2x ø 16 15'	2x ø 10 15'
1356 1380	3	50	405	20	2x ø 16 15'	2x ø 10 15'
1359 1356	2	235	405	25	2x ø 16 15'	2x ø 12 15'
1357 1360	3	149	405	20	2x ø 20 10'	2x ø 14 15'
1358 1361	3	149	405	20	2x ø 16 15'	2x ø 10 15'
1362 1359	2	149	405	25	2x ø 16 15'	2x ø 12 15'
1360 1363	3	134	405	20	2x ø 20 10'	2x ø 14 15'
1364 1362	2	106	405	25	2x ø 16 15'	2x ø 12 15'
1361 1360	3	195	405	20	2x ø 16 15'	2x ø 12 15'
1382 1381	3	195	405	20	2x ø 16 15'	2x ø 12 15'
1353 1385	4	80	405	40	2x ø 24 10'	2x ø 18 15'
1352 1384	4	115	405	40	2x ø 24 10'	2x ø 18 15'
1385 1352	4	132	405	40	2x ø 24 10'	2x ø 18 15'
1384 1351	4	80	405	40	2x ø 24 10'	2x ø 18 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-113879.5	1280530.1	-4144437.5	0.49
Som.	9	-27816.0	1007845.8	-2847463.5	0.35

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-303565.4	-21101.8	-72152.2	-4.0
Cls.Med	41	-303565.4	-21101.8	-72152.2	-3.3
Ft.	38	-309569.4	-23785.0	-78557.4	-38.4

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Fc.	41	-303565.4	-21101.8	-72152.2	-60.1
Sommita					
Cls.	41	-303565.4	-21101.8	-72152.2	-4.0
Cls.Med	41	-303565.4	-21101.8	-72152.2	-3.3
Ft.	38	-309569.4	-23785.0	-78557.4	-38.4
Fc.	41	-303565.4	-21101.8	-72152.2	-60.1

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1353-1385-1352-1384-1351	4.08	4.05	4	301392.0	1.50	452088.0	5094.7	502428.2	599226.9	483331.4	0.0	0.94
1382-1381	1.95	4.05	4	51921.0	1.50	77881.4	74805.3	175840.1	142214.7	101963.7	0.0	0.76
1361-1360	1.95	4.05	4	50249.6	1.50	75374.3	7260.6	38007.0	142214.7	101963.7	0.0	0.74
1364-1362-1359-1356-1353	7.90	4.05	4	251094.1	1.50	376641.1	-1111590.8	-310681.3	728200.8	417678.7	0.0	0.90
1351-1381-1354-1357-1360-1363	8.17	4.05	4	303394.5	1.50	455091.7	521948.4	267960.1	603226.1	588674.1	0.0	0.77
1358-1361	1.49	4.05	4	16609.1	1.50	24913.7	-48569.1	1791.4	107771.9	53659.2	0.0	0.46
1356-1380	0.50	4.05	4	1781.9	1.50	2672.8	-35350.4	123558.0	34812.9	17333.2	0.0	0.15
1355-1382-1352	3.00	4.05	4	14135.4	1.50	21203.1	-14554.4	-10698.5	219987.9	109531.1	0.0	0.19
1379-1354	0.50	4.05	4	2199.2	1.50	3298.8	23846.2	82156.0	34812.9	17333.2	0.0	0.19

- NUCLEO 1481 1451 1482 1452 1456 1453 1454 1479 1457 1455 1459 1460 1458 1461 1462 1463 1464 1480 1485 1484 /

Nodi: 1481 1451 1482 1452 1456 1453 1454 1479 1457 1455 1459 1460 1458 1461 1462 1463 1464 1480 1485 1484

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1481 1451	3	85	405	20	2x ø 16 15'	2x ø 12 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1482 1452	3	85	405	20	2x ø 16 15'	2x ø 10 15'
1456 1453	2	300	405	25	2x ø 16 15'	2x ø 12 15'
1454 1481	3	215	405	20	2x ø 16 15'	2x ø 12 15'
1479 1454	3	50	405	20	2x ø 12 15'	2x ø 10 20'
1454 1457	3	235	405	20	2x ø 16 15'	2x ø 12 15'
1455 1482	3	215	405	20	2x ø 16 15'	2x ø 10 15'
1459 1456	2	235	405	25	2x ø 16 15'	2x ø 12 15'
1457 1460	3	149	405	20	2x ø 16 15'	2x ø 12 15'
1458 1461	3	149	405	20	2x ø 12 15'	2x ø 10 20'
1462 1459	2	149	405	25	2x ø 16 15'	2x ø 12 15'
1460 1463	3	134	405	20	2x ø 16 15'	2x ø 12 15'
1464 1462	2	106	405	25	2x ø 16 15'	2x ø 12 15'
1461 1460	3	195	405	20	2x ø 12 15'	2x ø 10 20'
1482 1481	3	195	405	20	2x ø 16 15'	2x ø 10 15'
1456 1480	3	50	405	20	2x ø 12 15'	2x ø 10 20'
1453 1485	4	80	405	40	2x ø 24 10'	2x ø 18 15'
1452 1484	4	115	405	40	2x ø 24 10'	2x ø 18 15'
1485 1452	4	132	405	40	2x ø 24 10'	2x ø 18 15'
1484 1451	4	80	405	40	2x ø 24 10'	2x ø 18 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-74248.6	1007845.8	-2847463.5	0.37
Som.	9	40666.6	735162.6	-1550494.9	0.22

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-190740.6	8418.2	-36591.2	-2.6
Cls.Med	41	-190740.6	8418.2	-36591.2	-2.2
Ft.	41	-190740.6	8418.2	-36591.2	-26.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Fc.	41	-190740.6	8418.2	-36591.2	-38.9
Sommita					
Cls.	41	-190740.6	8418.2	-36591.2	-2.6
Cls.Med	41	-190740.6	8418.2	-36591.2	-2.2
Ft.	41	-190740.6	8418.2	-36591.2	-26.8
Fc.	41	-190740.6	8418.2	-36591.2	-38.9

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1453-1485-1452-1484-1451	4.08	4.05	4	243715.4	1.50	365573.1	23954.3	344415.7	599226.9	483331.4	0.0	0.76
1456-1480	0.50	4.05	4	1629.7	1.50	2444.6	-23860.3	83399.9	34812.9	12999.9	0.0	0.19
1482-1481	1.95	4.05	4	42690.1	1.50	64035.2	55216.2	128784.8	142214.7	70808.1	0.0	0.90
1461-1460	1.95	4.05	4	23672.8	1.50	35509.3	3820.2	23803.4	142214.7	53106.1	0.0	0.67
1464-1462-1459-1456-1453	7.90	4.05	4	205002.9	1.50	307504.4	-757047.9	-237528.1	728200.8	417678.7	0.0	0.74
1451-1481-1454-1457-1460-1463	8.17	4.05	4	242903.1	1.50	364354.7	363838.1	204618.3	603226.1	432495.2	0.0	0.84
1458-1461	1.49	4.05	4	13418.1	1.50	20127.1	-33804.9	1360.3	107771.9	40244.4	0.0	0.50
1455-1482-1452	3.00	4.05	4	14135.4	1.50	21203.1	-5123.1	-8182.9	219987.9	109531.1	0.0	0.19
1479-1454	0.50	4.05	4	1776.7	1.50	2665.1	16856.0	58068.2	34812.9	12999.9	0.0	0.21

- NUCLEO 1581 1551 1582 1552 1556 1553 1554 1579 1557 1555 1559 1560 1558 1561 1562 1563 1564 1580 1585 1584 /

Nodi: 1581 1551 1582 1552 1556 1553 1554 1557 1555 1559 1560 1562 1563 1564 1561 1580 1585 1584

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1581 1551	3	85	130	20	2x ø 16 15'	2x ø 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1582 1552	3	85	130	20	2x ø 16 15'	2x ø 10 15'
1556 1553	2	300	130	25	2x ø 16 15'	2x ø 10 15'
1554 1581	3	215	130	20	2x ø 16 15'	2x ø 10 15'
1557 1554	3	235	130	20	2x ø 16 15'	2x ø 10 15'
1555 1582	3	215	130	20	2x ø 16 15'	2x ø 10 15'
1556 1559	2	235	130	25	2x ø 16 15'	2x ø 10 15'
1560 1557	3	149	130	20	2x ø 16 15'	2x ø 10 15'
1559 1562	2	149	130	25	2x ø 16 15'	2x ø 10 15'
1563 1560	3	134	130	20	2x ø 16 15'	2x ø 10 15'
1562 1564	2	106	130	25	2x ø 16 15'	2x ø 10 15'
1561 1560	3	195	130	20	2x ø 12 15'	2x ø 10 20'
1582 1581	3	195	130	20	2x ø 16 15'	2x ø 10 15'
1556 1580	3	50	130	20	2x ø 12 15'	2x ø 10 20'
1553 1585	4	80	130	40	2x ø 24 10'	2x ø 16 15'
1552 1584	4	115	130	40	2x ø 24 10'	2x ø 16 15'
1585 1552	4	132	130	40	2x ø 24 10'	2x ø 16 15'
1584 1551	4	80	130	40	2x ø 24 10'	2x ø 16 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	4inv.	-148858.3	-156675.2	-64228.7	0.02
Som.	4	-94292.1	-156675.2	-54699.5	0.01

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-77550.3	24709.3	-6422.7	-1.1
Cls.Med	41	-77550.3	24709.3	-6422.7	-0.9
Ft.	37	-79278.3	27919.1	-8920.3	-9.4
Fc.	41	-77550.3	24709.3	-6422.7	-17.0
Sommita					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Cls.	41	-77550.3	24709.3	-6422.7	-1.1
Cls.Med	41	-77550.3	24709.3	-6422.7	-0.9
Ft.	37	-79278.3	27919.1	-8920.3	-9.4
Fc.	41	-77550.3	24709.3	-6422.7	-17.0

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1553-1585-1552-1584-1551	4.08	1.30	4	16986.7	1.50	25480.0	-7483.6	6832.4	599226.9	381891.5	0.0	0.07
1556-1580	0.50	1.30	4	806.9	1.50	1210.4	-2204.6	7591.9	34812.9	12999.9	0.0	0.09
1582-1581	1.95	1.30	4	16973.4	1.50	25460.1	-4244.7	-8736.1	142214.7	70808.1	0.0	0.36
1561-1560	1.95	1.30	4	5971.7	1.50	8957.5	-12152.5	-24329.0	142214.7	53106.1	0.0	0.17
1553-1556-1559-1562-1564	7.90	1.30	4	79505.7	1.50	119258.5	-47683.3	35079.4	728200.8	290054.6	0.0	0.41
1563-1560-1557-1554-1581-1551	8.17	1.30	4	73113.1	1.50	109669.7	-31561.1	-30057.8	603226.1	300343.9	0.0	0.37
1555-1582-1552	3.00	1.30	4	9535.5	1.50	14303.3	-9860.4	-1213.6	219987.9	109531.1	0.0	0.13

- NUCLEO 1781 1751 1782 1752 1756 1753 1754 1779 1857 1755 1780 1759 1760 1758 1761 1762 1763 1764 1785 1784 /

Nodi: 1781 1751 1782 1752 1756 1753 1754 1857 1755 1780 1759 1760 1762 1763 1764 1761 1785 1784

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1781 1751	3	85	140	20	2x ø 16 15'	2x ø 10 15'
1782 1752	3	85	140	20	2x ø 16 15'	2x ø 10 15'
1756 1753	2	300	140	25	2x ø 16 15'	2x ø 10 15'
1754 1781	3	215	140	20	2x ø 16 15'	2x ø 10 15'
1857 1754	3	235	140	20	2x ø 16 15'	2x ø 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1755 1782	3	215	140	20	2x ø 16 15'	2x ø 10 15'
1756 1780	3	50	140	20	2x ø 12 15'	2x ø 10 20'
1756 1759	2	235	140	25	2x ø 16 15'	2x ø 10 15'
1760 1857	3	149	140	20	2x ø 16 15'	2x ø 10 15'
1759 1762	2	149	140	25	2x ø 16 15'	2x ø 10 15'
1763 1760	3	134	140	20	2x ø 16 15'	2x ø 10 15'
1762 1764	2	106	140	25	2x ø 16 15'	2x ø 10 15'
1761 1760	3	195	140	20	2x ø 12 15'	2x ø 10 20'
1782 1781	3	195	140	20	2x ø 16 15'	2x ø 10 15'
1753 1785	4	80	140	40	2x ø 24 10'	2x ø 16 15'
1752 1784	4	115	140	40	2x ø 24 10'	2x ø 16 15'
1785 1752	4	132	140	40	2x ø 24 10'	2x ø 16 15'
1784 1751	4	80	140	40	2x ø 24 10'	2x ø 16 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-20992.9	166021.8	-54699.5	0.01
Som.	9	-11237.6	133147.1	-52207.7	0.01

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-54531.0	4382.8	-3448.7	-0.7
Cls.Med	41	-54531.0	4382.8	-3448.7	-0.7
Ft.	39	-54539.0	5224.5	-3466.7	-8.7
Fc.	41	-54531.0	4382.8	-3448.7	-10.8
Sommita					
Cls.	41	-54531.0	4382.8	-3448.7	-0.7
Cls.Med	41	-54531.0	4382.8	-3448.7	-0.7
Ft.	39	-54539.0	5224.5	-3466.7	-8.7
Fc.	41	-54531.0	4382.8	-3448.7	-10.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1753-1785-1752-1784-1751	4.08	1.40	4	16986.7	1.50	25480.0	-9008.2	6828.0	599226.9	381891.5	0.0	0.07
1782-1781	1.95	1.40	4	17222.8	1.50	25834.2	354.5	1014.7	142214.7	70808.1	0.0	0.36
1761-1760	1.95	1.40	4	6260.0	1.50	9390.1	-7266.7	-14465.8	142214.7	53106.1	0.0	0.18
1753-1756-1759-1762-1764	7.90	1.40	4	79505.7	1.50	119258.5	-49551.9	35079.4	728200.8	290054.6	0.0	0.41
1763-1760-1857-1754-1781-1751	8.17	1.40	4	79280.6	1.50	118920.9	-11590.9	-30007.2	603226.1	300343.9	0.0	0.40
1756-1780	0.50	1.40	4	806.9	1.50	1210.4	-1589.2	5473.0	34812.9	12999.9	0.0	0.09
1755-1782-1752	3.00	1.40	4	9535.5	1.50	14303.3	-5937.1	-1212.4	219987.9	109531.1	0.0	0.13

- NUCLEO 1881 1851 1882 1852 1856 1853 1854 1757 1855 1859 1860 1858 1861 1862 1863 1864 1880 1879 1885 1884 /

Nodi: 1881 1851 1882 1852 1856 1853 1854 1757 1855 1859 1860 1862 1863 1864 1861 1880 1885 1884

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1881 1851	3	85	135	20	2x ø 16 15'	2x ø 10 15'
1882 1852	3	85	135	20	2x ø 16 15'	2x ø 10 15'
1856 1853	2	300	135	25	2x ø 16 15'	2x ø 10 15'
1854 1881	3	215	135	20	2x ø 16 15'	2x ø 10 15'
1757 1854	3	235	135	20	2x ø 16 15'	2x ø 10 15'
1855 1882	3	215	135	20	2x ø 16 15'	2x ø 10 15'
1856 1859	2	235	135	25	2x ø 16 15'	2x ø 10 15'
1860 1757	3	149	135	20	2x ø 16 15'	2x ø 10 15'
1859 1862	2	149	135	25	2x ø 16 15'	2x ø 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1863 1860	3	134	135	20	2x ø 16 15'	2x ø 10 15'
1862 1864	2	106	135	25	2x ø 16 15'	2x ø 10 15'
1861 1860	3	195	135	20	2x ø 12 15'	2x ø 10 20'
1882 1881	3	195	135	20	2x ø 16 15'	2x ø 10 15'
1856 1880	3	50	135	20	2x ø 12 15'	2x ø 10 20'
1853 1885	4	80	135	40	2x ø 24 10'	2x ø 16 15'
1852 1884	4	115	135	40	2x ø 24 10'	2x ø 16 15'
1885 1852	4	132	135	40	2x ø 24 10'	2x ø 16 15'
1884 1851	4	80	135	40	2x ø 24 10'	2x ø 16 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-3382.9	133147.1	-52207.7	0.02
Som.	9	8115.9	47011.2	-27513.5	0.01

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-28821.5	-4744.6	1229.0	-0.4
Cls.Med	41	-28821.5	-4744.6	1229.0	-0.4
Ft.	40	-29008.5	-5129.2	1274.0	-4.7
Fc.	41	-28821.5	-4744.6	1229.0	-6.1
Sommita					
Cls.	41	-28821.5	-4744.6	1229.0	-0.4
Cls.Med	41	-28821.5	-4744.6	1229.0	-0.4
Ft.	40	-29008.5	-5129.2	1274.0	-4.7
Fc.	41	-28821.5	-4744.6	1229.0	-6.1

- Verifiche a taglio dei diaframmi

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1853-1885-1852-1884-1851	4.08	1.35	4	16986.7	1.50	25480.0	-3154.0	6539.7	599226.9	381891.5	0.0	0.07
1856-1880	0.50	1.35	4	536.4	1.50	804.5	-1295.3	4461.4	34812.9	12999.9	0.0	0.06
1882-1881	1.95	1.35	4	17222.8	1.50	25834.2	-640.5	-1107.4	142214.7	70808.1	0.0	0.36
1861-1860	1.95	1.35	4	6260.0	1.50	9390.1	-8318.5	-16604.0	142214.7	53106.1	0.0	0.18
1853-1856-1859-1862-1864	7.90	1.35	4	79505.7	1.50	119258.5	-41832.7	35069.3	728200.8	290054.6	0.0	0.41
1863-1860-1757-1854-1881-1851	8.17	1.35	4	79280.6	1.50	118920.9	-16124.7	-30007.2	603226.1	300343.9	0.0	0.40
1855-1882-1852	3.00	1.35	4	9241.9	1.50	13862.8	-3954.4	-1212.0	219987.9	109531.1	0.0	0.13

**- NUCLEO 1075 1065 1078 1066 1069 1067 1072 1068 1070 1071 1076 1077 / Nodi: 1075 1065 1078 1066 1069 1067 1072
1068 1070 1071 1076 1077**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1075 1065	3	100	325	20	2x ø 20 15'	2x ø 12 15'
1078 1066	2	72	325	25	2x ø 24 15'	2x ø 12 15'
1069 1067	3	535	325	20	2x ø 20 15'	2x ø 12 15'
1067 1075	3	174	325	20	2x ø 20 15'	2x ø 12 15'
1072 1068	2	535	325	25	2x ø 24 15'	2x ø 12 15'
1068 1078	2	174	325	25	2x ø 24 15'	2x ø 12 15'
1070 1069	4	154	325	40	2x ø 26 9'	2x ø 20 15'
1071 1070	4	100	325	40	2x ø 26 9'	2x ø 20 15'
1072 1071	4	154	325	40	2x ø 26 9'	2x ø 20 15'
1076 1075	3	90	325	20	2x ø 16 15'	2x ø 10 15'
1078 1077	3	90	325	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	M _x [kgm]	M _y [kgm]	Sd/Sr
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Base	30	-602078.4	2052350.3	-2123963.5	0.21
Som.	30	-642982.9	1049363.1	-986444.8	0.12

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-590849.6	141524.1	-247597.5	-11.3
Cls.Med	41	-590849.6	141524.1	-247597.5	-7.7
Ft.	41	-590849.6	141524.1	-247597.5	-72.8
Fc.	41	-590849.6	141524.1	-247597.5	-168.5
Sommita					
Cls.	41	-590849.6	141524.1	-247597.5	-11.3
Cls.Med	41	-590849.6	141524.1	-247597.5	-7.7
Ft.	41	-590849.6	141524.1	-247597.5	-72.8
Fc.	41	-590849.6	141524.1	-247597.5	-168.5

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1078-1077	0.90	3.25	21	-6370.6	1.50	-9555.8	-25104.8	71026.2	64441.0	32084.9	23602.7	0.40
1076-1075	0.90	3.25	18	-7006.0	1.50	-10508.9	658.2	1840.2	64441.0	32084.9	23602.7	0.45
1072-1071-1070-1069	4.08	3.25	30	-386475.8	1.50	-579713.7	80390.0	289023.7	599226.9	596705.5	675120.5	0.97
1072-1068-1078-1066	7.81	3.25	19	119387.9	1.50	179081.9	23165.0	-424283.9	719868.0	412899.2	1094972.5	0.43
1069-1067-1075-1065	8.09	3.25	14	192966.0	1.50	289449.0	-228980.3	-337571.3	596634.0	427768.9	499425.6	0.68

**- NUCLEO 1175 1165 1178 1166 1167 1169 1168 1172 1170 1171 1176 1177 / Nodi: 1175 1165 1178 1166 1167 1169 1168
1172 1170 1171 1176 1177**

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1175 1165	3	100	407	20	2x ø 20 15'	2x ø 12 15'
1178 1166	2	72	407	25	2x ø 24 15'	2x ø 12 15'
1167 1169	3	535	407	20	2x ø 20 15'	2x ø 12 15'
1167 1175	3	174	407	20	2x ø 20 15'	2x ø 12 15'
1168 1172	2	535	407	25	2x ø 24 15'	2x ø 12 15'
1168 1178	2	174	407	25	2x ø 24 15'	2x ø 12 15'
1170 1169	1	154	407	30	2x ø 26 9'	2x ø 18 15'
1172 1171	1	154	407	30	2x ø 26 9'	2x ø 18 15'
1176 1175	3	90	407	20	2x ø 16 15'	2x ø 10 15'
1178 1177	3	90	407	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	8inv.	-912821.1	1365583.3	-1374786.8	0.17
Som.	8	-897648.9	1365583.3	-1374786.8	0.17

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-500913.9	-66114.2	-187284.2	-9.6
Cls.Med	41	-500913.9	-66114.2	-187284.2	-7.4
Ft.	41	-500913.9	-66114.2	-187284.2	-78.9
Fc.	41	-500913.9	-66114.2	-187284.2	-144.5
Sommita					
Cls.	41	-500913.9	-66114.2	-187284.2	-9.6
Cls.Med	41	-500913.9	-66114.2	-187284.2	-7.4
Ft.	41	-500913.9	-66114.2	-187284.2	-78.9
Fc.	41	-500913.9	-66114.2	-187284.2	-144.5

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1178-1177	0.90	4.07	4	3901.3	1.50	5852.0	-22265.8	62306.6	64441.0	32084.9	23602.7	0.25
1176-1175	0.90	4.07	5	4167.5	1.50	6251.3	39892.6	134497.7	64441.0	32084.9	23602.7	0.26
1172-1171	1.54	4.07	4	97173.9	1.50	145760.8	-195929.5	450932.1	167213.4	179830.6	378138.5	0.87
1170-1169	1.54	4.07	4	98521.6	1.50	147782.4	-103064.8	-283009.0	167768.7	180427.7	379370.2	0.88
1172-1168-1178-1166	7.81	4.07	4	201951.3	1.50	302927.0	-614054.8	-411573.8	719868.0	412899.2	0.0	0.73
1169-1167-1175-1165	8.09	4.07	7	219664.1	1.50	329496.1	-228226.9	-373142.3	596634.0	427768.9	331297.9	0.99

**- NUCLEO 1275 1265 1278 1266 1267 1269 1268 1272 1270 1271 1276 1277 / Nodi: 1275 1265 1278 1266 1267 1269 1268
1272 1270 1271 1276 1277**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1275 1265	3	100	405	20	2x ø 16 15'	2x ø 12 15'
1278 1266	2	72	405	25	2x ø 16 15'	2x ø 12 15'
1267 1269	3	535	405	20	2x ø 16 15'	2x ø 12 15'
1267 1275	3	174	405	20	2x ø 16 15'	2x ø 12 15'
1268 1272	2	535	405	25	2x ø 16 15'	2x ø 12 15'
1268 1278	2	174	405	25	2x ø 16 15'	2x ø 12 15'
1270 1269	1	154	405	30	2x ø 26 9'	2x ø 18 15'
1272 1271	1	154	405	30	2x ø 26 9'	2x ø 18 15'
1276 1275	3	90	405	20	2x ø 16 15'	2x ø 10 15'
1278 1277	3	90	405	20	2x ø 16 15'	2x ø 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-115079.5	-1497808.9	-1374786.8	0.22
Som.	5	-74454.3	-1207858.4	-1104405.5	0.18

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-394776.0	-59419.3	-142423.1	-8.3
Cls.Med	41	-394776.0	-59419.3	-142423.1	-6.3
Ft.	41	-394776.0	-59419.3	-142423.1	-66.8
Fc.	41	-394776.0	-59419.3	-142423.1	-124.8
Sommita					
Cls.	41	-394776.0	-59419.3	-142423.1	-8.3
Cls.Med	41	-394776.0	-59419.3	-142423.1	-6.3
Ft.	41	-394776.0	-59419.3	-142423.1	-66.8
Fc.	41	-394776.0	-59419.3	-142423.1	-124.8

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1278-1277	0.90	4.05	4	4190.1	1.50	6285.2	-19887.8	55718.0	64441.0	32084.9	0.0	0.20
1276-1275	0.90	4.05	4	5463.3	1.50	8195.0	18503.1	62747.6	64441.0	32084.9	0.0	0.26
1272-1271	1.54	4.05	4	97173.9	1.50	145760.8	-188864.4	434937.0	167213.4	179830.6	0.0	0.87
1270-1269	1.54	4.05	4	98521.6	1.50	147782.4	-95976.6	-263044.3	167768.7	180427.7	0.0	0.88
1272-1268-1278-1266	7.81	4.05	4	201951.3	1.50	302927.0	-590582.9	-411573.8	719868.0	412899.2	0.0	0.73
1269-1267-1275-1265	8.09	4.05	4	219664.1	1.50	329496.1	38807.9	-367349.2	596634.0	427768.9	0.0	0.77

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

**- NUCLEO 1375 1365 1378 1366 1367 1369 1368 1372 1370 1371 1376 1377 / Nodi: 1375 1365 1378 1366 1367 1369 1368
1372 1370 1371 1376 1377**

- *Armature Nucleo*

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1375 1365	3	100	405	20	2x ø 16 15'	2x ø 12 15'
1378 1366	2	72	405	25	2x ø 16 15'	2x ø 12 15'
1367 1369	3	535	405	20	2x ø 16 15'	2x ø 12 15'
1367 1375	3	174	405	20	2x ø 16 15'	2x ø 12 15'
1368 1372	2	535	405	25	2x ø 16 15'	2x ø 12 15'
1368 1378	2	174	405	25	2x ø 16 15'	2x ø 12 15'
1370 1369	1	154	405	30	2x ø 26 9'	2x ø 18 15'
1372 1371	1	154	405	30	2x ø 26 9'	2x ø 18 15'
1376 1375	3	90	405	20	2x ø 16 15'	2x ø 10 15'
1378 1377	3	90	405	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-72790.6	-1207858.4	-1104405.5	0.18
Som.	5	-62535.5	-917907.6	-834023.7	0.13

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-288853.6	-50983.8	-97142.2	-6.1
Cls.Med	41	-288853.6	-50983.8	-97142.2	-4.6
Ft.	41	-288853.6	-50983.8	-97142.2	-48.8
Fc.	41	-288853.6	-50983.8	-97142.2	-91.0
Sommita					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Cls.	41	-288853.6	-50983.8	-97142.2	-6.1
Cls.Med	41	-288853.6	-50983.8	-97142.2	-4.6
Ft.	41	-288853.6	-50983.8	-97142.2	-48.8
Fc.	41	-288853.6	-50983.8	-97142.2	-91.0

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1378-1377	0.90	4.05	4	4190.1	1.50	6285.2	-15066.0	42237.4	64441.0	32084.9	0.0	0.20
1376-1375	0.90	4.05	4	5463.3	1.50	8195.0	15803.3	53557.6	64441.0	32084.9	0.0	0.26
1372-1371	1.54	4.05	4	79417.1	1.50	119125.7	-149448.6	344254.6	167213.4	179830.6	0.0	0.71
1370-1369	1.54	4.05	4	80404.4	1.50	120606.5	-74823.1	-204896.1	167768.7	180427.7	0.0	0.72
1372-1368-1378-1366	7.81	4.05	4	201951.3	1.50	302927.0	-463940.3	-331910.5	719868.0	412899.2	0.0	0.73
1369-1367-1375-1365	8.09	4.05	4	201944.3	1.50	302916.4	39896.3	-296247.0	596634.0	427768.9	0.0	0.71

**- NUCLEO 1475 1465 1478 1466 1467 1469 1468 1472 1470 1471 1476 1477 / Nodi: 1475 1465 1478 1466 1467 1469 1468
1472 1470 1471 1476 1477**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1475 1465	3	100	405	20	2x ø 16 15'	2x ø 10 15'
1478 1466	2	72	405	25	2x ø 12 15'	2x ø 10 20'
1467 1469	3	535	405	20	2x ø 16 15'	2x ø 10 15'
1467 1475	3	174	405	20	2x ø 16 15'	2x ø 10 15'
1468 1472	2	535	405	25	2x ø 12 15'	2x ø 10 20'
1468 1478	2	174	405	25	2x ø 12 15'	2x ø 10 20'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1470 1469	1	154	405	30	2x ø 20 15'	2x ø 14 15'
1472 1471	1	154	405	30	2x ø 20 15'	2x ø 14 15'
1476 1475	3	90	405	20	2x ø 12 15'	2x ø 10 20'
1478 1477	3	90	405	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-56994.1	-917907.6	-834023.7	0.23
Som.	5	-24698.5	-627957.0	-563642.3	0.16

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-182912.0	-40665.3	-51425.8	-4.2
Cls.Med	41	-182912.0	-40665.3	-51425.8	-3.2
Ft.	41	-182912.0	-40665.3	-51425.8	-34.1
Fc.	41	-182912.0	-40665.3	-51425.8	-62.8
Sommita					
Cls.	41	-182912.0	-40665.3	-51425.8	-4.2
Cls.Med	41	-182912.0	-40665.3	-51425.8	-3.2
Ft.	41	-182912.0	-40665.3	-51425.8	-34.1
Fc.	41	-182912.0	-40665.3	-51425.8	-62.8

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1478-1477	0.90	4.05	4	3492.8	1.50	5239.2	-7678.9	21649.6	64441.0	24063.7	0.0	0.22
1476-1475	0.90	4.05	4	4293.1	1.50	6439.6	15751.5	53250.1	64441.0	24063.7	0.0	0.27
1472-1471	1.54	4.05	4	69140.4	1.50	103710.6	-102411.5	236318.2	167213.4	108786.4	0.0	0.95

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1470-1469	1.54	4.05	4	70023.2	1.50	105034.8	-46023.6	-125211.9	167768.7	109147.6	0.0	0.96
1472-1468-1478-1466	7.81	4.05	4	133649.7	1.50	200474.5	-305418.4	-252247.0	719868.0	215051.6	0.0	0.93
1469-1467-1475-1465	8.09	4.05	4	165393.9	1.50	248090.9	67414.5	-225144.7	596634.0	297061.7	0.0	0.84

**- NUCLEO 1575 1565 1578 1566 1567 1569 1568 1572 1570 1571 1576 1577 / Nodi: 1575 1565 1578 1566 1567 1569 1568
1572 1570 1571 1576 1577**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1575 1565	3	100	130	20	2x ø 12 15'	2x ø 10 20'
1578 1566	2	72	130	25	2x ø 12 15'	2x ø 10 20'
1567 1569	3	535	130	20	2x ø 12 15'	2x ø 10 20'
1567 1575	3	174	130	20	2x ø 12 15'	2x ø 10 20'
1568 1572	2	535	130	25	2x ø 12 15'	2x ø 10 20'
1568 1578	2	174	130	25	2x ø 12 15'	2x ø 10 20'
1569 1570	1	154	130	30	2x ø 20 15'	2x ø 14 15'
1572 1571	1	154	130	30	2x ø 20 15'	2x ø 14 15'
1576 1575	3	90	130	20	2x ø 12 15'	2x ø 10 20'
1578 1577	3	90	130	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-35474.8	-627957.0	-563642.3	0.16
Som.	5	-16783.6	-534886.6	-476853.3	0.15

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-76707.7	-25927.4	-10189.8	-1.8

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Cls.Med	41	-76707.7	-25927.4	-10189.8	-1.4
Ft.	39	-76703.0	-27289.3	-10175.9	-14.9
Fc.	41	-76707.7	-25927.4	-10189.8	-26.3
Sommita					
Cls.	41	-76707.7	-25927.4	-10189.8	-1.8
Cls.Med	41	-76707.7	-25927.4	-10189.8	-1.4
Ft.	39	-76703.0	-27289.3	-10175.9	-14.9
Fc.	41	-76707.7	-25927.4	-10189.8	-26.3

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
1578-1577	0.90	1.30	4	3492.8	1.50	5239.2	-820.1	2525.6	64441.0	24063.7	0.0	0.22
1576-1575	0.90	1.30	4	4293.1	1.50	6439.6	15154.3	51113.2	64441.0	24063.7	0.0	0.27
1572-1571	1.54	1.30	4	58863.6	1.50	88295.5	-56944.0	131935.3	167213.4	108786.4	0.0	0.81
1569-1570	1.54	1.30	4	59642.0	1.50	89463.0	-18798.8	49963.0	167768.7	109147.6	0.0	0.82
1572-1568-1578-1566	7.81	1.30	4	97156.0	1.50	145734.1	-153462.1	-172583.7	719868.0	215051.6	0.0	0.68
1569-1567-1575-1565	8.09	1.30	4	137613.0	1.50	206419.5	89489.7	-154042.4	596634.0	222796.3	0.0	0.93

- NUCLEO 1775 1765 1778 1766 1769 1867 1768 1772 1770 1771 1776 1777 / Nodi: 1775 1765 1778 1766 1769 1867 1768

1772 1770 1771 1776 1777

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1775 1765	3	100	140	20	2x ø 12 15'	2x ø 10 20'
1778 1766	2	72	140	25	2x ø 12 15'	2x ø 10 20'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1769 1867	3	535	140	20	2x ø 12 15'	2x ø 10 20'
1867 1775	3	174	140	20	2x ø 12 15'	2x ø 10 20'
1768 1772	2	535	140	25	2x ø 12 15'	2x ø 10 20'
1768 1778	2	174	140	25	2x ø 12 15'	2x ø 10 20'
1770 1769	1	154	140	30	2x ø 20 15'	2x ø 14 15'
1772 1771	1	154	140	30	2x ø 20 15'	2x ø 14 15'
1776 1775	3	90	140	20	2x ø 12 15'	2x ø 10 20'
1778 1777	3	90	140	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-26501.5	-534886.6	-476853.3	0.14
Som.	5	-17235.0	-434656.3	-383387.6	0.12

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-59792.8	-5833.4	-7448.0	-1.2
Cls.Med	41	-59792.8	-5833.4	-7448.0	-1.1
Ft.	39	-59784.9	-6765.1	-7430.0	-14.1
Fc.	41	-59792.8	-5833.4	-7448.0	-18.5
Sommita					
Cls.	41	-59792.8	-5833.4	-7448.0	-1.2
Cls.Med	41	-59792.8	-5833.4	-7448.0	-1.1
Ft.	39	-59784.9	-6765.1	-7430.0	-14.1
Fc.	41	-59792.8	-5833.4	-7448.0	-18.5

- Verifiche a taglio dei diaframmi

Diaframma	B	H	Comb.	V _{dc}	alpha	V _{Ed}	N _{Ed}	M _{Ed}	V _{Rcd}	V _{Rds}	V _{Rds,scorrimento}	V _{s/}
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	[m]	[m]	critica	[kg]		[kg]	[kg]	[kgm]	[kg]	[kg]	[kg]	V _R
1778-1777	0.90	1.40	4	2343.4	1.50	3515.1	-480.3	1545.1	64441.0	24063.7	0.0	0.15
1776-1775	0.90	1.40	4	2676.5	1.50	4014.7	13040.8	43980.6	64441.0	24063.7	0.0	0.17
1772-1771	1.54	1.40	4	55564.9	1.50	83347.4	-47880.8	110952.1	167213.4	108786.4	0.0	0.77
1770-1769	1.54	1.40	4	56309.8	1.50	84464.6	-15609.3	-41439.3	167768.7	109147.6	0.0	0.77
1772-1768-1778-1766	7.81	1.40	4	85442.1	1.50	128163.1	-127823.0	-147012.8	719868.0	215051.6	0.0	0.60
1769-1867-1775-1765	8.09	1.40	4	128695.6	1.50	193043.5	77393.4	-131219.5	596634.0	222796.3	0.0	0.87

**- NUCLEO 1875 1865 1878 1866 1869 1767 1868 1872 1870 1871 1876 1877 / Nodi: 1875 1865 1878 1866 1869 1767 1868
1872 1870 1871 1876 1877**

- Armature Nucleo

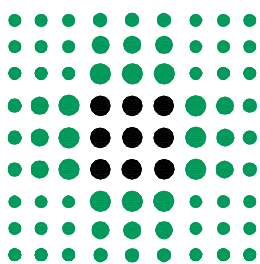
Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1875 1865	3	100	135	20	2x ø 12 15'	2x ø 10 20'
1878 1866	2	72	135	25	2x ø 12 15'	2x ø 10 20'
1869 1767	3	535	135	20	2x ø 12 15'	2x ø 10 20'
1767 1875	3	174	135	20	2x ø 12 15'	2x ø 10 20'
1868 1872	2	535	135	25	2x ø 12 15'	2x ø 10 20'
1868 1878	2	174	135	25	2x ø 12 15'	2x ø 10 20'
1870 1869	1	154	135	30	2x ø 20 15'	2x ø 14 15'
1872 1871	1	154	135	30	2x ø 20 15'	2x ø 14 15'
1876 1875	3	90	135	20	2x ø 12 15'	2x ø 10 20'
1878 1877	3	90	135	20	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	5inv.	-16013.5	-434656.3	-383387.6	0.12	
Som.	5	10869.4	-338006.7	-293261.0	0.10	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	41	-41530.1	8079.1	-4724.1	-0.9
Cls.Med	41	-41530.1	8079.1	-4724.1	-0.8
Ft.	41	-41530.1	8079.1	-4724.1	-9.6
Fc.	41	-41530.1	8079.1	-4724.1	-13.6
Sommita					
Cls.	41	-41530.1	8079.1	-4724.1	-0.9
Cls.Med	41	-41530.1	8079.1	-4724.1	-0.8
Ft.	41	-41530.1	8079.1	-4724.1	-9.6
Fc.	41	-41530.1	8079.1	-4724.1	-13.6

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1878-1877	0.90	1.35	4	2143.5	1.50	3215.2	-189.6	697.7	64441.0	24063.7	0.0	0.13
1876-1875	0.90	1.35	4	2374.7	1.50	3562.1	10687.0	36038.7	64441.0	24063.7	0.0	0.15
1872-1871	1.54	1.35	4	52012.5	1.50	78018.7	-38343.9	88860.9	167213.4	108786.4	0.0	0.72
1870-1869	1.54	1.35	4	52721.2	1.50	79081.8	-12398.7	-32891.7	167768.7	109147.6	0.0	0.72
1872-1868-1878-1866	7.81	1.35	4	72826.9	1.50	109240.4	-101146.8	-119474.7	719868.0	215051.6	0.0	0.51
1869-1767-1875-1865	8.09	1.35	4	119092.3	1.50	178638.4	63591.0	-106640.8	596634.0	222796.3	0.0	0.80



GRUPPO DI LAVORO:

geom. Giuliano Bastasini
geom. Lara Biavardi
per. ind. Giuseppe Carlassare
ing. Federica Ceresa
per. ind. Paolo Crovini
ing. Elisa Degiovanni
ing. jr. Roberto Degiovanni
geom. Laura Del Bono
ing. Vincenzo Facchino
geom. Roberto Gallarotti
arch. Andrea Mambriani
per. ind. Paolo Mazzina
geom. Roberto Mellini
per. ind. Paolo Robuschi
ing. Renato Maria Saviano
geom. Pier Paolo Taddei
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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 5
PROGETTO E VERIFICA TRAVI ROVESCE DI FONDAZIONE**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
Via Aristotele n. 5
Tel. 3356030441 - 0522 865441
42122 - Reggio Emilia

ELABORATO

RS. 06

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10:1

- Verifiche travi

- Modalità di verifica

Le travi vengono progettate-verificate a flessione retta e taglio nel piano longitudinale della trave sulla base dell'inviluppo delle sollecitazioni, in conformità al *Decreto Legge del 26 Marzo 1980* e successivi aggiornamenti.

Viene comunque sempre predisposta l'armatura minima mentre gli sforzi di taglio vengono integralmente assorbiti dalle staffe.

Le operazioni di progetto-verifica vengono condotte, per ogni asta, in tre diverse sezioni e precisamente in corrispondenza dei fili esterni dei pilastri e della sezione in campata nella quale viene riscontrato il massimo momento positivo (negativo).

I momenti si intendono positivi se tendono le fibre di intradosso (inferiori).

Per quanto concerne il progetto e la verifica delle travi a taglio esse vengono condotte nel modo seguente:

- Si controlla se la trave necessita o meno di armatura aggiuntiva a taglio:
 1. Se non occorre armatura aggiuntiva a taglio si procede a disporre la staffatura minima di regolamento e la progettazione ha termine.
 2. Se occorre armatura aggiuntiva a taglio la staffatura viene progettata andando a suddividere la trave, a seconda del caso, in uno, tre o cinque conci:
 - due tronchi in prossimità degli appoggi di lunghezza pari all'altezza della sezione;
 - due altri (eventuali) tronchi dall'ascissa precedente a quella in cui il taglio può essere assorbito con la sola staffatura minima da regolamento
 - un restante (eventuale) concio di chiusura centrale.
- In ogni caso l'armatura a taglio si intende simmetrica rispetto alla mezzeria della trave e viene progettata considerando, rispetto alla mezzeria, la zona della trave più sollecitata.

Per quanto concerne le verifiche a taglio esse vengono condotte suddividendo la trave in cinque conci:

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

due tronchi in prossimità degli appoggi di lunghezza pari all'altezza della sezione; due altri (eventuali) tronchi dall'ascissa precedente a quella in cui il taglio può essere assorbito con la sola staffatura minima da regolamento; il restante (eventuale) concio di chiusura centrale.

L'armatura a taglio si intende simmetrica rispetto alla mezzeria della trave e viene progettata considerando, rispetto alla mezzeria, la zona della trave più sollecitata.

Simbologia utilizzata:

Af Es.

Area di ferro all'estradosso

Af In.

Area di ferro all'intradosso

Sigb. Es.

Tensione del calcestruzzo estradosso

Sigb. In.

Tensione del calcestruzzo intradosso

Sigf. Es.

Tensione dell'acciaio estradosso

Sigf. In.

Tensione dell'acciaio intradosso

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Sezioni Impiegate: Trave

Sezione Numero	Dimensioni	Calcestruzzo	f_{cd} [kg/cm ²]	τ_{rd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{FREQ} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yFREQ} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro	Copriferro
													Es [cm]	In [cm]
11	B 40 [cm] H 19 [cm]	C25/30	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00
21	B 30 [cm] H 24 [cm]	C25/30	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50	2.50
22	B 60 [cm] H 24 [cm]	C25/30	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50	2.50
23	B 30 [cm] H 35 [cm]	C25/30	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50	2.50
6	B 30 [cm] H 50 [cm]	C25/30	141.1	2.8	149.4	249.0	112.0	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00

- Sezioni Impiegate: Trave di fondazione

Sezione Numero	Dimensioni	Calcestruzzo	f_{cd} [kg/cm ²]	τ_{rd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{FREQ} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yFREQ} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro	Copriferro
													Es [cm]	In [cm]
1	B 175 [cm] H 120 [cm] b 75 [cm] h 40 [cm] Terreno numero 1	C25/30	141.1	2.8	149.4	249.0	112.0	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00
2	B 100 [cm] H 120 [cm] b 40 [cm] h 40 [cm] Terreno numero 1	C25/30	141.1	2.8	149.4	249.0	112.0	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00
3	B 110 [cm] H 120 [cm] b 75	C25/30	141.1	2.8	149.4	249.0	112.0	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	[cm] h 40 [cm] Terreno numero 1													
4	B 120 [cm] H 120 [cm] b 70 [cm] h 40 [cm] Terreno numero 1	Rbk 300	141.1	2.8	149.4	249.0	112.0	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00
5	B 190 [cm] H 120 [cm] b 90 [cm] h 40 [cm] Terreno numero 1	Rbk 300	141.1	2.8	149.4	249.0	112.0	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00
6	B 170 [cm] H 120 [cm] b 40 [cm] h 40 [cm] Terreno numero 1	Rbk 300	141.1	2.8	149.4	249.0	112.0	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00
10	B 160 [cm] H 120 [cm] b 110 [cm] h 40 [cm] Terreno numero 1	Rbk 300	141.1	2.8	149.4	249.0	112.0	B 450 C	3913.0	3600.0	4500.0	4500.0	3.00	3.00

- **Verifica a taglio con il metodo dell'inclinazione variabile del traliccio. $\cotg \theta = 2.00$**
- **Fattore di sovrarresistenza Travi $\gamma_{R,d}=1.00$**
- **Fattore di sovrarresistenza Fondazioni $\gamma_{R,d}=1.10$**

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche Travate :

- Travata: 1 Travata 59 60

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 6 a Tr 170x120x40x40 [cm] 170x120																
59	0.25	23.26	18.85			43808.3	99791.5	0.04	-12696.6	-78691.1	0.06					
						SLE Rare	383.4		-1440.5			1.6	0.3	19.4	71.4	
						SLE Freq.	375.9		-1255.9			1.4	0.3	16.9	62.3	0.0212
						SLE Q.P.	374.0		-1205.7			1.3	0.3	16.2	59.8	0.0203
Camp.	2.07	18.85	18.85			78883.1	81289.4	0.04	-20366.1	-78305.5	0.06					
						SLE Rare	40138.8		0.0			0.0	29.7	1927.9	342.3	
						SLE Freq.	38561.4		0.0			0.0	28.5	1852.2	328.8	0.0407
						SLE Q.P.	38149.9		0.0			0.0	28.2	1832.4	325.3	0.0403
60	3.90	23.56	18.85			78789.1	101052.0	0.04	-60426.0	-78715.2	0.06					
						SLE Rare	442.0		-542.8			0.6	0.3	17.1	26.9	
						SLE Freq.	417.3		-585.5			0.6	0.3	16.1	29.0	0.0099
						SLE Q.P.	410.7		-588.8			0.6	0.3	15.9	29.2	0.0099

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	Vrd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 59 60 Sez. 6 a Tr 170x120x40x40 [cm] 170x120							
0.30	3.85	3.55	59988.3	17011.4	117440.3	63948.4	ø 10 2br. 20.0'

- Travata: 10 Travata 5 67 10 15 20

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione Sez. 3 a Tr 110x120x75x40 [cm] 110x120													
5	0.15	17.34	18.85			33348.3	73594.0	0.05	-13702.2	-78991.9	0.05		
					SLE Rare	4785.2			0.0			0.0	3.8 233.5 43.0
					SLE Freq.	4230.0			0.0			0.0	3.4 206.4 38.0 0.0041
					SLE Q.P.	4039.6			0.0			0.0	3.2 197.1 36.3 0.0039
Camp.	1.29	18.85	18.85			39253.0	79817.9	0.05	-9997.5	-79066.1	0.05		
					SLE Rare	23178.8			0.0			0.0	17.9 1133.3 204.7
					SLE Freq.	21955.1			0.0			0.0	16.9 1073.5 193.9 0.0218
					SLE Q.P.	21659.4			0.0			0.0	16.7 1059.0 191.3 0.0215
67	2.42	18.85	18.85			39261.1	79817.9	0.05	0.0	-79066.1	0.05		
					SLE Rare	23726.0			0.0			0.0	18.3 1160.1 209.6
					SLE Freq.	23170.3			0.0			0.0	17.9 1132.9 204.7 0.0230
					SLE Q.P.	23079.5			0.0			0.0	17.8 1128.5 203.8 0.0230
Trave di fondazione Sez. 3 a Tr 110x120x75x40 [cm] 110x120													
67	0.25	18.85	18.85			44406.4	79817.9	0.05	-19312.6	-79066.1	0.05		
					SLE Rare	20911.6			0.0			0.0	16.1 1022.5 184.7
					SLE Freq.	20504.8			0.0			0.0	15.8 1002.6 181.1 0.0204
					SLE Q.P.	20423.1			0.0			0.0	15.8 998.6 180.4 0.0203
Camp.	1.34	18.85	18.85			42991.5	79817.9	0.05	-57842.8	-79066.1	0.05		
					SLE Rare	0.0			-3758.4			3.2	0.0 37.1 185.5
					SLE Freq.	0.0			-2399.8			2.0	0.0 23.7 118.4 0.0130
					SLE Q.P.	0.0			-1953.0			1.7	0.0 19.3 96.4 0.0106
10	2.43	33.34	37.70			14419.6	139796.2	0.06	-62436.6	-155595.3	0.07		
					SLE Rare	0.0			-45909.9			27.8	0.0 345.7 1149.5
					SLE Freq.	0.0			-41346.9			25.0	0.0 311.3 1035.2 0.0875
					SLE Q.P.	0.0			-40059.1			24.2	0.0 301.6 1003.0 0.0832
Trave di fondazione Sez. 3 a Tr 110x120x75x40 [cm] 110x120													
10	0.25	33.88	37.70			19067.5	141995.1	0.06	-77132.5	-155653.3	0.07		

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Rare	0.0			-43083.4			26.0	0.0	323.3	1078.4	
				SLE Freq.	0.0			-38874.1			23.4	0.0	291.7	973.0	0.0792
				SLE Q.P.	0.0			-37699.3			22.7	0.0	282.9	943.6	0.0756
Camp.	3.45	18.85	18.85			35745.5	79817.9	0.05	0.0	-79066.1	0.05				
				SLE Rare	25577.5			0.0			0.0	19.7	1250.6	225.9	
				SLE Freq.	24151.8			0.0			0.0	18.6	1180.9	213.3	0.0240
				SLE Q.P.	23791.2			0.0			0.0	18.4	1163.3	210.1	0.0237
15	6.65	32.98	37.70			4550.9	138329.1	0.06	-64283.6	-155556.3	0.07				
				SLE Rare	0.0			-46527.4			28.2	0.0	351.1	1165.2	
				SLE Freq.	0.0			-42300.2			25.6	0.0	319.2	1059.3	0.0907
				SLE Q.P.	0.0			-41153.8			24.9	0.0	310.6	1030.6	0.0868
Trave di fondazione Sez. 3 a Tr 110x120x75x40 [cm] 110x120															
15	0.25	33.34	37.70			7619.8	139796.2	0.06	-62445.7	-155595.3	0.07				
				SLE Rare	0.0			-46043.9			27.9	0.0	346.7	1152.8	
				SLE Freq.	0.0			-41682.0			25.2	0.0	313.8	1043.6	0.0886
				SLE Q.P.	0.0			-40491.6			24.5	0.0	304.9	1013.8	0.0846
Camp.	2.72	18.85	18.85			41708.7	79817.9	0.05	-10597.9	-79066.1	0.05				
				SLE Rare	21024.5			0.0			0.0	16.2	1028.0	185.7	
				SLE Freq.	20120.0			0.0			0.0	15.5	983.8	177.7	0.0200
				SLE Q.P.	19905.5			0.0			0.0	15.4	973.3	175.8	0.0198
20	5.20	17.34	18.85			37419.5	73594.3	0.05	-5746.4	-78991.9	0.05				
				SLE Rare	6217.2			0.0			0.0	4.9	303.3	55.8	
				SLE Freq.	5952.7			0.0			0.0	4.7	290.4	53.4	0.0058
				SLE Q.P.	5876.9			0.0			0.0	4.7	286.7	52.8	0.0057
Da	A	Dx	Vsd	Vrd_c	VRd_{max}	Vrd_s	Staffe								
[m]	[m]	[m]	[kg]	[kg]	[kg]	[kg]									
Trave di fondazione 5 67 Sez. 3 a Tr 110x120x75x40 [cm] 110x120															
0.15	2.38	2.23	34370.5	25512.7	220200.6	92085.8	ø 12 2br. 20.0'								

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione 67 10 Sez. 3 a Tr 110x120x75x40 [cm] 110x120								
0.30	2.38	2.08	61056.0	25866.7	220200.6	92085.8	ø 12 2br. 20.0'	
Trave di fondazione 10 15 Sez. 3 a Tr 110x120x75x40 [cm] 110x120								
0.30	6.60	6.30	60059.3	25866.7	220200.6	92085.8	ø 12 2br. 20.0'	
Trave di fondazione 15 20 Sez. 3 a Tr 110x120x75x40 [cm] 110x120								
0.30	5.20	4.90	59395.4	25512.7	220200.6	92085.8	ø 12 2br. 20.0'	

- Travata: 11 Travata 22 32 41 50

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _r [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 3 a Tr 110x120x75x40 [cm] 110x120																
22	0.15	17.34	18.85			34875.1	73594.0	0.05	-14867.8	-78991.9	0.05					
					SLE Rare	2670.4			-814.9			0.7	2.1	130.3	40.2	
					SLE Freq.	2720.0			-512.1			0.4	2.2	132.7	25.3	0.0028
					SLE Q.P.	2709.6			-410.9			0.4	2.2	132.2	24.3	0.0026
Camp.	2.63	18.85	18.85			38707.3	79817.9	0.05	-8805.7	-79066.1	0.05					
					SLE Rare	21389.9			0.0			0.0	16.5	1045.9	188.9	
					SLE Freq.	20497.1			0.0			0.0	15.8	1002.2	181.0	0.0204
					SLE Q.P.	20292.4			0.0			0.0	15.7	992.2	179.2	0.0202
32	5.10	33.34	37.70			14742.8	139796.2	0.06	-67929.0	-155595.3	0.07					
					SLE Rare	0.0			-40671.4			24.6	0.0	306.2	1018.3	
					SLE Freq.	0.0			-36903.8			22.3	0.0	277.9	924.0	0.0741
					SLE Q.P.	0.0			-35882.7			21.7	0.0	270.2	898.4	0.0720
Trave di fondazione Sez. 3 a Tr 110x120x75x40 [cm] 110x120																

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

32	0.25	32.98	37.70			18674.8	138329.2	0.06	-73804.8	-155556.3	0.07							
					SLE Rare	0.0			-41443.5			25.1	0.0	312.8	1037.9			
					SLE Freq.	0.0			-37645.9			22.8	0.0	284.1	942.8	0.0756		
					SLE Q.P.	0.0			-36612.5			22.2	0.0	276.3	916.9	0.0735		
Camp.	3.45	18.85	18.85			37645.6	79817.9	0.05	0.0	-79066.1	0.05							
					SLE Rare	26906.5			0.0			0.0	20.8	1315.6	237.7			
					SLE Freq.	25347.8			0.0			0.0	19.6	1239.4	223.9	0.0252		
					SLE Q.P.	24952.9			0.0			0.0	19.2	1220.1	220.4	0.0248		
41	6.65	32.98	37.70			22662.5	138329.1	0.06	-77789.4	-155556.3	0.07							
					SLE Rare	0.0			-41056.9			24.9	0.0	309.9	1028.2			
					SLE Freq.	0.0			-37323.7			22.6	0.0	281.7	934.7	0.0749		
					SLE Q.P.	0.0			-36306.4			22.0	0.0	274.0	909.2	0.0729		
Trave di fondazione Sez. 3 a Tr 110x120x75x40 [cm] 110x120																		
41	0.25	33.34	37.70			3167.7	139796.2	0.06	-57551.4	-155595.3	0.07							
					SLE Rare	0.0			-42342.2			25.6	0.0	318.8	1060.1			
					SLE Freq.	0.0			-38285.8			23.2	0.0	288.3	958.6	0.0772		
					SLE Q.P.	0.0			-37162.6			22.5	0.0	279.8	930.5	0.0746		
Camp.	2.72	18.85	18.85			32025.3	79817.9	0.05	-1283.5	-79066.1	0.05							
					SLE Rare	20136.5			0.0			0.0	15.5	984.6	177.9			
					SLE Freq.	19390.3			0.0			0.0	15.0	948.1	171.3	0.0193		
					SLE Q.P.	19229.7			0.0			0.0	14.8	940.2	169.8	0.0191		
50	5.20	17.34	18.85			26652.3	73594.3	0.05	-8276.2	-78991.9	0.05							
					SLE Rare	2529.4			-682.5			0.6	2.0	123.4	33.7			
					SLE Freq.	2553.5			-502.6			0.4	2.0	124.6	24.8	0.0027		
					SLE Q.P.	2554.9			-455.8			0.4	2.0	124.7	22.9	0.0025		

Da [m]	A [m]	Dx [m]	VSD [kg]	Vrd _c [kg]	Vrd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 22 32 Sez. 3 a Tr 110x120x75x40 [cm] 110x120							

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.15	5.05	4.90	56254.0	25512.7	220200.6	92085.8	ø 12 2br. 20.0'
Trave di fondazione 32 41 Sez. 3 a Tr 110x120x75x40 [cm] 110x120							
0.30	6.60	6.30	57673.2	25866.7	220200.6	92085.8	ø 12 2br. 20.0'
Trave di fondazione 41 50 Sez. 3 a Tr 110x120x75x40 [cm] 110x120							
0.30	5.20	4.90	56337.6	25512.7	220200.6	92085.8	ø 12 2br. 20.0'

- Travata: 12 Travata 23 33 42 51

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
23	0.15	24.94	21.99			49467.6	106453.0	0.04	-4837.5	-92336.7	0.05					
						SLE Rare	5381.9		-419.2			0.3	3.2	181.5	37.2	
						SLE Freq.	4820.3		-474.6			0.4	2.9	162.5	33.3	0.0034
						SLE Q.P.	4669.0		-478.1			0.4	2.8	157.4	32.3	0.0033
Camp.	2.63	21.99	21.99			64783.4	94194.0	0.04	-34183.1	-92168.2	0.05					
						SLE Rare	34062.1		0.0			0.0	21.0	1411.7	239.9	
						SLE Freq.	32523.4		0.0			0.0	20.1	1347.9	229.1	0.0273
						SLE Q.P.	32150.1		0.0			0.0	19.8	1332.5	226.5	0.0270
33	5.10	38.90	43.98			39431.3	164946.2	0.05	-133077.1	-181485.1	0.07					
						SLE Rare	0.0		-72327.8			40.2	0.0	509.1	1552.3	
						SLE Freq.	0.0		-64486.1			35.8	0.0	453.9	1384.0	0.1314
						SLE Q.P.	0.0		-62352.7			34.6	0.0	438.9	1338.2	0.1252
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
33	0.25	38.48	43.98			13903.5	163209.5	0.05	-102706.6	-181431.7	0.07					
						SLE Rare	0.0		-72352.3			40.3	0.0	510.5	1553.2	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Freq.	0.0			-64713.2			36.0	0.0	456.6	1389.2	0.1321
				SLE Q.P.	0.0			-62637.6			34.9	0.0	442.0	1344.7	0.1261
Camp.	3.45	21.99	21.99			59235.9	94194.0	0.04	0.0	-92168.2	0.05				
				SLE Rare	42921.4			0.0			0.0	26.5	1778.9	302.3	
				SLE Freq.	40570.8			0.0			0.0	25.0	1681.5	285.8	0.0341
				SLE Q.P.	39981.6			0.0			0.0	24.6	1657.0	281.6	0.0336
42	6.65	38.48	43.98			15006.9	163209.4	0.05	-102294.1	-181431.7	0.07				
				SLE Rare	0.0			-71510.3			39.8	0.0	504.6	1535.1	
				SLE Freq.	0.0			-64031.5			35.7	0.0	451.8	1374.6	0.1301
				SLE Q.P.	0.0			-62003.1			34.5	0.0	437.5	1331.0	0.1243
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120															
42	0.25	38.90	43.98			0.0	164946.2	0.05	-101113.9	-181485.1	0.07				
				SLE Rare	0.0			-73379.2			40.8	0.0	516.5	1574.9	
				SLE Freq.	0.0			-65397.0			36.3	0.0	460.3	1403.6	0.1340
				SLE Q.P.	0.0			-63213.4			35.1	0.0	444.9	1356.7	0.1277
Camp.	2.72	21.99	21.99			53587.4	94194.0	0.04	0.0	-92168.2	0.05				
				SLE Rare	33211.5			0.0			0.0	20.5	1376.5	233.9	
				SLE Freq.	31768.2			0.0			0.0	19.6	1316.6	223.8	0.0267
				SLE Q.P.	31430.9			0.0			0.0	19.4	1302.7	221.4	0.0264
51	5.20	24.64	24.75			45321.4	105287.0	0.04	-10500.3	-103300.3	0.06				
				SLE Rare	5146.9			-545.1			0.4	3.0	175.5	35.0	
				SLE Freq.	4587.7			-599.3			0.4	2.7	156.4	31.2	0.0032
				SLE Q.P.	4435.2			-601.7			0.4	2.6	151.2	30.2	0.0031

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 23 33 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.94	0.79	53007.3	27260.8	220200.6	127896.9	ø 10 4br. 20.0'
0.94	4.26	3.32	71437.1	27230.5	220200.6	102317.5	ø 10 4br. 25.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

4.26	5.05	0.79	96289.9	27488.6	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 33 42 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.14	0.84	97637.0	27493.7	220200.6	127896.9	ø 10 4br. 20.0'
1.14	5.76	4.62	71069.6	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.76	6.60	0.84	97226.0	27493.7	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 42 51 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.07	0.77	96345.9	27511.2	220200.6	127896.9	ø 10 4br. 20.0'
1.07	4.43	3.35	72083.5	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.43	5.20	0.77	52503.1	27282.8	220200.6	127896.9	ø 10 4br. 20.0'

- Travata: 13 Travata 24 34 43 52

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	W mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
24	0.15	24.94	21.99			49226.5	106453.0	0.04	-2675.3	-92336.7	0.05					
					SLE Rare	7662.9			0.0			0.0	4.5	258.4	52.9	
					SLE Freq.	6883.5			0.0			0.0	4.1	232.1	47.6	0.0049
					SLE Q.P.	6663.8			0.0			0.0	3.9	224.7	46.0	0.0048
Camp.	2.63	21.99	21.99			56783.0	94194.0	0.04	-6611.9	-92168.2	0.05					
					SLE Rare	34583.4			0.0			0.0	21.3	1433.3	243.6	
					SLE Freq.	33166.1			0.0			0.0	20.4	1374.6	233.6	0.0278
					SLE Q.P.	32835.9			0.0			0.0	20.2	1360.9	231.3	0.0276
34	5.10	38.90	43.98			2490.4	164946.2	0.05	-109826.6	-181485.1	0.07					
					SLE Rare	0.0			-79647.4			44.3	0.0	560.6	1709.4	
					SLE Freq.	0.0			-70853.5			39.4	0.0	498.7	1520.7	0.1497
					SLE Q.P.	0.0			-68454.4			38.0	0.0	481.8	1469.2	0.1428

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
34	0.25	38.48	43.98			9328.6	163209.5	0.05	-110897.5	-181431.7	0.07					
				SLE Rare	0.0				-79237.4			44.1	0.0	559.1	1701.0	
				SLE Freq.	0.0				-70714.5			39.4	0.0	499.0	1518.0	0.1493
				SLE Q.P.	0.0				-68394.2			38.1	0.0	482.6	1468.2	0.1426
Camp.	3.45	21.99	21.99			59056.9	94194.0	0.04	0.0	-92168.2	0.05					
				SLE Rare	42747.2				0.0			0.0	26.4	1771.7	301.1	
				SLE Freq.	40405.7				0.0			0.0	24.9	1674.6	284.6	0.0339
				SLE Q.P.	39825.9				0.0			0.0	24.6	1650.6	280.5	0.0334
43	6.65	38.48	43.98			8135.6	163209.4	0.05	-110553.1	-181431.7	0.07					
				SLE Rare	0.0				-79056.7			44.0	0.0	557.9	1697.1	
				SLE Freq.	0.0				-70697.5			39.4	0.0	498.9	1517.7	0.1493
				SLE Q.P.	0.0				-68431.0			38.1	0.0	482.9	1469.0	0.1427
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
43	0.25	38.90	43.98			0.0	164946.2	0.05	-112453.4	-181485.1	0.07					
				SLE Rare	0.0				-81622.4			45.3	0.0	574.5	1751.8	
				SLE Freq.	0.0				-72685.7			40.4	0.0	511.6	1560.0	0.1549
				SLE Q.P.	0.0				-70243.9			39.0	0.0	494.4	1507.6	0.1479
Camp.	2.72	21.99	21.99			55558.2	94194.0	0.04	-3354.7	-92168.2	0.05					
				SLE Rare	33286.0				0.0			0.0	20.5	1379.5	234.5	
				SLE Freq.	31915.1				0.0			0.0	19.7	1322.7	224.8	0.0268
				SLE Q.P.	31598.2				0.0			0.0	19.5	1309.6	222.6	0.0265
52	5.20	24.64	21.99			48686.0	105200.7	0.04	-1756.7	-92320.0	0.05					
				SLE Rare	8241.3				0.0			0.0	4.9	281.2	57.1	
				SLE Freq.	7416.4				0.0			0.0	4.4	253.0	51.3	0.0053
				SLE Q.P.	7186.0				0.0			0.0	4.3	245.2	49.7	0.0052
Da	A	Dx	VSd	Vrd _c	Vrd _{max}	Vrd _s	Staffe									

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

[m]	[m]	[m]	[kg]	[kg]	[kg]	[kg]	[kg]
Trave di fondazione 24 34 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.94	0.79	53056.0	27260.8	220200.6	127896.9	∅ 10 4br. 20.0'
0.94	4.26	3.32	76410.5	27230.5	220200.6	102317.5	∅ 10 4br. 25.0'
4.26	5.05	0.79	102632.4	27488.6	220200.6	127896.9	∅ 10 4br. 20.0'
Trave di fondazione 34 43 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.09	0.79	103507.1	27562.8	220200.6	127896.9	∅ 10 4br. 20.0'
1.09	5.81	4.72	76985.2	27230.5	220200.6	102317.5	∅ 10 4br. 25.0'
5.81	6.60	0.79	103304.1	27562.8	220200.6	127896.9	∅ 10 4br. 20.0'
Trave di fondazione 43 52 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.11	0.81	102845.3	27462.0	220200.6	127896.9	∅ 10 4br. 20.0'
1.11	4.39	3.27	76023.8	27230.5	220200.6	102317.5	∅ 10 4br. 25.0'
4.39	5.20	0.81	51572.8	27230.5	220200.6	127896.9	∅ 10 4br. 20.0'

- Travata: 14 Travata 26 35 44 53

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
26	0.15	24.94	21.99			49812.4	106453.0	0.04	-4382.0	-92336.7	0.05					
					SLE Rare	6432.0			-5.9			0.0	3.8	216.9	44.4	
					SLE Freq.	5696.7			-63.4			0.0	3.4	192.1	39.4	0.0041
					SLE Q.P.	5533.6			-65.5			0.0	3.3	186.6	38.2	0.0039
Camp.	2.63	21.99	21.99			57694.7	94194.0	0.04	-6726.4	-92168.2	0.05					
					SLE Rare	35083.9			0.0			0.0	21.6	1454.1	247.1	
					SLE Freq.	33676.3			0.0			0.0	20.8	1395.7	237.2	0.0283
					SLE Q.P.	33353.0			0.0			0.0	20.6	1382.3	234.9	0.0280

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

35	5.10	38.90	43.98			3230.0	164946.2	0.05	-111021.0	-181485.1	0.07							
					SLE Rare	0.0			-80475.1			44.7	0.0	566.4	1727.2			
					SLE Freq.	0.0			-71473.4			39.7	0.0	503.1	1534.0	0.1514		
					SLE Q.P.	0.0			-69013.8			38.3	0.0	485.8	1481.2	0.1444		
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																		
35	0.25	38.48	43.98			8472.0	163209.5	0.05	-112045.1	-181431.7	0.07							
					SLE Rare	0.0			-80000.6			44.5	0.0	564.5	1717.4			
					SLE Freq.	0.0			-71294.8			39.7	0.0	503.1	1530.5	0.1510		
					SLE Q.P.	0.0			-68921.4			38.4	0.0	486.3	1479.6	0.1441		
Camp.	3.45	21.99	21.99			60163.6	94194.0	0.04	0.0	-92168.2	0.05							
					SLE Rare	43534.8			0.0			0.0	26.8	1804.3	306.6			
					SLE Freq.	41156.1			0.0			0.0	25.4	1705.7	289.9	0.0345		
					SLE Q.P.	40568.7			0.0			0.0	25.0	1681.4	285.7	0.0340		
44	6.65	38.48	43.98			7928.6	163209.4	0.05	-114843.0	-181431.7	0.07							
					SLE Rare	0.0			-82155.9			45.7	0.0	579.7	1763.7			
					SLE Freq.	0.0			-73452.7			40.9	0.0	518.3	1576.8	0.1572		
					SLE Q.P.	0.0			-71093.5			39.6	0.0	501.7	1526.2	0.1504		
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																		
44	0.25	38.90	43.98			0.0	164946.2	0.05	-116961.3	-181485.1	0.07							
					SLE Rare	0.0			-84906.7			47.2	0.0	597.6	1822.3			
					SLE Freq.	0.0			-75605.8			42.0	0.0	532.2	1622.7	0.1633		
					SLE Q.P.	0.0			-73065.4			40.6	0.0	514.3	1568.1	0.1560		
Camp.	2.72	21.99	21.99			55984.3	94194.0	0.04	-1812.6	-92168.2	0.05							
					SLE Rare	33190.4			0.0			0.0	20.5	1375.6	233.8			
					SLE Freq.	31838.9			0.0			0.0	19.6	1319.6	224.3	0.0267		
					SLE Q.P.	31528.2			0.0			0.0	19.4	1306.7	222.1	0.0265		
53	5.20	24.64	21.99			49319.2	105200.7	0.04	-499.9	-92320.0	0.05							
					SLE Rare	8570.2			0.0			0.0	5.1	292.4	59.3			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	SLE Freq.	7742.0			0.0			0.0	4.6	264.2	53.6	0.0056
	SLE Q.P.	7510.0			0.0			0.0	4.5	256.2	52.0	0.0054

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 26 35 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.94	0.79	54837.8	27260.8	220200.6	127896.9	∅ 10 4br. 20.0'
0.94	4.26	3.32	77437.5	27230.5	220200.6	102317.5	∅ 10 4br. 25.0'
4.26	5.05	0.79	104212.8	27488.6	220200.6	127896.9	∅ 10 4br. 20.0'
Trave di fondazione 35 44 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.14	0.84	105293.5	27493.7	220200.6	127896.9	∅ 10 4br. 20.0'
1.14	5.76	4.62	77434.2	27230.5	220200.6	102317.5	∅ 10 4br. 25.0'
5.76	6.60	0.84	106176.2	27493.7	220200.6	127896.9	∅ 10 4br. 20.0'
Trave di fondazione 44 53 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.11	0.81	105521.9	27462.0	220200.6	127896.9	∅ 10 4br. 20.0'
1.11	4.39	3.27	78080.8	27230.5	220200.6	102317.5	∅ 10 4br. 25.0'
4.39	5.20	0.81	52012.1	27230.5	220200.6	127896.9	∅ 10 4br. 20.0'

- Travata: 15 Travata 27 36 45 54

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
27	0.15	24.64	21.99			47964.0	105200.4	0.04	-1635.4	-92320.0	0.05					
						SLE Rare	6702.3		0.0			0.0	4.0	228.7	46.4	
						SLE Freq.	6104.6		0.0			0.0	3.6	208.3	42.3	0.0044
						SLE Q.P.	5939.4		0.0			0.0	3.5	202.7	41.1	0.0043

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Camp.	2.63	21.99	21.99			55659.1	94194.0	0.04	-3826.7	-92168.2	0.05								
					SLE Rare	33878.8			0.0			0.0	20.9	1404.1	238.6				
					SLE Freq.	32563.9			0.0			0.0	20.1	1349.6	229.4	0.0273			
					SLE Q.P.	32265.4			0.0			0.0	19.9	1337.2	227.3	0.0271			
36	5.10	38.90	43.98			0.0	164946.2	0.05	-109826.1	-181485.1	0.07								
					SLE Rare	0.0			-79678.4			44.3	0.0	560.8	1710.1				
					SLE Freq.	0.0			-70882.7			39.4	0.0	498.9	1521.3	0.1497			
					SLE Q.P.	0.0			-68481.0			38.0	0.0	482.0	1469.7	0.1428			
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																			
36	0.25	38.48	43.98			6712.5	163209.5	0.05	-110962.7	-181431.7	0.07								
					SLE Rare	0.0			-79288.8			44.2	0.0	559.5	1702.1				
					SLE Freq.	0.0			-70755.7			39.4	0.0	499.3	1518.9	0.1494			
					SLE Q.P.	0.0			-68430.4			38.1	0.0	482.9	1469.0	0.1427			
Camp.	3.45	21.99	21.99			59755.2	94194.0	0.04	0.0	-92168.2	0.05								
					SLE Rare	43214.3			0.0			0.0	26.6	1791.0	304.4				
					SLE Freq.	40810.9			0.0			0.0	25.2	1691.4	287.5	0.0343			
					SLE Q.P.	40215.8			0.0			0.0	24.8	1666.8	283.3	0.0338			
45	6.65	38.48	43.98			7187.4	163209.4	0.05	-109026.0	-181431.7	0.07								
					SLE Rare	0.0			-77956.9			43.4	0.0	550.1	1673.5				
					SLE Freq.	0.0			-69714.1			38.8	0.0	491.9	1496.6	0.1464			
					SLE Q.P.	0.0			-67478.2			37.6	0.0	476.2	1448.6	0.1400			
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																			
45	0.25	38.90	43.98			0.0	164946.2	0.05	-110685.7	-181485.1	0.07								
					SLE Rare	0.0			-80365.9			44.7	0.0	565.7	1724.8				
					SLE Freq.	0.0			-71553.7			39.8	0.0	503.6	1535.7	0.1517			
					SLE Q.P.	0.0			-69143.8			38.4	0.0	486.7	1484.0	0.1447			
Camp.	2.72	21.99	21.99			55587.0	94194.0	0.04	0.0	-92168.2	0.05								
					SLE Rare	33680.7			0.0			0.0	20.8	1395.9	237.2				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Freq.	32277.0			0.0			0.0	19.9	1337.7	227.3	0.0271
				SLE Q.P.	31952.7			0.0			0.0	19.7	1324.3	225.1	0.0268
54	5.20	24.64	21.99		47894.8	105200.7	0.04	-949.3	-92320.0	0.05					
				SLE Rare	6540.7			0.0			0.0	3.9	223.2	45.3	
				SLE Freq.	5926.6			0.0			0.0	3.5	202.2	41.0	0.0043
				SLE Q.P.	5752.0			0.0			0.0	3.4	196.3	39.8	0.0041

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 27 36 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.94	0.79	53060.6	27253.5	220200.6	127896.9	ø 10 4br. 20.0'
0.94	4.26	3.32	76010.4	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.26	5.05	0.79	102188.6	27488.6	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 36 45 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.19	0.89	103675.0	27424.2	220200.6	127896.9	ø 10 4br. 20.0'
1.19	5.71	4.53	73945.3	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.71	6.60	0.89	103100.4	27424.2	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 45 54 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.10	0.80	102574.9	27474.3	220200.6	127896.9	ø 10 4br. 20.0'
1.10	4.40	3.29	75968.1	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.40	5.20	0.80	53290.6	27234.9	220200.6	127896.9	ø 10 4br. 20.0'

- Travata: 16 Travata 28 37 46 55

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

28	0.15	24.64	21.99			47433.2	105200.4	0.04	-1547.6	-92320.0	0.05									
					SLE Rare	6626.6			0.0			0.0	3.9	226.1	45.9					
					SLE Freq.	6051.2			0.0			0.0	3.6	206.5	41.9	0.0044				
					SLE Q.P.	5891.6			0.0			0.0	3.5	201.0	40.8	0.0042				
Camp.	2.63	21.99	21.99			54978.5	94194.0	0.04	-2845.5	-92168.2	0.05									
					SLE Rare	33298.5			0.0			0.0	20.5	1380.1	234.5					
					SLE Freq.	31979.3			0.0			0.0	19.7	1325.4	225.2	0.0268				
					SLE Q.P.	31679.5			0.0			0.0	19.5	1313.0	223.1	0.0266				
37	5.10	38.90	43.98			0.0	164946.2	0.05	-110264.7	-181485.1	0.07									
					SLE Rare	0.0			-80058.0			44.5	0.0	563.5	1718.2					
					SLE Freq.	0.0			-71287.8			39.6	0.0	501.8	1530.0	0.1509				
					SLE Q.P.	0.0			-68892.8			38.3	0.0	484.9	1478.6	0.1440				
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																				
37	0.25	38.48	43.98			6132.1	163209.5	0.05	-111360.3	-181431.7	0.07									
					SLE Rare	0.0			-79628.8			44.3	0.0	561.9	1709.4					
					SLE Freq.	0.0			-71106.8			39.6	0.0	501.8	1526.5	0.1504				
					SLE Q.P.	0.0			-68784.1			38.3	0.0	485.4	1476.6	0.1438				
Camp.	3.45	21.99	21.99			59325.9	94194.0	0.04	0.0	-92168.2	0.05									
					SLE Rare	42874.7			0.0			0.0	26.4	1777.0	302.0					
					SLE Freq.	40472.4			0.0			0.0	25.0	1677.4	285.1	0.0340				
					SLE Q.P.	39877.7			0.0			0.0	24.6	1652.7	280.9	0.0335				
46	6.65	38.48	43.98			8818.2	163209.4	0.05	-108771.0	-181431.7	0.07									
					SLE Rare	0.0			-77794.0			43.3	0.0	548.9	1670.0					
					SLE Freq.	0.0			-69587.5			38.8	0.0	491.0	1493.9	0.1461				
					SLE Q.P.	0.0			-67361.6			37.5	0.0	475.3	1446.1	0.1397				
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																				
46	0.25	38.90	43.98			0.0	164946.2	0.05	-110525.4	-181485.1	0.07									
					SLE Rare	0.0			-80258.2			44.6	0.0	564.9	1722.5					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Freq.	0.0			-71471.8			39.7	0.0	503.1	1533.9	0.1514
				SLE Q.P.	0.0			-69068.9			38.4	0.0	486.1	1482.4	0.1445
Camp.	2.72	21.99	21.99			55837.8	94194.0	0.04	0.0	-92168.2	0.05				
				SLE Rare	33786.8			0.0			0.0	20.8	1400.3	238.0	
				SLE Freq.	32356.7			0.0			0.0	19.9	1341.0	227.9	0.0272
				SLE Q.P.	32024.9			0.0			0.0	19.7	1327.3	225.6	0.0269
55	5.20	24.64	21.99			48299.4	105200.7	0.04	-4763.1	-92320.0	0.05				
				SLE Rare	7051.8			0.0			0.0	4.2	240.6	48.8	
				SLE Freq.	6366.9			0.0			0.0	3.8	217.2	44.1	0.0046
				SLE Q.P.	6172.3			0.0			0.0	3.7	210.6	42.7	0.0044

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 28 37 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.93	0.78	52579.4	27269.4	220200.6	127896.9	ø 10 4br. 20.0'
0.93	4.27	3.34	76165.1	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.27	5.05	0.78	101951.1	27500.9	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 37 46 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.11	0.81	103559.9	27535.2	220200.6	127896.9	ø 10 4br. 20.0'
1.11	5.79	4.68	76488.0	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.79	6.60	0.81	102777.7	27535.2	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 46 55 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.07	0.77	102466.9	27511.2	220200.6	127896.9	ø 10 4br. 20.0'
1.07	4.43	3.35	76888.8	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.43	5.20	0.77	52955.2	27282.8	220200.6	127896.9	ø 10 4br. 20.0'

- Travata: 17 Travata 29 38 47 56

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
29	0.15	24.64	21.99			46100.4	105200.4	0.04	-3070.2	-92320.0	0.05					
					SLE Rare	5702.7			-121.6			0.1	3.4	194.6	39.5	
					SLE Freq.	5265.5			-139.8			0.1	3.1	179.7	36.5	0.0038
					SLE Q.P.	5147.0			-139.1			0.1	3.1	175.6	35.6	0.0037
Camp.	2.63	21.99	21.99			53763.8	94194.0	0.04	-3799.9	-92168.2	0.05					
					SLE Rare	32518.2			0.0			0.0	20.0	1347.7	229.0	
					SLE Freq.	31227.4			0.0			0.0	19.3	1294.2	220.0	0.0262
					SLE Q.P.	30935.1			0.0			0.0	19.1	1282.1	217.9	0.0260
38	5.10	38.90	43.98			0.0	164946.2	0.05	-110773.9	-181485.1	0.07					
					SLE Rare	0.0			-80456.0			44.7	0.0	566.3	1726.8	
					SLE Freq.	0.0			-71688.2			39.8	0.0	504.6	1538.6	0.1520
					SLE Q.P.	0.0			-69293.9			38.5	0.0	487.7	1487.2	0.1452
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
38	0.25	38.48	43.98			3934.7	163209.5	0.05	-111854.1	-181431.7	0.07					
					SLE Rare	0.0			-80005.0			44.6	0.0	564.5	1717.5	
					SLE Freq.	0.0			-71475.3			39.8	0.0	504.4	1534.4	0.1515
					SLE Q.P.	0.0			-69150.3			38.5	0.0	488.0	1484.5	0.1448
Camp.	3.45	21.99	21.99			59086.3	94194.0	0.04	0.0	-92168.2	0.05					
					SLE Rare	42683.4			0.0			0.0	26.3	1769.0	300.6	
					SLE Freq.	40270.3			0.0			0.0	24.8	1669.0	283.6	0.0338
					SLE Q.P.	39672.4			0.0			0.0	24.5	1644.2	279.4	0.0333
47	6.65	38.48	43.98			5387.3	163209.4	0.05	-108952.5	-181431.7	0.07					
					SLE Rare	0.0			-77939.2			43.4	0.0	550.0	1673.1	
					SLE Freq.	0.0			-69753.8			38.8	0.0	492.2	1497.4	0.1465
					SLE Q.P.	0.0			-67535.0			37.6	0.0	476.6	1449.8	0.1402

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120														
47	0.25	38.90	43.98			0.0	164946.2	0.05	-110846.8	-181485.1	0.07			
					SLE Rare	0.0			-80502.0			44.7	0.0	566.6 1727.7
					SLE Freq.	0.0			-71729.7			39.9	0.0	504.9 1539.5 0.1522
					SLE Q.P.	0.0			-69332.3			38.5	0.0	488.0 1488.0 0.1453
Camp.	2.72	21.99	21.99			55407.4	94194.0	0.04	-1273.8	-92168.2	0.05			
					SLE Rare	33480.4			0.0			0.0	20.6	1387.6 235.8
					SLE Freq.	32025.5			0.0			0.0	19.7	1327.3 225.6 0.0269
					SLE Q.P.	31683.8			0.0			0.0	19.5	1313.1 223.2 0.0266
56	5.20	24.64	21.99			47900.6	105200.7	0.04	-5265.4	-92320.0	0.05			
					SLE Rare	6877.7			0.0			0.0	4.1	234.7 47.6
					SLE Freq.	6165.3			0.0			0.0	3.7	210.4 42.7 0.0044
					SLE Q.P.	5959.2			0.0			0.0	3.5	203.3 41.3 0.0043

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 29 38 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.89	0.74	52606.8	27333.0	220200.6	127896.9	ø 10 4br. 20.0'
0.89	4.31	3.41	77219.6	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.31	5.05	0.74	101736.4	27652.3	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 38 47 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.24	0.94	103677.4	27354.4	220200.6	127896.9	ø 10 4br. 20.0'
1.24	5.66	4.43	72376.7	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.66	6.60	0.94	102778.2	27354.4	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 47 56 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.05	0.75	102410.2	27555.5	220200.6	127896.9	ø 10 4br. 20.0'
1.05	4.45	3.39	77478.0	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.45	5.20	0.75	52803.0	27314.7	220200.6	127896.9	ø 10 4br. 20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Travata: 18 Travata 30 39 48 57

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
30	0.15	24.08	21.99			44927.2	102897.1	0.04	-5188.6	-92289.0	0.05					
					SLE Rare	5470.4			-144.2			0.1	3.3	190.8	38.0	
					SLE Freq.	4986.1			-180.9			0.1	3.0	173.9	34.6	0.0036
					SLE Q.P.	4853.5			-181.5			0.1	2.9	169.3	33.7	0.0035
Camp.	2.63	21.99	21.99			51769.1	94194.0	0.04	-12047.9	-92168.2	0.05					
					SLE Rare	30002.3			0.0			0.0	18.5	1243.5	211.3	
					SLE Freq.	28883.2			0.0			0.0	17.8	1197.1	203.4	0.0242
					SLE Q.P.	28635.0			0.0			0.0	17.7	1186.8	201.7	0.0240
39	5.10	38.90	43.98			767.9	164946.2	0.05	-113991.6	-181485.1	0.07					
					SLE Rare	0.0			-82747.9			46.0	0.0	582.4	1775.9	
					SLE Freq.	0.0			-73801.0			41.0	0.0	519.4	1583.9	0.1581
					SLE Q.P.	0.0			-71360.6			39.6	0.0	502.3	1531.5	0.1511
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
39	0.25	38.48	43.98			6413.9	163209.5	0.05	-114461.4	-181431.7	0.07					
					SLE Rare	0.0			-81887.3			45.6	0.0	577.8	1757.9	
					SLE Freq.	0.0			-73208.1			40.8	0.0	516.6	1571.6	0.1565
					SLE Q.P.	0.0			-70844.9			39.5	0.0	499.9	1520.8	0.1497
Camp.	3.45	21.99	21.99			60451.3	94194.0	0.04	0.0	-92168.2	0.05					
					SLE Rare	41135.0			0.0			0.0	25.4	1704.8	289.7	
					SLE Freq.	38829.1			0.0			0.0	23.9	1609.3	273.5	0.0326
					SLE Q.P.	38255.4			0.0			0.0	23.6	1585.5	269.5	0.0321
48	6.65	38.48	43.98			10702.8	163209.4	0.05	-110375.5	-181431.7	0.07					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Rare	0.0			-78972.3			44.0	0.0	557.3	1695.3	
				SLE Freq.	0.0			-70779.8			39.4	0.0	499.5	1519.4	0.1495
				SLE Q.P.	0.0			-68567.0			38.2	0.0	483.8	1471.9	0.1431
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120															
48	0.25	38.90	43.98			1682.1	164946.2	0.05	-112585.5	-181485.1	0.07				
				SLE Rare	0.0				-81723.8		45.4	0.0	575.2	1754.0	
				SLE Freq.	0.0				-72950.0		40.5	0.0	513.5	1565.7	0.1557
				SLE Q.P.	0.0				-70562.0		39.2	0.0	496.6	1514.4	0.1488
Camp.	2.72	21.99	21.99			56403.6	94194.0	0.04	-10652.5	-92168.2	0.05				
				SLE Rare	32500.5				0.0		0.0	20.0	1347.0	228.9	
				SLE Freq.	30962.1				0.0		0.0	19.1	1283.2	218.1	0.0260
				SLE Q.P.	30585.0				0.0		0.0	18.9	1267.6	215.4	0.0257
57	5.20	24.64	21.99			49300.5	105200.7	0.04	-4159.6	-92320.0	0.05				
				SLE Rare	7158.3				0.0		0.0	4.3	244.2	49.6	
				SLE Freq.	6270.2				0.0		0.0	3.7	213.9	43.4	0.0045
				SLE Q.P.	6011.2				0.0		0.0	3.6	205.1	41.6	0.0043

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 30 39 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.91	0.76	50169.8	27259.7	220200.6	127896.9	ø 10 4br. 20.0'
0.91	4.29	3.37	76246.0	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.29	5.05	0.76	101208.3	27525.4	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 39 48 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.17	0.87	103671.9	27452.0	220200.6	127896.9	ø 10 4br. 20.0'
1.17	5.73	4.57	74759.5	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.73	6.60	0.87	102523.3	27452.0	220200.6	127896.9	ø 10 4br. 20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione 48 57 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.06	0.76	102394.7	27523.5	220200.6	127896.9	ø 10 4br. 20.0'
1.06	4.44	3.37	77207.7	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.44	5.20	0.76	51619.2	27298.8	220200.6	127896.9	ø 10 4br. 20.0'

- Travata: 19 Travata 31 40 49 58

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
31	0.15	29.65	21.99			71795.0	125894.7	0.05	-33088.8	-92581.4	0.05					
					SLE Rare	12562.9			0.0			0.0	7.1	357.9	84.3	
					SLE Freq.	10102.7			0.0			0.0	5.7	287.8	67.8	0.0065
					SLE Q.P.	9416.9			0.0			0.0	5.3	268.3	63.2	0.0060
Camp.	2.63	21.99	21.99			79218.5	94194.0	0.04	-54558.3	-92168.2	0.05					
					SLE Rare	26157.3			0.0			0.0	16.1	1084.1	184.2	
					SLE Freq.	25003.6			0.0			0.0	15.4	1036.3	176.1	0.0210
					SLE Q.P.	24735.6			0.0			0.0	15.2	1025.2	174.2	0.0208
40	5.10	38.90	43.98			29556.8	164946.2	0.05	-128182.0	-181485.1	0.07					
					SLE Rare	0.0			-88281.6			49.0	0.0	621.4	1894.7	
					SLE Freq.	0.0			-78871.7			43.8	0.0	555.1	1692.7	0.1727
					SLE Q.P.	0.0			-76314.5			42.4	0.0	537.1	1637.9	0.1653
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
40	0.25	38.48	43.98			11534.9	163209.5	0.05	-120364.5	-181431.7	0.07					
					SLE Rare	0.0			-86111.0			48.0	0.0	607.6	1848.6	
					SLE Freq.	0.0			-77092.0			42.9	0.0	544.0	1655.0	0.1676
					SLE Q.P.	0.0			-74645.2			41.6	0.0	526.7	1602.4	0.1606
Camp.	3.45	21.99	21.99			69613.4	94194.0	0.04	-8306.3	-92168.2	0.05					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Rare	36279.9			0.0		0.0	22.4	1503.6	255.5	
					SLE Freq.	34548.5			0.0		0.0	21.3	1431.9	243.3	0.0290
					SLE Q.P.	34115.1			0.0		0.0	21.0	1413.9	240.3	0.0286
49	6.65	38.48	43.98			21670.3	163209.4	0.05	-120856.6	-181431.7	0.07				
					SLE Rare	0.0			-81386.0		45.3	0.0	574.3	1747.1	
					SLE Freq.	0.0			-73172.9		40.7	0.0	516.3	1570.8	0.1564
					SLE Q.P.	0.0			-70975.5		39.5	0.0	500.8	1523.6	0.1501
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120															
49	0.25	38.90	43.98			11367.0	164946.2	0.05	-116600.5	-181485.1	0.07				
					SLE Rare	0.0			-84420.1		46.9	0.0	594.2	1811.8	
					SLE Freq.	0.0			-75668.0		42.0	0.0	532.6	1624.0	0.1635
					SLE Q.P.	0.0			-73313.6		40.7	0.0	516.0	1573.5	0.1567
Camp.	2.72	21.99	21.99			62005.2	94194.0	0.04	-27238.5	-92168.2	0.05				
					SLE Rare	31352.4			0.0		0.0	19.3	1299.4	220.8	
					SLE Freq.	29292.9			0.0		0.0	18.1	1214.1	206.3	0.0246
					SLE Q.P.	28744.6			0.0		0.0	17.7	1191.3	202.5	0.0241
58	5.20	29.04	21.99			57280.6	123412.6	0.05	-35322.6	-92551.6	0.05				
					SLE Rare	10793.8			0.0		0.0	6.1	313.7	72.7	
					SLE Freq.	8521.8			0.0		0.0	4.8	247.7	57.4	0.0055
					SLE Q.P.	7890.7			0.0		0.0	4.5	229.3	53.2	0.0051

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 31 40 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.96	0.81	58552.4	27230.5	220200.6	127896.9	ø 10 4br. 20.0'
0.96	4.24	3.28	74870.0	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.24	5.05	0.81	100367.7	27464.0	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 40 49 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.30	1.06	0.76	102190.6	27604.1	220200.6	127896.9	∅ 10 4br. 20.0'
1.06	5.84	4.78	77526.3	27230.5	220200.6	102317.5	∅ 10 4br. 25.0'
5.84	6.60	0.76	100861.6	27604.1	220200.6	127896.9	∅ 10 4br. 20.0'
Trave di fondazione 49 58 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.08	0.78	102584.0	27498.9	220200.6	127896.9	∅ 10 4br. 20.0'
1.08	4.42	3.33	77144.2	27230.5	220200.6	102317.5	∅ 10 4br. 25.0'
4.42	5.20	0.78	61495.7	27303.1	220200.6	127896.9	∅ 10 4br. 20.0'

- Travata: 2 Travata 1001 1073 1074 1022 1 2 3 4 5 22 23 24 25 26 27 28 29 30 31 1051 1084 1052

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
1001	0.12	26.80	40.72			43770.9	113674.4	0.05	-31120.6	166467.4	0.08					
					SLE Rare	5119.2			0.0			0.0	3.1	175.6	35.9	
					SLE Freq.	4241.5			0.0			0.0	2.5	145.5	29.8	0.0027
					SLE Q.P.	3992.7			0.0			0.0	2.4	137.0	28.0	0.0025
Camp.	0.36	27.08	40.72			43770.9	114814.3	0.05	-31120.6	166509.5	0.08					
					SLE Rare	6462.8			0.0			0.0	3.9	219.7	45.3	
					SLE Freq.	5546.6			0.0			0.0	3.3	188.6	38.9	0.0035
					SLE Q.P.	5287.4			0.0			0.0	3.2	179.8	37.1	0.0034
1073	0.60	26.09	40.72			43770.9	110738.7	0.05	-31120.6	166357.8	0.08					
					SLE Rare	6911.8			0.0			0.0	4.2	243.4	48.8	
					SLE Freq.	6006.2			0.0			0.0	3.6	211.5	42.4	0.0039
					SLE Q.P.	5750.1			0.0			0.0	3.5	202.5	40.6	0.0037

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120														
1073	0.00	25.55	40.72			68754.1	108490.1	0.05	-57179.9	166272.8	-	0.08		
					SLE Rare	6766.0			0.0				0.0	4.1 243.2 47.9
					SLE Freq.	5594.1			0.0				0.0	3.4 201.1 39.6 0.0037
					SLE Q.P.	5261.0			0.0				0.0	3.2 189.1 37.2 0.0034
Camp.	1.47	21.99	47.78			62531.3	93959.5	0.05	-98861.1	192769.8	-	0.11		
					SLE Rare	4449.4			0.0				0.0	2.7 185.0 30.8
					SLE Freq.	4336.9			0.0				0.0	2.7 180.3 30.0 0.0030
					SLE Q.P.	4303.0			0.0				0.0	2.6 178.9 29.8 0.0030
1074	2.95	53.41	95.00			76417.4	225735.1	0.06	-141566.8	379558.8	-	0.18		
					SLE Rare	0.0			-33589.2				14.4	0.0 191.6 343.0
					SLE Freq.	0.0			-30475.7				13.1	0.0 173.8 311.2 0.0201
					SLE Q.P.	0.0			-29613.4				12.7	0.0 168.9 302.4 0.0196
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120														
1074	0.00	53.41	95.00			41232.8	225735.1	0.06	-88168.4	379558.8	-	0.18		
					SLE Rare	0.0			-17842.7				7.6	0.0 101.8 182.2
					SLE Freq.	0.0			-16035.0				6.9	0.0 91.5 163.7 0.0106
					SLE Q.P.	0.0			-15529.2				6.7	0.0 88.6 158.6 0.0103
Camp.	0.25	53.41	95.00			41232.8	225735.1	0.06	-88168.4	379558.8	-	0.18		
					SLE Rare	0.0			-20028.0				8.6	0.0 114.2 204.5
					SLE Freq.	0.0			-18391.0				7.9	0.0 104.9 187.8 0.0122
					SLE Q.P.	0.0			-17946.4				7.7	0.0 102.4 183.2 0.0119
1022	0.50	53.41	95.00			41232.8	225735.1	0.06	-88168.4	379558.8	-	0.18		
					SLE Rare	0.0			-23273.5				10.0	0.0 132.8 237.6

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Freq.	0.0			-21737.2			9.3	0.0	124.0	222.0	0.0144
					SLE Q.P.	0.0			-21334.4			9.1	0.0	121.7	217.8	0.0141
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
1022	0.10	53.41	95.00			124553.3	225735.1	0.06	-	208766.7	379558.8					0.18
					SLE Rare	0.0			-40421.4			17.3	0.0	230.6	412.7	
					SLE Freq.	0.0			-38690.3			16.6	0.0	220.7	395.1	0.0256
					SLE Q.P.	0.0			-38278.8			16.4	0.0	218.4	390.9	0.0253
Camp.	1.99	31.42	54.29			103736.2	133298.8	0.05	-	136929.6	219612.5					0.10
					SLE Rare	713.5			-202.0			0.1	0.4	20.9	4.5	
					SLE Freq.	634.3			-205.8			0.1	0.3	18.6	4.0	0.0004
					SLE Q.P.	602.7			-203.1			0.1	0.3	17.7	3.8	0.0003
1	3.88	45.91	73.14			34416.9	193815.4	0.05	-29255.5		294409.8					0.12
					SLE Rare	0.0			-11145.6			5.3	0.0	69.8	147.0	
					SLE Freq.	0.0			-8516.9			4.1	0.0	53.4	112.3	0.0075
					SLE Q.P.	0.0			-7765.0			3.7	0.0	48.7	102.4	0.0069
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
1	0.25	43.58	73.14			24431.8	184284.8	0.05	-28656.0		293787.2					0.13
					SLE Rare	0.0			-13796.7			6.7	0.0	87.6	182.2	
					SLE Freq.	0.0			-11040.9			5.3	0.0	70.1	145.8	0.0098
					SLE Q.P.	0.0			-10263.9			5.0	0.0	65.1	135.5	0.0091
Camp.	2.03	18.85	18.85			33839.2	80209.4	0.05	-18435.1		-79137.5					0.05
					SLE Rare	11271.0			0.0			0.0	8.6	548.4	99.3	
					SLE Freq.	11327.9			0.0			0.0	8.6	551.2	99.8	0.0110
					SLE Q.P.	11324.9			0.0			0.0	8.6	551.1	99.8	0.0110
2	3.80	33.34	37.70			32367.0	140498.3	0.05	-37540.9		-					0.07

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

									155790.3										
					SLE Rare	0.0			-10628.9			6.6	0.0	83.4	265.8				
					SLE Freq.	0.0			-8388.1			5.2	0.0	65.8	209.7	0.0163			
					SLE Q.P.	0.0			-7745.5			4.8	0.0	60.8	193.7	0.0150			
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																			
	2	0.25	33.34	37.70				17703.4	140498.1	0.05	-22983.3	155790.3	0.07						
					SLE Rare	0.0			-13561.9			8.4	0.0	106.4	339.1				
					SLE Freq.	0.0			-11000.4			6.8	0.0	86.3	275.1	0.0213			
					SLE Q.P.	0.0			-10276.1			6.4	0.0	80.6	257.0	0.0199			
	Camp.	2.02	18.85	18.85				22324.8	80209.4	0.05	-11095.0	-79137.5	0.05						
					SLE Rare	8806.6			0.0			0.0	6.7	428.5	77.6				
					SLE Freq.	8810.6			0.0			0.0	6.7	428.7	77.6	0.0085			
					SLE Q.P.	8801.9			0.0			0.0	6.7	428.3	77.5	0.0085			
	3	3.80	33.34	37.70				18023.2	140498.2	0.05	-29244.0	155790.3	0.07						
					SLE Rare	0.0			-14530.2			9.0	0.0	114.0	363.3				
					SLE Freq.	0.0			-12316.9			7.7	0.0	96.6	308.0	0.0239			
					SLE Q.P.	0.0			-11676.6			7.3	0.0	91.6	292.0	0.0226			
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																			
	3	0.25	33.34	37.70				3074.7	140498.1	0.05	-25638.6	155790.3	0.07						
					SLE Rare	0.0			-17762.0			11.1	0.0	139.3	444.1				
					SLE Freq.	0.0			-14922.2			9.3	0.0	117.0	373.1	0.0289			
					SLE Q.P.	0.0			-14106.1			8.8	0.0	110.6	352.7	0.0274			
	Camp.	2.03	18.85	18.85				19805.5	80209.4	0.05	-24231.1	-79137.5	0.05						
					SLE Rare	4937.1			0.0			0.0	3.8	240.2	43.5				
					SLE Freq.	4788.5			0.0			0.0	3.6	233.0	42.2	0.0046			

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Q.P.	4761.4			0.0			0.0	3.6	231.7	41.9	0.0046
4	3.80	33.65	37.70			19805.5	141769.9	0.05	-49279.6	155826.6	0.07				
				SLE Rare	0.0				-16476.6			10.2	0.0	129.0	411.9
				SLE Freq.	0.0				-15403.9			9.6	0.0	120.6	385.1
				SLE Q.P.	0.0				-15066.7			9.4	0.0	117.9	376.7
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120															
4	0.25	33.34	37.70			14886.8	140498.1	0.05	-26056.3	155790.3	0.07				
				SLE Rare	0.0				-12695.0			7.9	0.0	99.6	317.4
				SLE Freq.	0.0				-11641.9			7.2	0.0	91.3	291.1
				SLE Q.P.	0.0				-11313.0			7.0	0.0	88.7	282.9
Camp.	2.00	18.85	18.85			23116.0	80209.4	0.05	-7699.8	-79137.5	0.05				
				SLE Rare	12674.7				0.0			0.0	9.7	616.7	111.6
				SLE Freq.	11172.2				0.0			0.0	8.5	543.6	98.4
				SLE Q.P.	10778.4				0.0			0.0	8.2	524.5	94.9
5	3.75	32.62	34.22			23116.0	137355.4	0.05	-25561.4	141905.7	0.06				
				SLE Rare	56.3				-2957.3			1.9	0.0	23.8	81.2
				SLE Freq.	0.0				-3153.0			2.0	0.0	25.4	86.6
				SLE Q.P.	0.0				-3162.3			2.0	0.0	25.5	86.8
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120															
5	0.25	37.70	37.70			18220.6	158171.9	0.06	-41816.3	156277.0	0.06				
				SLE Rare	0.0				-10791.3			6.5	0.0	82.2	269.1
				SLE Freq.	0.0				-10735.5			6.5	0.0	81.8	267.8
				SLE Q.P.	0.0				-10725.3			6.5	0.0	81.7	267.5
Camp.	0.35	37.70	37.70			18220.6	158171.9	0.06	-41816.3	156277.0	0.06				

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Rare	0.0			-10163.1			6.2	0.0	77.5	253.5	
					SLE Freq.	0.0			-10157.1			6.2	0.0	77.4	253.3	0.0196
					SLE Q.P.	0.0			-10145.5			6.2	0.0	77.3	253.0	0.0196
22	0.44	37.70	37.70			18220.6	158171.9	0.06	-41816.3	156277.0	-0.06					
					SLE Rare	0.0			-9789.8			5.9	0.0	74.6	244.2	
					SLE Freq.	0.0			-9812.1			6.0	0.0	74.8	244.7	0.0190
					SLE Q.P.	0.0			-9798.3			5.9	0.0	74.7	244.4	0.0190
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
22	0.25	34.12	37.70			21179.9	143648.7	0.05	-29946.3	155880.0	-0.07					
					SLE Rare	0.0			-5567.9			3.4	0.0	43.4	139.2	
					SLE Freq.	0.0			-5730.2			3.6	0.0	44.7	143.2	0.0111
					SLE Q.P.	0.0			-5736.6			3.6	0.0	44.8	143.4	0.0111
Camp.	1.88	18.85	18.85			21179.9	80209.4	0.05	-12233.4	-79137.5	0.05					
					SLE Rare	12953.3			0.0			0.0	9.9	630.3	114.1	
					SLE Freq.	11391.7			0.0			0.0	8.7	554.3	100.3	0.0110
					SLE Q.P.	10943.3			0.0			0.0	8.3	532.5	96.4	0.0106
23	3.50	33.34	37.70			17396.8	140498.3	0.05	-22312.9	155790.3	-0.07					
					SLE Rare	18.4			-2721.1			1.7	0.0	21.3	68.0	
					SLE Freq.	0.0			-2616.3			1.6	0.0	20.5	65.4	0.0051
					SLE Q.P.	0.0			-2578.4			1.6	0.0	20.2	64.5	0.0050
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
23	0.25	33.34	37.70			22337.5	140474.8	0.05	-23243.4	155789.6	-0.07					
					SLE Rare	119.9			-1977.0			1.2	0.1	15.5	49.4	
					SLE Freq.	87.6			-1909.2			1.2	0.0	15.0	47.7	0.0037
					SLE Q.P.	74.7			-1886.8			1.2	0.0	14.8	47.2	0.0037

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Camp.	1.90	18.85	18.85			22337.5	80209.4	0.05	-10052.2	-79137.5	0.05											
						SLE Rare	11537.8		0.0			0.0	8.8	561.4	101.6							
						SLE Freq.	10689.4		0.0			0.0	8.1	520.1	94.2	0.0104						
						SLE Q.P.	10440.7		0.0			0.0	7.9	508.0	92.0	0.0101						
24	3.55	33.58	37.70			15624.0	141460.4	0.05	-29642.7	155817.8	0.07											
						SLE Rare	0.0		-10061.7			6.3	0.0	78.8	251.6							
						SLE Freq.	0.0		-8966.4			5.6	0.0	70.2	224.2	0.0174						
						SLE Q.P.	0.0		-8708.6			5.4	0.0	68.2	217.7	0.0169						
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																						
24	0.25	33.34	37.70			5895.6	140498.1	0.05	-22415.0	155790.3	0.07											
						SLE Rare	0.0		-8791.0			5.5	0.0	69.0	219.8							
						SLE Freq.	0.0		-7906.7			4.9	0.0	62.0	197.7	0.0153						
						SLE Q.P.	0.0		-7694.9			4.8	0.0	60.4	192.4	0.0149						
Camp.	1.90	18.85	18.85			13824.6	80209.4	0.05	-33397.1	-79137.5	0.05											
						SLE Rare	1682.3		0.0			0.0	1.3	81.9	14.8							
						SLE Freq.	1483.2		0.0			0.0	1.1	72.2	13.1	0.0014						
						SLE Q.P.	1417.6		0.0			0.0	1.1	69.0	12.5	0.0014						
25	3.55	30.71	36.46			13824.6	129678.1	0.05	-56350.5	150574.1	0.07											
						SLE Rare	0.0		-24206.1			15.5	0.0	194.8	626.1							
						SLE Freq.	0.0		-22592.0			14.4	0.0	181.8	584.4	0.0459						
						SLE Q.P.	0.0		-22197.6			14.2	0.0	178.6	574.2	0.0451						
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																						
25	0.25	37.70	37.70			0.0	158171.9	0.06	-34205.1	156277.0	0.06											
						SLE Rare	0.0		-24792.6			15.0	0.0	189.0	618.3							
						SLE Freq.	0.0		-23217.6			14.1	0.0	176.9	579.1	0.0449						

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Q.P.	0.0			-22828.2			13.9	0.0	174.0	569.4	0.0442
Camp.	0.30	37.70	37.70			0.0	158171.9	0.06	-34205.1	156277.0	0.06				
				SLE Rare	0.0			-23035.0			14.0	0.0	175.6	574.5	
				SLE Freq.	0.0			-21567.4			13.1	0.0	164.4	537.9	0.0417
				SLE Q.P.	0.0			-21202.5			12.9	0.0	161.6	528.8	0.0410
26	0.34	37.70	37.70			0.0	158171.9	0.06	-34205.1	156277.0	0.06				
				SLE Rare	0.0			-21394.4			13.0	0.0	163.1	533.6	
				SLE Freq.	0.0			-20024.9			12.2	0.0	152.6	499.4	0.0387
				SLE Q.P.	0.0			-19682.1			11.9	0.0	150.0	490.9	0.0381
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120															
26	0.25	29.66	35.62			25906.1	125368.2	0.05	-47964.8	147139.1	0.07				
				SLE Rare	0.0			-12980.5			8.4	0.0	105.8	343.6	
				SLE Freq.	0.0			-12338.0			8.0	0.0	100.6	326.6	0.0259
				SLE Q.P.	0.0			-12175.7			7.9	0.0	99.2	322.3	0.0255
Camp.	2.03	18.85	18.85			25906.1	80209.4	0.05	-22975.1	-79137.5	0.05				
				SLE Rare	9944.6			0.0			0.0	7.6	483.9	87.6	
				SLE Freq.	9036.6			0.0			0.0	6.9	439.7	79.6	0.0088
				SLE Q.P.	8806.5			0.0			0.0	6.7	428.5	77.6	0.0085
27	3.80	33.34	37.70			13666.6	140498.1	0.05	-13644.0	155790.3	0.07				
				SLE Rare	0.0			-8486.6			5.3	0.0	66.6	212.2	
				SLE Freq.	0.0			-7654.8			4.8	0.0	60.0	191.4	0.0148
				SLE Q.P.	0.0			-7439.7			4.6	0.0	58.4	186.0	0.0144
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120															
27	0.25	33.44	37.70			15921.0	140901.2	0.05	-26407.7	155801.8	0.07				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Rare	0.0			-7945.7			4.9	0.0	62.3	198.7	
					SLE Freq.	0.0			-7342.2			4.6	0.0	57.6	183.6	0.0142
					SLE Q.P.	0.0			-7185.8			4.5	0.0	56.3	179.7	0.0139
Camp.	2.02	18.85	18.85			15921.0	80209.4	0.05	-6281.2	-79137.5	0.05					
					SLE Rare	10432.2			0.0			0.0	7.9	507.6	91.9	
					SLE Freq.	9640.5			0.0			0.0	7.3	469.1	84.9	0.0093
					SLE Q.P.	9440.1			0.0			0.0	7.2	459.3	83.2	0.0092
28	3.80	33.34	37.70			10163.1	140498.1	0.05	-22435.7	155790.3	0.07					
					SLE Rare	0.0			-11599.7			7.2	0.0	91.0	290.1	
					SLE Freq.	0.0			-10521.7			6.5	0.0	82.5	263.1	0.0204
					SLE Q.P.	0.0			-10247.5			6.4	0.0	80.4	256.2	0.0199
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
28	0.25	33.34	37.70			15540.9	140498.1	0.05	-28756.2	155790.3	0.07					
					SLE Rare	0.0			-10876.4			6.8	0.0	85.3	272.0	
					SLE Freq.	0.0			-10035.2			6.2	0.0	78.7	250.9	0.0195
					SLE Q.P.	0.0			-9821.3			6.1	0.0	77.0	245.6	0.0190
Camp.	2.02	18.85	18.85			15818.7	80209.4	0.05	-11534.2	-79137.5	0.05					
					SLE Rare	6861.1			0.0			0.0	5.2	333.9	60.4	
					SLE Freq.	6347.3			0.0			0.0	4.8	308.9	55.9	0.0062
					SLE Q.P.	6217.5			0.0			0.0	4.7	302.5	54.8	0.0060
29	3.80	33.34	37.70			7836.6	140498.1	0.05	-22125.3	155790.3	0.07					
					SLE Rare	0.0			-15620.8			9.7	0.0	122.5	390.6	
					SLE Freq.	0.0			-14205.7			8.8	0.0	111.4	355.2	0.0276
					SLE Q.P.	0.0			-13843.0			8.6	0.0	108.6	346.1	0.0268
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																

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29	0.25	33.34	37.70			28178.1	140498.1	0.05	-47586.8	155790.3	-0.07								
					SLE Rare	0.0			-15635.7			9.7	0.0	122.6	391.0				
					SLE Freq.	0.0			-14359.2			8.9	0.0	112.6	359.1	0.0278			
					SLE Q.P.	0.0			-14030.5			8.7	0.0	110.0	350.8	0.0272			
Camp.	2.02	18.85	18.85			32376.4	80209.4	0.05	-37629.6	-79137.5	0.05								
					SLE Rare	1207.3			0.0			0.0	0.9	58.7	10.6				
					SLE Freq.	1255.2			0.0			0.0	1.0	61.1	11.1	0.0012			
					SLE Q.P.	1256.1			0.0			0.0	1.0	61.1	11.1	0.0012			
30	3.80	33.34	37.70			27980.6	140498.1	0.05	-49297.3	155790.3	-0.07								
					SLE Rare	0.0			-21642.6			13.5	0.0	169.8	541.2				
					SLE Freq.	0.0			-19414.5			12.1	0.0	152.3	485.5	0.0377			
					SLE Q.P.	0.0			-18832.9			11.7	0.0	147.7	470.9	0.0365			
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																			
30	0.25	33.34	37.70			36988.8	140498.1	0.05	-71663.9	155790.3	-0.07								
					SLE Rare	0.0			-23910.4			14.9	0.0	187.5	597.9				
					SLE Freq.	0.0			-21518.5			13.4	0.0	168.8	538.1	0.0417			
					SLE Q.P.	0.0			-20889.4			13.0	0.0	163.8	522.3	0.0405			
Camp.	2.02	18.85	18.85			46054.9	80209.4	0.05	-55695.2	-79137.5	0.05								
					SLE Rare	0.0			-2244.8			2.0	0.0	23.2	110.7				
					SLE Freq.	0.0			-1264.3			1.1	0.0	13.1	62.3	0.0066			
					SLE Q.P.	0.0			-988.8			0.9	0.0	10.2	48.8	0.0052			
31	3.80	54.17	73.14			46109.7	226893.1	0.06	-72042.3	296251.9	-0.09								
					SLE Rare	0.0			-16489.0			7.6	0.0	99.0	216.4				
					SLE Freq.	0.0			-14063.7			6.4	0.0	84.4	184.6	0.0124			
					SLE Q.P.	0.0			-13419.4			6.1	0.0	80.6	176.1	0.0118			

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Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																
31	0.25	68.78	73.14			129410.6	285985.5	0.06	-	100032.9	300571.1	0.07				
						SLE Rare	0.0		-16870.4			5.9	0.0	74.9	218.6	
						SLE Freq.	0.0		-14364.8			5.0	0.0	63.7	186.2	0.0139
						SLE Q.P.	0.0		-13694.3			4.8	0.0	60.8	177.5	0.0132
Camp.	2.16	113.10	101.64			352458.5	465476.4	0.08	-	294631.3	419286.2	0.07				
						SLE Rare	27750.2		0.0			0.0	7.3	232.1	94.6	
						SLE Freq.	25600.2		0.0			0.0	6.8	214.1	87.3	0.0059
						SLE Q.P.	25021.4		0.0			0.0	6.6	209.2	85.3	0.0058
1051	4.07	113.10	108.57			451976.6	466553.6	0.07	-	414139.2	446611.5	0.07				
						SLE Rare	22212.2		0.0			0.0	5.8	185.4	74.2	
						SLE Freq.	18313.3		0.0			0.0	4.8	152.9	61.1	0.0042
						SLE Q.P.	17198.8		0.0			0.0	4.5	143.6	57.4	0.0039
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																
1051	0.10	113.10	108.57			238836.1	466553.6	0.07	-	213442.2	446611.5	0.07				
						SLE Rare	14047.5		0.0			0.0	3.6	117.3	46.9	
						SLE Freq.	12091.7		0.0			0.0	3.1	100.9	40.4	0.0028
						SLE Q.P.	11542.7		0.0			0.0	3.0	96.3	38.5	0.0026
Camp.	0.45	113.10	108.57			238836.1	466553.6	0.07	-	213442.2	446611.5	0.07				
						SLE Rare	8194.7		0.0			0.0	2.1	68.4	27.4	
						SLE Freq.	6684.5		0.0			0.0	1.7	55.8	22.3	0.0015
						SLE Q.P.	6252.0		0.0			0.0	1.6	52.2	20.9	0.0014
1084	0.80	113.10	108.57			238836.1	466553.6	0.07	-			-0.07				

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									213442.2	446611.5										
					SLE Rare	460.9			-435.6				0.1	0.1	3.8	3.8				
					SLE Freq.	0.0			-811.0				0.2	0.0	2.8	7.1	0.0005			
					SLE Q.P.	0.0			-830.2				0.2	0.0	2.9	7.2	0.0005			
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																				
1084	0.00	113.10	108.57			143403.1	466553.6	0.07	-	146697.8	446611.5	0.07								
					SLE Rare	0.0			-1229.5				0.3	0.0	4.3	10.7				
					SLE Freq.	0.0			-1483.6				0.4	0.0	5.2	12.9	0.0009			
					SLE Q.P.	0.0			-1497.6				0.4	0.0	5.3	13.1	0.0009			
Camp.	0.53	113.10	108.57			143403.1	466553.6	0.07	-	146697.8	446611.5	0.07								
					SLE Rare	428.6			-3.2				0.0	0.1	3.6	1.4				
					SLE Freq.	0.0			-152.5				0.0	0.0	0.5	1.3	0.0001			
					SLE Q.P.	0.0			-161.7				0.0	0.0	0.6	1.4	0.0001			
1052	1.05	38.35	54.29			142879.6	161975.3	0.05	-	146123.0	223044.7	0.07								
					SLE Rare	0.0			-2810.5				1.2	0.0	9.9	49.0				
					SLE Freq.	0.0			-2831.0				1.2	0.0	10.0	49.4	0.0043			
					SLE Q.P.	0.0			-2826.7				1.2	0.0	10.0	49.3	0.0043			

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 1001 1073 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.12	0.60	0.48	50480.3	27489.0	205520.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 1073 1074 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.00	2.95	2.95	97911.1	26006.4	205520.6	127896.9	ø 10 4br. 20.0'

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione 1074 1022 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.00	0.50	0.50	74433.2	34956.7	205520.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 1022 1 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.10	3.83	3.73	83649.2	29289.7	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 1 2 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	37592.2	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 2 3 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	35162.4	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 3 4 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	34920.0	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 4 5 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.70	3.40	36091.0	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 5 22 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.28	0.41	0.12	38409.3	31124.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 22 23 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.45	3.15	30700.0	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 23 24 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.50	3.20	32385.4	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 24 25 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.50	3.20	36326.3	24703.9	205520.6	102317.5	ø 10 4br. 25.0'

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Trave di fondazione 25 26 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.27	0.32	0.04	45474.2	31124.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 26 27 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	34378.9	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 27 28 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	32387.6	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 28 29 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	32700.9	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 29 30 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	32463.4	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 30 31 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	45134.0	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 31 1051 Sez. 10 a Tr 160x120x110x40 [cm] 160x120							
0.30	4.07	3.77	132930.6	48792.7	322960.9	170529.2	ø 10 4br. 15.0'
Trave di fondazione 1051 1084 Sez. 10 a Tr 160x120x110x40 [cm] 160x120							
0.10	0.80	0.70	128470.8	60675.3	322960.9	170529.2	ø 10 4br. 15.0'
Trave di fondazione 1084 1052 Sez. 10 a Tr 160x120x110x40 [cm] 160x120							
0.00	1.05	1.05	134819.3	42311.1	322960.9	170529.2	ø 10 4br. 15.0'

- Travata: 20 Travata 21 67

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 2 a Tr 100x120x40x40 [cm] 100x120																
21	0.25	12.57	12.57			23425.5	53850.8	0.04	-25420.1	-52595.2	0.06					
					SLE Rare	0.0			-8078.2			11.4	0.0	137.2	599.1	
					SLE Freq.	0.0			-6815.4			9.6	0.0	115.8	505.4	0.0558
					SLE Q.P.	0.0			-6454.7			9.1	0.0	109.7	478.7	0.0529
Camp.	2.05	12.57	12.57			25976.3	53850.8	0.04	-3947.1	-52595.2	0.06					
					SLE Rare	18522.3			0.0			0.0	20.3	1342.7	232.2	
					SLE Freq.	17050.5			0.0			0.0	18.6	1236.0	213.8	0.0253
					SLE Q.P.	16646.1			0.0			0.0	18.2	1206.7	208.7	0.0247
67	3.85	11.56	12.57			24154.8	49635.9	0.04	-12207.9	-52529.3	0.06					
					SLE Rare	2694.8			-207.4			0.3	3.0	195.0	34.2	
					SLE Freq.	1917.9			-255.6			0.4	2.2	138.8	24.3	0.0028
					SLE Q.P.	1692.4			-258.3			0.4	1.9	122.5	21.5	0.0024

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 21 67 Sez. 2 a Tr 100x120x40x40 [cm] 100x120							
0.30	3.85	3.55	36785.3	14452.6	117440.3	63948.4	ø 10 2br. 20.0'

- Travata: 21 Travata 1020 6 7 8 9 10

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
1020	0.10	3.13	4.34			2983.7	5415.4	0.09	-3262.4	-7352.2	0.10					
					SLE Rare	16.8			-97.2			1.2	0.2	6.6	38.8	
					SLE Freq.	0.0			-137.2			1.7	0.0	7.7	54.8	0.0058
					SLE Q.P.	0.0			-139.4			1.7	0.0	7.9	55.6	0.0059

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Camp.	1.99	6.03	6.03	487.5	518.4	424.4	10064.7	0.12	-1411.4	-10064.7	0.12						
					SLE Rare	0.0			-693.2			7.0	0.0	65.5	279.2		
					SLE Freq.	0.0			-606.0			6.1	0.0	57.2	244.0	0.0218	
					SLE Q.P.	0.0			-581.1			5.8	0.0	54.9	234.0	0.0209	
6	3.88	8.37	12.06			4127.0	13797.3	0.12	-3335.3	-19654.0	0.16						
					SLE Rare	270.6			-8.2			0.1	2.1	70.5	20.5		
					SLE Freq.	388.1			0.0			0.0	3.0	101.1	29.4	0.0021	
					SLE Q.P.	395.9			0.0			0.0	3.1	103.2	30.0	0.0022	
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																	
6	0.25	8.37	12.06			2980.6	13797.3	0.12	-2843.1	-19654.0	0.16						
					SLE Rare	15.6			-90.1			0.7	0.1	6.4	18.6		
					SLE Freq.	63.9			-2.4			0.0	0.5	16.4	4.8	0.0003	
					SLE Q.P.	68.7			0.0			0.0	0.5	17.7	5.2	0.0004	
Camp.	2.03	6.03	6.03	487.5	499.8	458.0	10064.7	0.12	-789.7	-10064.7	0.12						
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8		
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138	
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138	
7	3.80	9.63	12.06			3811.9	15814.7	0.13	-2412.7	-19668.9	0.15						
					SLE Rare	776.8			0.0			0.0	5.8	192.9	58.0		
					SLE Freq.	715.1			0.0			0.0	5.3	177.6	53.4	0.0039	
					SLE Q.P.	699.6			0.0			0.0	5.2	173.7	52.3	0.0038	
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																	
7	0.25	9.58	12.06			3178.7	15737.2	0.13	-2795.7	-19668.5	0.15						
					SLE Rare	159.1			0.0			0.0	1.2	40.7	11.9		
					SLE Freq.	188.5			0.0			0.0	1.4	48.2	14.1	0.0011	
					SLE Q.P.	191.5			0.0			0.0	1.4	49.0	14.3	0.0011	
Camp.	2.02	6.03	6.03	487.5	499.8	426.5	10064.7	0.12	-829.9	-10064.7	0.12						
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8		

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					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
8	3.80	8.07	12.06			3724.9	13322.4	0.12	-2620.7	-19649.4	0.16					
					SLE Rare	594.0			0.0			0.0	4.7	159.2	45.2	
					SLE Freq.	559.9			0.0			0.0	4.4	150.1	42.6	0.0031
					SLE Q.P.	552.1			0.0			0.0	4.4	148.0	42.0	0.0031
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
8	0.25	8.07	12.06			4045.0	13322.4	0.12	-3646.4	-19649.4	0.16					
					SLE Rare	117.0			-43.5			0.3	0.9	29.6	9.0	
					SLE Freq.	192.8			0.0			0.0	1.5	48.8	14.7	0.0010
					SLE Q.P.	199.3			0.0			0.0	1.6	50.4	15.2	0.0011
Camp.	2.03	6.03	6.03	487.5	499.8	514.7	10064.7	0.12	-1430.5	-10064.7	0.12					
					SLE Rare	0.0			-540.0			5.4	0.0	51.0	217.5	
					SLE Freq.	0.0			-509.3			5.1	0.0	48.1	205.1	0.0183
					SLE Q.P.	0.0			-500.1			5.0	0.0	47.2	201.4	0.0180
9	3.80	7.92	12.06			4474.0	13077.6	0.12	-4253.7	-19646.8	0.16					
					SLE Rare	253.2			0.0			0.0	2.0	70.4	19.3	
					SLE Freq.	139.5			0.0			0.0	1.1	38.8	10.6	0.0008
					SLE Q.P.	110.1			0.0			0.0	0.9	30.6	8.4	0.0006
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
9	0.25	7.92	12.06			1975.3	13077.6	0.12	-2210.7	-19646.8	0.16					
					SLE Rare	0.0			-377.1			2.9	0.0	24.5	77.7	
					SLE Freq.	0.0			-173.6			1.3	0.0	11.3	35.8	0.0024
					SLE Q.P.	0.0			-120.1			0.9	0.0	7.8	24.8	0.0016
Camp.	2.00	6.03	6.03	487.5	487.5	640.6	10064.7	0.12	-487.5	-10064.7	0.12					
					SLE Rare	49.1			-375.0			3.8	0.5	35.4	151.0	
					SLE Freq.	19.7			-375.0			3.8	0.2	35.4	151.0	0.0135
					SLE Q.P.	11.5			-375.0			3.8	0.1	35.4	151.0	0.0135

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

10	3.75	4.47	6.03			3637.3	7557.1	0.10	-923.6	-10065.5	0.12						
					SLE Rare	1691.5			0.0			0.0	19.0	674.9	163.8		
					SLE Freq.	1429.2			0.0			0.0	16.1	570.2	138.4	0.0111	
					SLE Q.P.	1356.8			0.0			0.0	15.2	541.3	131.4	0.0105	

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	Vrd _{max} [kg]	Vrd _s [kg]	TSd [kgm]	Trd1 [kgm]	Trd2 [kgm]	Staffe
Trave 1020 6 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.10	3.83	3.73	7376.8	5433.7	40089.8	12108.2	336.9	4849.0	10300.2	ø 8 2br. 20.0'
Trave 6 7 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	10675.6	6064.9	40089.8	12108.2	103.4	4849.0	10300.2	ø 8 2br. 20.0'
Trave 7 8 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	10652.4	6064.9	40089.8	12108.2	45.0	4849.0	10300.2	ø 8 2br. 20.0'
Trave 8 9 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	9971.5	6064.9	40089.8	12108.2	62.5	4849.0	10300.2	ø 8 2br. 20.0'
Trave 9 10 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.70	3.40	8447.5	6064.9	40089.8	12108.2	77.9	4849.0	10300.2	ø 8 2br. 20.0'

- Travata: 22 Travata 32 33 34 35 36 37 38 39 40 1057

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
32	0.25	6.03	6.03			5685.1	10064.7	0.12	-4274.5	-10064.7	0.12					
					SLE Rare	1057.8			0.0			0.0	10.6	426.0	99.9	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Freq.	779.9			0.0			0.0	7.8	314.0	73.7	0.0066
					SLE Q.P.	705.3			0.0			0.0	7.1	284.0	66.6	0.0059
Camp.	1.88	6.03	6.03	487.5	428.5	1123.8	10064.7	0.12	-1231.3	-10064.7	0.12					
					SLE Rare	0.0			-329.6			3.3	0.0	31.1	132.7	
					SLE Freq.	0.0			-329.6			3.3	0.0	31.1	132.7	0.0118
					SLE Q.P.	0.0			-329.6			3.3	0.0	31.1	132.7	0.0118
33	3.50	11.77	12.06			4485.8	19219.3	0.14	-4317.3	-19682.9	0.14					
					SLE Rare	0.0			-219.9			1.5	0.0	16.1	45.0	
					SLE Freq.	74.4			-4.8			0.0	0.5	15.6	5.4	0.0004
					SLE Q.P.	84.2			0.0			0.0	0.6	17.7	6.2	0.0004
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
33	0.25	9.44	9.43			6196.8	15500.5	0.13	-3797.9	-15486.0	0.13					
					SLE Rare	1356.6			0.0			0.0	10.8	353.2	109.4	
					SLE Freq.	1232.9			0.0			0.0	9.8	321.0	99.4	0.0073
					SLE Q.P.	1199.5			0.0			0.0	9.5	312.3	96.7	0.0071
Camp.	1.90	6.03	6.03	487.5	440.0	977.6	10064.7	0.12	-1177.3	-10064.7	0.12					
					SLE Rare	0.0			-338.4			3.4	0.0	32.0	136.3	
					SLE Freq.	0.0			-338.4			3.4	0.0	32.0	136.3	0.0121
					SLE Q.P.	0.0			-338.4			3.4	0.0	32.0	136.3	0.0121
34	3.55	8.89	12.06			4419.1	14623.5	0.12	-5350.4	-19661.0	0.16					
					SLE Rare	0.0			-639.7			4.8	0.0	50.7	131.6	
					SLE Freq.	0.0			-502.1			3.7	0.0	39.8	103.3	0.0069
					SLE Q.P.	0.0			-465.7			3.5	0.0	36.9	95.8	0.0064
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
34	0.25	11.22	12.06			5320.9	18342.2	0.14	-4006.3	-19680.2	0.14					
					SLE Rare	723.2			0.0			0.0	5.1	158.8	53.1	
					SLE Freq.	671.1			0.0			0.0	4.8	147.4	49.3	0.0034
					SLE Q.P.	657.3			0.0			0.0	4.7	144.4	48.3	0.0034

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Camp.	2.19	6.03	6.03	487.5	587.2	362.8	10064.7	0.12	-1293.8	-10064.7	0.12						
					SLE Rare	0.0			-492.1			4.9	0.0	46.5	198.2		
					SLE Freq.	0.0			-481.5			4.8	0.0	45.5	193.9	0.0173	
					SLE Q.P.	0.0			-478.8			4.8	0.0	45.2	192.8	0.0172	
35	4.14	8.65	12.06			4785.1	14247.8	0.12	-4841.2	-19658.0	0.16						
					SLE Rare	0.0			-126.8			0.9	0.0	9.0	26.1		
					SLE Freq.	0.0			-58.7			0.4	0.0	4.2	12.1	0.0008	
					SLE Q.P.	0.0			-41.0			0.3	0.0	2.9	8.4	0.0006	
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																	
35	0.25	8.65	12.06			5264.5	14247.8	0.12	-4632.1	-19658.0	0.16						
					SLE Rare	336.2			0.0			0.0	2.6	88.6	25.4		
					SLE Freq.	320.0			0.0			0.0	2.5	84.3	24.2	0.0018	
					SLE Q.P.	316.2			0.0			0.0	2.4	83.3	23.9	0.0018	
Camp.	2.03	6.03	6.03	487.5	499.8	702.3	10064.7	0.12	-1188.2	-10064.7	0.12						
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8		
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138	
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138	
36	3.80	11.84	12.06			5169.1	19324.0	0.14	-4315.5	-19683.2	0.14						
					SLE Rare	419.1			0.0			0.0	2.9	87.4	30.6		
					SLE Freq.	425.9			0.0			0.0	3.0	88.8	31.1	0.0021	
					SLE Q.P.	426.8			0.0			0.0	3.0	89.0	31.1	0.0021	
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																	
36	0.25	9.50	12.06			5356.7	15608.4	0.13	-4119.1	-19667.7	0.15						
					SLE Rare	681.7			0.0			0.0	5.1	175.8	51.0		
					SLE Freq.	631.6			0.0			0.0	4.7	162.9	47.3	0.0036	
					SLE Q.P.	618.8			0.0			0.0	4.6	159.6	46.3	0.0035	
Camp.	2.02	6.03	6.03	487.5	499.8	669.7	10064.7	0.12	-1048.1	-10064.7	0.12						
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8		

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
37	3.80	11.91	12.06			4902.7	19436.7	0.14	-4525.4	-19683.5	0.14					
					SLE Rare	167.0			0.0			0.0	1.2	34.6	12.2	
					SLE Freq.	186.6			0.0			0.0	1.3	38.7	13.6	0.0009
					SLE Q.P.	188.6			0.0			0.0	1.3	39.1	13.8	0.0009
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
37	0.25	9.57	12.06			5187.0	15721.5	0.13	-4044.3	-19668.4	0.15					
					SLE Rare	628.4			0.0			0.0	4.7	160.9	47.0	
					SLE Freq.	583.0			0.0			0.0	4.4	149.2	43.6	0.0033
					SLE Q.P.	571.4			0.0			0.0	4.3	146.3	42.7	0.0032
Camp.	2.02	6.03	6.03	487.5	499.8	652.3	10064.7	0.12	-1073.4	-10064.7	0.12					
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8	
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
38	3.80	12.06	12.06			4612.0	19684.1	0.14	-4326.4	-19684.1	0.14					
					SLE Rare	119.1			0.0			0.0	0.8	24.4	8.7	
					SLE Freq.	140.5			0.0			0.0	1.0	28.8	10.2	0.0007
					SLE Q.P.	142.8			0.0			0.0	1.0	29.2	10.4	0.0007
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
38	0.25	12.06	12.06			5058.6	19684.1	0.14	-3829.5	-19684.1	0.14					
					SLE Rare	673.7			0.0			0.0	4.7	138.0	49.0	
					SLE Freq.	626.4			0.0			0.0	4.3	128.3	45.6	0.0031
					SLE Q.P.	614.5			0.0			0.0	4.3	125.9	44.7	0.0030
Camp.	2.02	6.03	6.03	487.5	499.8	730.4	10064.7	0.12	-1226.2	-10064.7	0.12					
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8	
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		SLE Freq.	981.3			0.0			0.0	9.8	395.2	92.7	0.0083
		SLE Q.P.	928.1			0.0			0.0	9.3	373.8	87.7	0.0078
Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	TSd [kgm]	Trd1 [kgm]	Trd2 [kgm]	Staffe			
Trave 32 33 Sez. 6 Rett. 30x50 [cm] 30x50 fond													
0.30	3.45	3.15	9781.2	6064.9	40089.8	12108.2	62.7	4849.0	10300.2	ø 8 2br. 20.0'			
Trave 33 34 Sez. 6 Rett. 30x50 [cm] 30x50 fond													
0.30	3.50	3.20	11292.5	6064.9	40089.8	16144.2	38.0	4849.0	13733.6	ø 8 2br. 15.0'			
Trave 34 35 Sez. 6 Rett. 30x50 [cm] 30x50 fond													
0.30	4.09	3.79	10516.8	6064.9	40089.8	12108.2	28.7	4849.0	10300.2	ø 8 2br. 20.0'			
Trave 35 36 Sez. 6 Rett. 30x50 [cm] 30x50 fond													
0.30	3.75	3.45	11665.2	6064.9	40089.8	12108.2	18.1	4849.0	10300.2	ø 8 2br. 20.0'			
Trave 36 37 Sez. 6 Rett. 30x50 [cm] 30x50 fond													
0.30	3.75	3.45	11699.7	6064.9	40089.8	12108.2	23.4	4849.0	10300.2	ø 8 2br. 20.0'			
Trave 37 38 Sez. 6 Rett. 30x50 [cm] 30x50 fond													
0.30	3.75	3.45	11769.6	6064.9	40089.8	12108.2	27.2	4849.0	10300.2	ø 8 2br. 20.0'			
Trave 38 39 Sez. 6 Rett. 30x50 [cm] 30x50 fond													
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	87.0	4849.0	10300.2	ø 8 2br. 20.0'			
Trave 39 40 Sez. 6 Rett. 30x50 [cm] 30x50 fond													
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	211.3	4849.0	10300.2	ø 8 2br. 20.0'			
Trave 40 1057 Sez. 6 Rett. 30x50 [cm] 30x50 fond													

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.30	4.07	3.77	8541.3	6064.9	40089.8	12108.2	381.9	4849.0	10300.2	ø 8 2br. 20.0'
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- Travata: 23 Travata 1015 11 12 13 14 15

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
1015	0.10	3.13	4.34			3556.5	5415.4	0.09	-3326.8	-7352.2	0.10					
					SLE Rare	217.0			0.0			0.0	2.9	85.7	16.3	
					SLE Freq.	136.0			0.0			0.0	1.8	53.7	10.2	0.0010
					SLE Q.P.	114.9			0.0			0.0	1.5	45.4	8.7	0.0008
Camp.	1.99	6.03	6.03	487.5	518.4	59.4	10064.7	0.12	-1451.7	-10064.7	0.12					
					SLE Rare	0.0			-808.3			8.1	0.0	76.4	325.5	
					SLE Freq.	0.0			-726.9			7.3	0.0	68.7	292.7	0.0261
					SLE Q.P.	0.0			-705.0			7.1	0.0	66.6	283.9	0.0253
11	3.88	12.06	12.06			3624.7	19684.1	0.14	-3892.2	-19684.1	0.14					
					SLE Rare	0.0			-462.8			3.2	0.0	33.7	94.8	
					SLE Freq.	0.0			-203.5			1.4	0.0	14.8	41.7	0.0028
					SLE Q.P.	0.0			-135.1			0.9	0.0	9.8	27.7	0.0019
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
11	0.25	12.06	12.06			3205.0	19684.1	0.14	-3203.4	-19684.1	0.14					
					SLE Rare	0.0			-124.4			0.9	0.0	9.1	25.5	
					SLE Freq.	3.0			-36.2			0.3	0.0	2.6	7.4	0.0005
					SLE Q.P.	6.7			-13.7			0.1	0.0	1.4	2.8	0.0002
Camp.	2.03	6.03	6.03	487.5	499.8	338.8	10064.7	0.12	-897.4	-10064.7	0.12					
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8	
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

12	3.80	12.06	12.06			3862.4	19684.1	0.14	-2566.2	-19684.1	0.14								
					SLE Rare	713.8			0.0			0.0	5.0	146.2	52.0				
					SLE Freq.	661.3			0.0			0.0	4.6	135.4	48.1	0.0032			
					SLE Q.P.	648.1			0.0			0.0	4.5	132.7	47.2	0.0032			
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																			
12	0.25	12.06	12.06			2990.5	19684.1	0.14	-2795.6	-19684.1	0.14								
					SLE Rare	67.2			-5.5			0.0	0.5	13.8	4.9				
					SLE Freq.	94.5			0.0			0.0	0.7	19.4	6.9	0.0005			
					SLE Q.P.	97.5			0.0			0.0	0.7	20.0	7.1	0.0005			
Camp.	2.02	6.03	6.03	487.5	499.8	410.6	10064.7	0.12	-880.8	-10064.7	0.12								
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8				
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138			
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138			
13	3.80	12.06	12.06			3697.8	19684.1	0.14	-2575.0	-19684.1	0.14								
					SLE Rare	618.0			0.0			0.0	4.3	126.5	45.0				
					SLE Freq.	572.8			0.0			0.0	4.0	117.3	41.7	0.0028			
					SLE Q.P.	561.4			0.0			0.0	3.9	115.0	40.9	0.0027			
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																			
13	0.25	12.06	12.06			3312.9	19684.1	0.14	-3222.8	-19684.1	0.14								
					SLE Rare	7.1			-85.3			0.6	0.0	6.2	17.5				
					SLE Freq.	41.5			-6.2			0.0	0.3	8.5	3.0	0.0002			
					SLE Q.P.	45.0			-1.4			0.0	0.3	9.2	3.3	0.0002			
Camp.	2.03	6.03	6.03	487.5	499.8	460.7	10064.7	0.12	-1000.0	-10064.7	0.12								
					SLE Rare	0.0			-396.3			4.0	0.0	37.4	159.6				
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138			
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138			
14	3.80	12.06	12.06			4083.8	19684.1	0.14	-3004.9	-19684.1	0.14								
					SLE Rare	619.1			0.0			0.0	4.3	126.8	45.1				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		SLE Freq.	556.4			0.0			0.0	3.9	113.9	40.5	0.0027		
		SLE Q.P.	539.4			0.0			0.0	3.7	110.5	39.3	0.0026		
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond															
14	0.25	12.06	12.06			2736.0	19684.1	0.14	-2866.7	-19684.1	0.14				
		SLE Rare	0.0						-377.3		2.6	0.0	27.5	77.3	
		SLE Freq.	0.0						-131.6		0.9	0.0	9.6	27.0	0.0018
		SLE Q.P.	0.0						-73.0		0.5	0.0	5.3	15.0	0.0010
Camp.	2.00	6.03	6.03	487.5	487.5	643.8	10064.7	0.12	-762.2	-10064.7	0.12				
		SLE Rare	0.0						-375.0		3.8	0.0	35.4	151.0	
		SLE Freq.	0.0						-375.0		3.8	0.0	35.4	151.0	0.0135
		SLE Q.P.	0.0						-375.0		3.8	0.0	35.4	151.0	0.0135
15	3.75	4.47	6.03			4102.1	7557.1	0.10	-2212.3	-10065.5	0.12				
		SLE Rare	1291.6						0.0		0.0	14.5	515.3	125.1	
		SLE Freq.	1017.5						0.0		0.0	11.4	406.0	98.5	0.0079
		SLE Q.P.	944.9						0.0		0.0	10.6	377.0	91.5	0.0073

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	TSd [kgm]	Trd1 [kgm]	Trd2 [kgm]	Staffe
Trave 1015 11 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.10	3.83	3.73	7860.4	5433.7	40089.8	12108.2	268.0	4849.0	10300.2	ø 8 2br. 20.0'
Trave 11 12 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	137.8	4849.0	10300.2	ø 8 2br. 20.0'
Trave 12 13 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	54.1	4849.0	10300.2	ø 8 2br. 20.0'
Trave 13 14 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	43.7	4849.0	10300.2	ø 8 2br. 20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 14 15 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.70	3.40	9174.9	6064.9	40089.8	12108.2	83.4	4849.0	10300.2	ø 8 2br. 20.0'

- Travata: 24 Travata 41 42 43 44 45 46 47 48 49 1067

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
41	0.25	6.03	6.03			5411.3	10064.7	0.12	-4040.8	-10064.7	0.12					
					SLE Rare	1036.1			0.0			0.0	10.4	417.2	97.9	
					SLE Freq.	759.8			0.0			0.0	7.6	306.0	71.8	0.0064
					SLE Q.P.	685.2			0.0			0.0	6.9	275.9	64.7	0.0058
Camp.	1.88	6.03	6.03	487.5	428.5	1024.0	10064.7	0.12	-1177.2	-10064.7	0.12					
					SLE Rare	0.0			-329.6			3.3	0.0	31.1	132.7	
					SLE Freq.	0.0			-329.6			3.3	0.0	31.1	132.7	0.0118
					SLE Q.P.	0.0			-329.6			3.3	0.0	31.1	132.7	0.0118
42	3.50	12.06	12.06			4276.3	19684.1	0.14	-4161.9	-19684.1	0.14					
					SLE Rare	0.0			-260.3			1.8	0.0	18.9	53.3	
					SLE Freq.	47.7			-22.5			0.2	0.3	9.8	4.6	0.0003
					SLE Q.P.	57.2			0.0			0.0	0.4	11.7	4.2	0.0003
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
42	0.25	12.06	12.06			5999.4	19684.1	0.14	-3617.3	-19684.1	0.14					
					SLE Rare	1342.9			0.0			0.0	9.3	275.0	97.7	
					SLE Freq.	1223.0			0.0			0.0	8.5	250.4	89.0	0.0060
					SLE Q.P.	1191.0			0.0			0.0	8.3	243.9	86.7	0.0058
Camp.	1.90	6.03	6.03	487.5	440.0	935.5	10064.7	0.12	-1148.1	-10064.7	0.12					
					SLE Rare	0.0			-338.4			3.4	0.0	32.0	136.3	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Freq.	0.0			-338.4			3.4	0.0	32.0	136.3	0.0121
					SLE Q.P.	0.0			-338.4			3.4	0.0	32.0	136.3	0.0121
43	3.55	12.06	12.06			4137.1	19684.1	0.14	-5166.0	-19684.1	0.14					
					SLE Rare	0.0			-692.2			4.8	0.0	50.4	141.8	
					SLE Freq.	0.0			-551.8			3.8	0.0	40.2	113.0	0.0076
					SLE Q.P.	0.0			-514.5			3.6	0.0	37.4	105.4	0.0070
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
43	0.25	12.06	12.06			5376.7	19684.1	0.14	-3933.5	-19684.1	0.14					
					SLE Rare	798.1			0.0			0.0	5.5	163.4	58.1	
					SLE Freq.	737.5			0.0			0.0	5.1	151.0	53.7	0.0036
					SLE Q.P.	721.6			0.0			0.0	5.0	147.8	52.5	0.0035
Camp.	2.19	6.03	6.03	487.5	587.2	439.0	10064.7	0.12	-1154.0	-10064.7	0.12					
					SLE Rare	0.0			-451.7			4.5	0.0	42.7	181.9	
					SLE Freq.	0.0			-451.7			4.5	0.0	42.7	181.9	0.0162
					SLE Q.P.	0.0			-451.7			4.5	0.0	42.7	181.9	0.0162
44	4.14	12.06	12.06			4689.8	19684.1	0.14	-4640.5	-19684.1	0.14					
					SLE Rare	0.0			-81.6			0.6	0.0	5.9	16.7	
					SLE Freq.	21.4			-11.8			0.1	0.1	4.4	2.4	0.0002
					SLE Q.P.	24.7			-0.2			0.0	0.2	5.1	1.8	0.0001
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
44	0.25	12.06	12.06			4827.6	19684.1	0.14	-4389.1	-19684.1	0.14					
					SLE Rare	222.8			0.0			0.0	1.5	45.6	16.2	
					SLE Freq.	219.7			0.0			0.0	1.5	45.0	16.0	0.0011
					SLE Q.P.	219.2			0.0			0.0	1.5	44.9	16.0	0.0011
Camp.	2.03	6.03	6.03	487.5	499.8	557.7	10064.7	0.12	-1086.6	-10064.7	0.12					
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8	
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

45	3.80	12.06	12.06			5070.0	19684.1	0.14	-4113.4	-19684.1	0.14								
					SLE Rare	473.4			0.0			0.0	3.3	96.9	34.5				
					SLE Freq.	477.6			0.0			0.0	3.3	97.8	34.8	0.0023			
					SLE Q.P.	478.3			0.0			0.0	3.3	97.9	34.8	0.0023			
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																			
45	0.25	12.06	12.06			5167.8	19684.1	0.14	-3994.6	-19684.1	0.14								
					SLE Rare	648.2			0.0			0.0	4.5	132.7	47.2				
					SLE Freq.	599.2			0.0			0.0	4.2	122.7	43.6	0.0029			
					SLE Q.P.	586.6			0.0			0.0	4.1	120.1	42.7	0.0029			
Camp.	2.02	6.03	6.03	487.5	499.8	623.3	10064.7	0.12	-1034.6	-10064.7	0.12								
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8				
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138			
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138			
46	3.80	12.06	12.06			4755.2	19684.1	0.14	-4369.4	-19684.1	0.14								
					SLE Rare	171.4			0.0			0.0	1.2	35.1	12.5				
					SLE Freq.	190.8			0.0			0.0	1.3	39.1	13.9	0.0009			
					SLE Q.P.	192.9			0.0			0.0	1.3	39.5	14.0	0.0009			
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																			
46	0.25	12.06	12.06			5063.0	19684.1	0.14	-3935.6	-19684.1	0.14								
					SLE Rare	621.4			0.0			0.0	4.3	127.3	45.2				
					SLE Freq.	575.4			0.0			0.0	4.0	117.8	41.9	0.0028			
					SLE Q.P.	563.7			0.0			0.0	3.9	115.4	41.0	0.0027			
Camp.	2.02	6.03	6.03	487.5	499.8	638.3	10064.7	0.12	-1054.5	-10064.7	0.12								
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8				
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138			
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138			
47	3.80	12.06	12.06			4503.3	19684.1	0.14	-4184.3	-19684.1	0.14								
					SLE Rare	136.8			0.0			0.0	0.9	28.0	10.0				

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Freq.	157.3			0.0			0.0	1.1	32.2	11.4	0.0008
					SLE Q.P.	159.5			0.0			0.0	1.1	32.7	11.6	0.0008
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
47	0.25	12.06	12.06			4912.8	19684.1	0.14	-3682.9	-19684.1	0.14					
					SLE Rare	674.6			0.0			0.0	4.7	138.1	49.1	
					SLE Freq.	626.9			0.0			0.0	4.3	128.4	45.6	0.0031
					SLE Q.P.	615.0			0.0			0.0	4.3	125.9	44.8	0.0030
Camp.	2.02	6.03	6.03	487.5	499.8	716.0	10064.7	0.12	-1162.7	-10064.7	0.12					
					SLE Rare	0.0			-384.4			3.9	0.0	36.3	154.8	
					SLE Freq.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
					SLE Q.P.	0.0			-384.4			3.9	0.0	36.3	154.8	0.0138
48	3.80	12.06	12.06			3882.3	19684.1	0.14	-3782.7	-19684.1	0.14					
					SLE Rare	23.6			-29.4			0.2	0.2	4.8	6.0	
					SLE Freq.	46.8			-2.6			0.0	0.3	9.6	3.4	0.0002
					SLE Q.P.	49.8			-0.2			0.0	0.3	10.2	3.6	0.0002
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
48	0.25	12.06	12.06			5081.3	19684.1	0.14	-3547.7	-19684.1	0.14					
					SLE Rare	823.9			0.0			0.0	5.7	168.7	60.0	
					SLE Freq.	777.7			0.0			0.0	5.4	159.3	56.6	0.0038
					SLE Q.P.	766.8			0.0			0.0	5.3	157.0	55.8	0.0037
Camp.	2.02	6.03	6.03	487.5	499.8	566.8	10064.7	0.12	-1078.5	-10064.7	0.12					
					SLE Rare	0.0			-428.5			4.3	0.0	40.5	172.6	
					SLE Freq.	0.0			-405.6			4.1	0.0	38.3	163.3	0.0146
					SLE Q.P.	0.0			-399.9			4.0	0.0	37.8	161.0	0.0144
49	3.80	12.06	12.06			3913.9	19684.1	0.14	-4383.3	-19684.1	0.14					
					SLE Rare	0.0			-355.2			2.5	0.0	25.9	72.7	
					SLE Freq.	0.0			-258.1			1.8	0.0	18.8	52.9	0.0035
					SLE Q.P.	0.0			-234.7			1.6	0.0	17.1	48.1	0.0032

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
49	0.25	12.06	12.06			4500.8	19684.1	0.14	-5868.9	-19684.1	0.14					
					SLE Rare	0.0			-1090.0			7.6	0.0	79.3	223.2	
					SLE Freq.	0.0			-770.1			5.3	0.0	56.1	157.7	0.0106
					SLE Q.P.	0.0			-684.0			4.7	0.0	49.8	140.1	0.0094
Camp.	2.16	6.03	6.03	487.5	528.5	100.5	10064.7	0.12	-1882.5	-10064.7	0.12					
					SLE Rare	0.0			-942.3			9.5	0.0	89.0	379.4	
					SLE Freq.	0.0			-844.1			8.5	0.0	79.7	339.9	0.0303
					SLE Q.P.	0.0			-817.3			8.2	0.0	77.2	329.1	0.0293
1067	4.07	6.03	6.03			5298.4	10064.7	0.12	-4399.8	-10064.7	0.12					
					SLE Rare	605.4			0.0			0.0	6.1	243.8	57.2	
					SLE Freq.	481.8			0.0			0.0	4.8	194.0	45.5	0.0041
					SLE Q.P.	449.3			0.0			0.0	4.5	180.9	42.4	0.0038

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	TSd [kgm]	Trd1 [kgm]	Trd2 [kgm]	Staffe
Trave 41 42 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.45	3.15	9781.6	6064.9	40089.8	12108.2	41.9	4849.0	10300.2	ø 8 2br. 20.0'
Trave 42 43 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.50	3.20	12567.3	6064.9	40089.8	16144.2	47.7	4849.0	13733.6	ø 8 2br. 15.0'
Trave 43 44 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	4.09	3.79	10868.5	6064.9	40089.8	12108.2	21.6	4849.0	10300.2	ø 8 2br. 20.0'
Trave 44 45 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	25.9	4849.0	10300.2	ø 8 2br. 20.0'
Trave 45 46 Sez. 6 Rett. 30x50 [cm] 30x50 fond										

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
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0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	17.6	4849.0	10300.2	ø 8 2br. 20.0'
Trave 46 47 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	24.6	4849.0	10300.2	ø 8 2br. 20.0'
Trave 47 48 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	74.8	4849.0	10300.2	ø 8 2br. 20.0'
Trave 48 49 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.75	3.45	11774.0	6064.9	40089.8	12108.2	165.3	4849.0	10300.2	ø 8 2br. 20.0'
Trave 49 1067 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	4.07	3.77	8541.3	6064.9	40089.8	12108.2	392.0	4849.0	10300.2	ø 8 2br. 20.0'

- Travata: 25 Travata 61 62

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
61	0.25	4.47	6.03			3907.9	7557.1	0.10	-2624.7	-10065.5	0.12					
					SLE Rare	624.3			0.0			0.0	7.0	249.1	60.5	
					SLE Freq.	640.4			0.0			0.0	7.2	255.5	62.0	0.0050
					SLE Q.P.	641.6			0.0			0.0	7.2	256.0	62.1	0.0050
Camp.	2.07	6.03	6.03	487.5	524.7	721.3	10064.7	0.12	-524.9	-10064.7	0.12					
					SLE Rare	116.9			-403.7			4.1	1.2	47.1	162.5	
					SLE Freq.	101.4			-403.7			4.1	1.0	40.9	162.5	0.0145
					SLE Q.P.	97.4			-403.7			4.1	1.0	39.2	162.5	0.0145
62	3.90	4.47	6.03			3969.6	7557.1	0.10	-2224.9	-10065.5	0.12					
					SLE Rare	961.7			0.0			0.0	10.8	383.7	93.1	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	SLE Freq.	891.4			0.0			0.0	10.0	355.6	86.3	0.0069
	SLE Q.P.	872.3			0.0			0.0	9.8	348.0	84.5	0.0068

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	TSd [kgm]	Trd1 [kgm]	Trd2 [kgm]	Staffe
Trave 61 62 Sez. 6 Rett. 30x50 [cm] 30x50 fond										
0.30	3.85	3.55	5531.2	6064.9	40089.8	12108.2	284.2	4849.0	10300.2	ø 8 2br. 20.0'

- Travata: 26 Travata 63 64

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave Sez. 6 Rett. 30x50 [cm] 30x50 fond																
63	0.25	4.47	6.03			3683.0	7557.1	0.10	-2821.2	-10065.5	0.12					
					SLE Rare	412.9			0.0			0.0	4.6	164.7	40.0	
					SLE Freq.	429.4			0.0			0.0	4.8	171.3	41.6	0.0033
					SLE Q.P.	430.9			0.0			0.0	4.8	171.9	41.7	0.0033
Camp.	2.07	6.03	6.03	487.5	524.7	564.7	10064.7	0.12	-881.5	-10064.7	0.12					
					SLE Rare	0.0			-403.7			4.1	0.0	38.1	162.5	
					SLE Freq.	0.0			-403.7			4.1	0.0	38.1	162.5	0.0145
					SLE Q.P.	0.0			-403.7			4.1	0.0	38.1	162.5	0.0145
64	3.90	4.47	6.03			3409.8	7557.1	0.10	-2307.5	-10065.5	0.12					
					SLE Rare	608.9			0.0			0.0	6.8	242.9	59.0	
					SLE Freq.	563.3			0.0			0.0	6.3	224.8	54.6	0.0044
					SLE Q.P.	551.1			0.0			0.0	6.2	219.9	53.4	0.0043

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	TSd [kgm]	Trd1 [kgm]	Trd2 [kgm]	Staffe
Trave 63 64 Sez. 6 Rett. 30x50 [cm] 30x50 fond										

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.30	3.85	3.55	5531.2	6064.9	40089.8	12108.2	339.9	4849.0	10300.2	ø 8 2br. 20.0'
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- Travata: 3 Travata 1011 1012 1013 1014 16 17 18 19 20 50 51 52 53 54 55 56 57 58 1069 1070 1071 1072

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																
1011	0.13	25.67	36.19			25925.8	109143.9	0.05	-20637.6	150224.5	0.06					
					SLE Rare	2868.6			0.0			0.0	1.5	72.8	16.8	
					SLE Freq.	2502.1			0.0			0.0	1.3	63.5	14.7	0.0013
					SLE Q.P.	2403.7			0.0			0.0	1.3	61.0	14.1	0.0013
Camp.	0.85	36.19	36.19			25925.8	152339.3	0.05	-30631.9	150972.7	0.06					
					SLE Rare	825.9			0.0			0.0	0.4	21.1	4.5	
					SLE Freq.	817.9			0.0			0.0	0.4	20.9	4.5	0.0005
					SLE Q.P.	815.7			0.0			0.0	0.4	20.9	4.5	0.0005
1012	1.57	36.19	36.19			13530.1	152339.3	0.05	-30631.9	150972.7	0.06					
					SLE Rare	0.0			-10304.4			5.2	0.0	62.1	266.2	
					SLE Freq.	0.0			-9466.0			4.8	0.0	57.1	244.5	0.0256
					SLE Q.P.	0.0			-9240.8			4.6	0.0	55.7	238.7	0.0250
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																
1012	0.00	36.19	36.19			92767.6	152339.3	0.05	112525.3	150972.7	0.06					
					SLE Rare	0.0			-2461.7			1.2	0.0	14.8	63.6	
					SLE Freq.	0.0			-2447.2			1.2	0.0	14.7	63.2	0.0066

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Q.P.	0.0			-2440.4			1.2	0.0	14.7	63.0	0.0066
Camp.	0.51	36.19	36.19			92767.6	152339.3	0.05	-	112525.3	150972.7	0.06			
				SLE Rare	0.0			-4126.3			2.1	0.0	24.9	106.6	
				SLE Freq.	0.0			-3726.1			1.9	0.0	22.5	96.3	0.0101
				SLE Q.P.	0.0			-3613.7			1.8	0.0	21.8	93.4	0.0098
1013	1.01	36.19	36.19			92767.6	152339.3	0.05	-	112525.3	150972.7	0.06			
				SLE Rare	0.0			-10348.3			5.2	0.0	62.4	267.3	
				SLE Freq.	0.0			-9286.5			4.7	0.0	56.0	239.9	0.0251
				SLE Q.P.	0.0			-8980.8			4.5	0.0	54.1	232.0	0.0243
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120															
1013	0.00	36.19	36.19			100150.9	152339.3	0.05	-	105941.3	150972.7	0.06			
				SLE Rare	0.0			-13676.6			6.9	0.0	82.4	353.3	
				SLE Freq.	0.0			-12451.7			6.3	0.0	75.0	321.7	0.0337
				SLE Q.P.	0.0			-12110.5			6.1	0.0	73.0	312.9	0.0327
Camp.	0.73	57.14	73.00			124949.7	239504.4	0.06	-	133693.3	298760.0	0.08			
				SLE Rare	0.0			-5021.1			1.8	0.0	23.4	65.4	
				SLE Freq.	0.0			-3894.4			1.4	0.0	18.1	50.7	0.0039
				SLE Q.P.	0.0			-3557.8			1.3	0.0	16.5	46.3	0.0036
1014	1.47	89.10	90.48			124949.7	369170.3	0.07	-	133693.3	371894.0	0.07			
				SLE Rare	0.0			-6075.9			1.9	0.0	24.0	63.7	
				SLE Freq.	0.0			-4462.0			1.4	0.0	17.6	46.7	0.0034
				SLE Q.P.	0.0			-3974.3			1.2	0.0	15.7	41.6	0.0030
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm]															

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

160x120																
1014	0.10	90.48	90.48			265469.3	374657.3	0.07	-	287473.7	372094.2	0.07				
				SLE Rare		0.0			-14881.0			4.6	0.0	58.4	155.8	
				SLE Freq.		0.0			-11151.1			3.4	0.0	43.8	116.8	0.0084
				SLE Q.P.		0.0			-10002.0			3.1	0.0	39.2	104.7	0.0076
Camp.	1.99	64.94	56.67			219381.3	269429.0	0.06	-	201350.3	235248.8	0.06				
				SLE Rare		16639.0			0.0			0.0	5.9	240.5	73.8	
				SLE Freq.		16684.9			0.0			0.0	5.9	241.2	74.1	0.0061
				SLE Q.P.		16657.5			0.0			0.0	5.9	240.8	73.9	0.0061
16	3.88	68.78	73.14			95285.9	285985.5	0.06	-68844.7		300571.1	0.07				
				SLE Rare		0.0			-9505.0			3.3	0.0	42.2	123.2	
				SLE Freq.		0.0			-8196.8			2.9	0.0	36.4	106.2	0.0079
				SLE Q.P.		0.0			-7883.1			2.8	0.0	35.0	102.2	0.0076
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
16	0.25	53.98	73.14			37121.7	226123.5	0.06	-48853.4		296209.1	0.09				
				SLE Rare		0.0			-10637.1			4.9	0.0	63.9	139.6	
				SLE Freq.		0.0			-8967.4			4.1	0.0	53.9	117.7	0.0079
				SLE Q.P.		0.0			-8545.6			3.9	0.0	51.4	112.2	0.0075
Camp.	2.03	18.85	18.85			39474.0	80209.4	0.05	-43548.6		-79137.5	0.05				
				SLE Rare		4662.0			0.0			0.0	3.5	226.9	41.1	
				SLE Freq.		4431.5			0.0			0.0	3.4	215.6	39.0	0.0043
				SLE Q.P.		4350.7			0.0			0.0	3.3	211.7	38.3	0.0042
17	3.80	33.34	37.70			38391.3	140498.3	0.05	-60175.9		155790.3	0.07				
				SLE Rare		0.0			-17277.3			10.8	0.0	135.5	432.0	
				SLE Freq.		0.0			-16197.8			10.1	0.0	127.0	405.0	0.0314

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Q.P.	0.0				-15963.1			9.9	0.0	125.2	399.2	0.0310
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
17	0.25	33.34	37.70			14286.2	140498.1	0.05	-32120.3		155790.3		0.07			
				SLE Rare	0.0				-16979.5			10.6	0.0	133.2	424.6	
				SLE Freq.	0.0				-15597.3			9.7	0.0	122.3	390.0	0.0302
				SLE Q.P.	0.0				-15272.1			9.5	0.0	119.8	381.9	0.0296
Camp.	2.02	18.85	18.85			21605.9	80209.4	0.05	-21920.1		-79137.5		0.05			
				SLE Rare	3935.7				0.0			0.0	3.0	191.5	34.7	
				SLE Freq.	3483.7				0.0			0.0	2.7	169.5	30.7	0.0034
				SLE Q.P.	3346.7				0.0			0.0	2.5	162.8	29.5	0.0032
18	3.80	33.34	37.70			20121.1	140498.2	0.05	-37503.7		155790.3		0.07			
				SLE Rare	0.0				-14192.5			8.8	0.0	111.3	354.9	
				SLE Freq.	0.0				-13260.6			8.3	0.0	104.0	331.6	0.0257
				SLE Q.P.	0.0				-13043.7			8.1	0.0	102.3	326.2	0.0253
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
18	0.25	33.34	37.70			12051.5	140498.1	0.05	-24191.7		155790.3		0.07			
				SLE Rare	0.0				-14921.3			9.3	0.0	117.0	373.1	
				SLE Freq.	0.0				-13655.5			8.5	0.0	107.1	341.5	0.0265
				SLE Q.P.	0.0				-13349.5			8.3	0.0	104.7	333.8	0.0259
Camp.	2.03	18.85	18.85			16735.3	80209.4	0.05	-10157.6		-79137.5		0.05			
				SLE Rare	6991.8				0.0			0.0	5.3	340.2	61.6	
				SLE Freq.	6454.7				0.0			0.0	4.9	314.1	56.9	0.0063
				SLE Q.P.	6310.6				0.0			0.0	4.8	307.1	55.6	0.0061
19	3.80	33.62	37.70			13472.0	141648.5	0.05	-21338.6		155823.2		0.07			
				SLE Rare	0.0				-10438.5			6.5	0.0	81.7	261.0	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Freq.	0.0			-9612.2			6.0	0.0	75.3	240.3	0.0186
					SLE Q.P.	0.0			-9404.6			5.8	0.0	73.6	235.1	0.0182
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
19	0.25	33.34	37.70			22186.0	140498.1	0.05	-25722.5			155790.3	-0.07			
					SLE Rare	0.0			-10722.9			6.7	0.0	84.1	268.1	
					SLE Freq.	0.0			-9720.4			6.1	0.0	76.2	243.1	0.0189
					SLE Q.P.	0.0			-9473.1			5.9	0.0	74.3	236.9	0.0184
Camp.	2.00	18.85	18.85			28405.8	80209.4	0.05	-17006.5			-79137.5	0.05			
					SLE Rare	9611.0			0.0			0.0	7.3	467.7	84.7	
					SLE Freq.	8655.5			0.0			0.0	6.6	421.2	76.2	0.0084
					SLE Q.P.	8410.0			0.0			0.0	6.4	409.2	74.1	0.0082
20	3.75	28.95	35.40			26370.5	122455.4	0.05	-34401.3			146200.0	-0.07			
					SLE Rare	0.0			-8238.2			5.4	0.0	67.6	219.5	
					SLE Freq.	0.0			-8144.3			5.3	0.0	66.8	217.0	0.0172
					SLE Q.P.	0.0			-8118.1			5.3	0.0	66.6	216.3	0.0172
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
20	0.25	37.70	37.70			13636.8	158171.9	0.06	-40592.3			156277.0	-0.06			
					SLE Rare	0.0			-12931.6			7.8	0.0	98.6	322.5	
					SLE Freq.	0.0			-12389.3			7.5	0.0	94.4	309.0	0.0240
					SLE Q.P.	0.0			-12252.5			7.4	0.0	93.4	305.6	0.0237
Camp.	0.35	37.70	37.70			13636.8	158171.9	0.06	-40592.3			156277.0	-0.06			
					SLE Rare	0.0			-12677.7			7.7	0.0	96.6	316.2	
					SLE Freq.	0.0			-12151.8			7.4	0.0	92.6	303.1	0.0235
					SLE Q.P.	0.0			-12017.9			7.3	0.0	91.6	299.7	0.0232
50	0.44	36.86	37.70			13636.8	154790.3	0.06	-40592.3				-0.06			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

										156187.0									
						SLE Rare	0.0			-12675.8			7.7	0.0	97.1	316.3			
						SLE Freq.	0.0			-12146.6			7.4	0.0	93.1	303.1	0.0235		
						SLE Q.P.	0.0			-12010.6			7.3	0.0	92.0	299.7	0.0232		
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																			
	50	0.25	27.81	31.67				15454.3	117564.6	0.05	-26433.4		131300.2	0.06					
						SLE Rare	0.0				-7545.2			5.1	0.0	64.1	223.9		
						SLE Freq.	0.0				-7487.8			5.1	0.0	63.6	222.2	0.0185	
						SLE Q.P.	0.0				-7473.2			5.1	0.0	63.5	221.8	0.0184	
	Camp.	1.88	18.85	18.85				15472.1	80209.4	0.05	-10522.5		-79137.5	0.05					
						SLE Rare	9221.1				0.0			0.0	7.0	448.7	81.2		
						SLE Freq.	8321.1				0.0			0.0	6.3	404.9	73.3	0.0081	
						SLE Q.P.	8094.8				0.0			0.0	6.2	393.9	71.3	0.0078	
	51	3.50	33.34	37.70				11685.9	140498.3	0.05	-16752.1		155790.3	0.07					
						SLE Rare	0.0				-7211.4			4.5	0.0	56.6	180.3		
						SLE Freq.	0.0				-6433.4			4.0	0.0	50.5	160.9	0.0125	
						SLE Q.P.	0.0				-6226.5			3.9	0.0	48.8	155.7	0.0121	
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																			
	51	0.25	33.38	37.70				18056.1	140658.3	0.05	-25711.2		155794.8	0.07					
						SLE Rare	0.0				-6192.0			3.9	0.0	48.6	154.8		
						SLE Freq.	0.0				-5615.9			3.5	0.0	44.0	140.4	0.0109	
						SLE Q.P.	0.0				-5462.1			3.4	0.0	42.8	136.6	0.0106	
	Camp.	1.90	18.85	18.85				18056.1	80209.4	0.05	-11419.7		-79137.5	0.05					
						SLE Rare	7255.3				0.0			0.0	5.5	353.0	63.9		
						SLE Freq.	6818.6				0.0			0.0	5.2	331.8	60.1	0.0066	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Q.P.	6711.6			0.0			0.0	5.1	326.6	59.1	0.0065
52	3.55	33.43	37.70		8662.3	140866.9	0.05	-19842.4	155800.8	-0.07					
				SLE Rare	0.0			-13879.1			8.6	0.0	108.8	347.0	
				SLE Freq.	0.0			-12520.3			7.8	0.0	98.1	313.1	0.0243
				SLE Q.P.	0.0			-12170.3			7.6	0.0	95.4	304.3	0.0236
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120															
52	0.25	33.34	37.70		16386.7	140498.1	0.05	-35204.9	155790.3	-0.07					
				SLE Rare	0.0			-12399.6			7.7	0.0	97.3	310.1	
				SLE Freq.	0.0			-11352.7			7.1	0.0	89.0	283.9	0.0220
				SLE Q.P.	0.0			-11083.2			6.9	0.0	86.9	277.1	0.0215
Camp.	2.19	18.85	18.85		16386.7	80209.4	0.05	-8307.2	-79137.5	0.05					
				SLE Rare	9664.3			0.0			0.0	7.4	470.3	85.1	
				SLE Freq.	8958.0			0.0			0.0	6.8	435.9	78.9	0.0087
				SLE Q.P.	8778.6			0.0			0.0	6.7	427.2	77.3	0.0085
53	4.14	33.34	37.70		9305.3	140498.1	0.05	-30722.9	155790.3	-0.07					
				SLE Rare	0.0			-16588.8			10.3	0.0	130.1	414.8	
				SLE Freq.	0.0			-15070.6			9.4	0.0	118.2	376.8	0.0292
				SLE Q.P.	0.0			-14681.2			9.1	0.0	115.2	367.1	0.0285
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120															
53	0.25	33.43	37.70		5661.8	140866.9	0.05	-26084.0	155800.8	-0.07					
				SLE Rare	0.0			-14908.3			9.3	0.0	116.9	372.8	
				SLE Freq.	0.0			-13701.5			8.5	0.0	107.4	342.6	0.0266
				SLE Q.P.	0.0			-13392.1			8.3	0.0	105.0	334.9	0.0260
Camp.	2.03	18.85	18.85		14677.2	80209.4	0.05	-13793.3	-79137.5	0.05					
				SLE Rare	6561.7			0.0			0.0	5.0	319.3	57.8	

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Freq.	6046.0			0.0		0.0	4.6	294.2	53.3	0.0059
				SLE Q.P.	5914.6			0.0		0.0	4.5	287.8	52.1	0.0057
54	3.80	33.34	37.70		14677.2	140498.1	0.05	-35126.7	155790.3	0.07				
				SLE Rare	0.0			-12956.0			8.1	0.0	101.6	324.0
				SLE Freq.	0.0			-11810.3			7.4	0.0	92.6	295.3
				SLE Q.P.	0.0			-11517.0			7.2	0.0	90.3	288.0
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120														
54	0.25	33.34	37.70		10845.6	140498.1	0.05	-25244.7	155790.3	0.07				
				SLE Rare	0.0			-11349.9			7.1	0.0	89.0	283.8
				SLE Freq.	0.0			-10497.6			6.5	0.0	82.3	262.5
				SLE Q.P.	0.0			-10280.0			6.4	0.0	80.6	257.1
Camp.	2.02	18.85	18.85		12659.1	80209.4	0.05	-9342.1	-79137.5	0.05				
				SLE Rare	8532.8			0.0			0.0	6.5	415.2	75.2
				SLE Freq.	7801.6			0.0			0.0	5.9	379.6	68.7
				SLE Q.P.	7613.7			0.0			0.0	5.8	370.5	67.1
55	3.80	33.34	37.70		12635.2	140498.1	0.05	-30605.3	155790.3	0.07				
				SLE Rare	0.0			-12449.9			7.7	0.0	97.7	311.3
				SLE Freq.	0.0			-11393.4			7.1	0.0	89.4	284.9
				SLE Q.P.	0.0			-11124.8			6.9	0.0	87.3	278.2
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120														
55	0.25	33.34	37.70		15646.9	140498.1	0.05	-29205.5	155790.3	0.07				
				SLE Rare	0.0			-11298.0			7.0	0.0	88.6	282.5
				SLE Freq.	0.0			-10506.5			6.5	0.0	82.4	262.7
				SLE Q.P.	0.0			-10307.1			6.4	0.0	80.8	257.7
Camp.	2.02	18.85	18.85		16385.0	80209.4	0.05	-11226.3	-79137.5	0.05				

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Rare	7789.3			0.0			0.0	5.9	379.0	68.6	
					SLE Freq.	7052.5			0.0			0.0	5.4	343.2	62.1	0.0068
					SLE Q.P.	6856.1			0.0			0.0	5.2	333.6	60.4	0.0066
56	3.80	33.34	37.70			7704.7	140498.1	0.05	-19570.8	155790.3	-0.07					
					SLE Rare	0.0			-13859.0			8.6	0.0	108.7	346.5	
					SLE Freq.	0.0			-12755.1			7.9	0.0	100.0	318.9	0.0247
					SLE Q.P.	0.0			-12485.7			7.8	0.0	97.9	312.2	0.0242
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
56	0.25	33.34	37.70			27757.6	140498.1	0.05	-43303.8	155790.3	-0.07					
					SLE Rare	0.0			-13031.9			8.1	0.0	102.2	325.9	
					SLE Freq.	0.0			-12201.5			7.6	0.0	95.7	305.1	0.0237
					SLE Q.P.	0.0			-12007.9			7.5	0.0	94.2	300.3	0.0233
Camp.	2.02	18.85	18.85			28253.1	80209.4	0.05	-27266.0	-79137.5	0.05					
					SLE Rare	5756.5			0.0			0.0	4.4	280.1	50.7	
					SLE Freq.	5123.8			0.0			0.0	3.9	249.3	45.1	0.0050
					SLE Q.P.	4932.5			0.0			0.0	3.8	240.0	43.5	0.0048
57	3.80	33.34	37.70			22771.7	140498.1	0.05	-33716.2	155790.3	-0.07					
					SLE Rare	0.0			-15809.2			9.8	0.0	124.0	395.3	
					SLE Freq.	0.0			-14522.1			9.0	0.0	113.9	363.1	0.0282
					SLE Q.P.	0.0			-14229.6			8.9	0.0	111.6	355.8	0.0276
Trave di fondazione Sez. 4 a Tr 120x120x70x40 [cm] 120x120																
57	0.25	33.34	37.70			37482.4	140498.1	0.05	-60836.4	155790.3	-0.07					
					SLE Rare	0.0			-15496.8			9.6	0.0	121.6	387.5	
					SLE Freq.	0.0			-14471.8			9.0	0.0	113.5	361.9	0.0281
					SLE Q.P.	0.0			-14262.6			8.9	0.0	111.9	356.6	0.0277

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Camp.	2.02	18.85	18.85			38695.8	80209.4	0.05	-38602.4	-79137.5	0.05							
						SLE Rare	6295.9		0.0			0.0	4.8	306.4	55.5			
						SLE Freq.	5876.6		0.0			0.0	4.5	286.0	51.8	0.0057		
						SLE Q.P.	5728.6		0.0			0.0	4.4	278.8	50.5	0.0056		
58	3.80	53.37	73.14			39985.9	223632.6	0.06	-59928.1	-296069.7	0.09							
						SLE Rare	0.0		-10996.0			5.1	0.0	66.3	144.4			
						SLE Freq.	0.0		-9440.0			4.3	0.0	56.9	123.9	0.0083		
						SLE Q.P.	0.0		-9064.6			4.2	0.0	54.6	119.0	0.0080		
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																		
58	0.25	68.78	73.14			122988.6	285985.5	0.06	-96441.5	-300571.1	0.07							
						SLE Rare	0.0		-8204.7			2.9	0.0	36.4	106.3			
						SLE Freq.	0.0		-7090.4			2.5	0.0	31.5	91.9	0.0068		
						SLE Q.P.	0.0		-6849.5			2.4	0.0	30.4	88.8	0.0066		
Camp.	2.16	89.26	95.43			306435.9	370390.8	0.07	-298830.2	-391338.4	0.08							
						SLE Rare	15314.2		0.0			0.0	4.4	161.1	55.6			
						SLE Freq.	15173.5		0.0			0.0	4.4	159.6	55.1	0.0041		
						SLE Q.P.	15123.5		0.0			0.0	4.3	159.1	54.9	0.0041		
1069	4.07	95.00	108.57			382879.8	394769.3	0.07	-424359.3	-443565.1	0.08							
						SLE Rare	0.0		-23654.5			6.8	0.0	88.1	207.6			
						SLE Freq.	0.0		-20048.0			5.8	0.0	74.7	176.0	0.0121		
						SLE Q.P.	0.0		-18854.3			5.4	0.0	70.2	165.5	0.0113		
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																		
1069	0.10	95.00	108.57			165537.0	394769.3	0.07	-	-	0.08							

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

								178380.4	443565.1										
								SLE Rare	0.0			-7696.0			2.2	0.0	28.7	67.5	
								SLE Freq.	0.0			-6295.1			1.8	0.0	23.4	55.3	0.0038
								SLE Q.P.	0.0			-5837.9			1.7	0.0	21.7	51.2	0.0035
Camp.	0.82	95.00	108.57				165537.0	394769.3	0.07			-	178380.4	443565.1			0.08		
								SLE Rare	0.0			-7955.6			2.3	0.0	29.6	69.8	
								SLE Freq.	0.0			-6796.8			2.0	0.0	25.3	59.7	0.0041
								SLE Q.P.	0.0			-6426.7			1.8	0.0	23.9	56.4	0.0039
1070	1.54	66.85	70.82				134671.8	278410.5	0.06			-	145672.2	291576.5			0.07		
								SLE Rare	0.0			-18225.4			6.5	0.0	82.1	243.5	
								SLE Freq.	0.0			-16671.7			6.0	0.0	75.1	222.7	0.0174
								SLE Q.P.	0.0			-16213.4			5.8	0.0	73.1	216.6	0.0169
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																			
1070	0.00	62.50	64.61				102401.3	260444.6	0.06			-	109004.6	266554.8			0.07		
								SLE Rare	0.0			-13184.4			4.9	0.0	61.7	192.7	
								SLE Freq.	0.0			-11911.1			4.4	0.0	55.7	174.1	0.0141
								SLE Q.P.	0.0			-11526.2			4.3	0.0	53.9	168.5	0.0136
Camp.	0.50	42.93	54.29				102401.3	180710.6	0.05			-	109004.6	223581.2			0.07		
								SLE Rare	0.0			-5728.4			2.4	0.0	30.3	99.8	
								SLE Freq.	0.0			-5216.5			2.2	0.0	27.6	90.9	0.0079
								SLE Q.P.	0.0			-5064.6			2.2	0.0	26.8	88.2	0.0076
1071	1.00	40.72	54.29				102401.3	171651.8	0.05			-	109004.6	223325.7			0.07		
								SLE Rare	0.0			-3045.7			1.3	0.0	16.3	53.1	
								SLE Freq.	0.0			-3010.2			1.3	0.0	16.1	52.5	0.0045

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Q.P.	0.0				-3001.5			1.3	0.0	16.0	52.3	0.0045
Trave di fondazione Sez. 10 a Tr 160x120x110x40 [cm] 160x120																
1071	0.00	40.72	54.29			17606.9	171651.8	0.05	-41723.3		223325.7	0.07				
				SLE Rare	0.0				-12226.3			5.2	0.0	65.4	213.1	
				SLE Freq.	0.0				-11242.2			4.8	0.0	60.1	196.0	0.0170
				SLE Q.P.	0.0				-10962.0			4.7	0.0	58.6	191.1	0.0165
Camp.	0.71	40.72	54.29			17606.9	171651.8	0.05	-41723.3		223325.7	0.07				
				SLE Rare	43.1				-254.6			0.1	0.0	1.4	4.4	
				SLE Freq.	42.1				-204.0			0.1	0.0	1.1	3.6	0.0003
				SLE Q.P.	41.8				-186.5			0.1	0.0	1.0	3.3	0.0003
1072	1.41	28.88	54.29			16844.5	122889.7	0.05	-24442.9		221817.8	0.08				
				SLE Rare	2466.1				0.0			0.0	1.2	55.6	12.9	
				SLE Freq.	2131.0				0.0			0.0	1.0	48.0	11.2	0.0009
				SLE Q.P.	2040.0				0.0			0.0	1.0	46.0	10.7	0.0009

Da [m]	A [m]	Dx [m]	VSD [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 1011 1012 Sez. 10 a Tr 160x120x110x40 [cm] 160x120							
0.13	1.57	1.44	50822.4	37418.6	322960.9	170529.2	ø 10 4br. 15.0'
Trave di fondazione 1012 1013 Sez. 10 a Tr 160x120x110x40 [cm] 160x120							
0.00	1.01	1.01	137931.5	41501.3	322960.9	170529.2	ø 10 4br. 15.0'
Trave di fondazione 1013 1014 Sez. 10 a Tr 160x120x110x40 [cm] 160x120							
0.00	1.47	1.47	72568.5	41501.3	322960.9	170529.2	ø 10 4br. 15.0'

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Trave di fondazione 1014 16 Sez. 10 a Tr 160x120x110x40 [cm] 160x120							
0.10	3.83	3.73	100915.4	47507.2	322960.9	170529.2	ø 10 4br. 15.0'
Trave di fondazione 16 17 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	37429.5	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 17 18 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	31026.1	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 18 19 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	31963.8	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 19 20 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.70	3.40	30907.8	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 20 50 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.28	0.41	0.12	31250.9	30893.0	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 50 51 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.45	3.15	27884.1	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 51 52 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.50	3.20	31729.7	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 52 53 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	4.09	3.79	35521.9	24703.9	205520.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 53 54 Sez. 4 a Tr 120x120x70x40 [cm] 120x120							
0.30	3.75	3.45	32113.5	24703.9	205520.6	102317.5	ø 10 4br. 25.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione 54 55 Sez. 4 a Tr 120x120x70x40 [cm] 120x120								
0.30	3.75	3.45	31791.3	24703.9	205520.6	102317.5	ø 10 4br. 25.0'	
Trave di fondazione 55 56 Sez. 4 a Tr 120x120x70x40 [cm] 120x120								
0.30	3.75	3.45	32286.4	24703.9	205520.6	102317.5	ø 10 4br. 25.0'	
Trave di fondazione 56 57 Sez. 4 a Tr 120x120x70x40 [cm] 120x120								
0.30	3.75	3.45	32078.8	24703.9	205520.6	102317.5	ø 10 4br. 25.0'	
Trave di fondazione 57 58 Sez. 4 a Tr 120x120x70x40 [cm] 120x120								
0.30	3.75	3.45	47290.0	24703.9	205520.6	102317.5	ø 10 4br. 25.0'	
Trave di fondazione 58 1069 Sez. 10 a Tr 160x120x110x40 [cm] 160x120								
0.30	4.07	3.77	140525.2	47838.1	322960.9	170529.2	ø 10 4br. 15.0'	
Trave di fondazione 1069 1070 Sez. 10 a Tr 160x120x110x40 [cm] 160x120								
0.10	1.54	1.44	88955.7	50919.8	322960.9	170529.2	ø 10 4br. 15.0'	
Trave di fondazione 1070 1071 Sez. 10 a Tr 160x120x110x40 [cm] 160x120								
0.00	1.00	1.00	152500.3	43163.1	322960.9	170529.2	ø 10 4br. 15.0'	
Trave di fondazione 1071 1072 Sez. 10 a Tr 160x120x110x40 [cm] 160x120								
0.00	1.41	1.41	53828.3	38494.0	322960.9	170529.2	ø 10 4br. 15.0'	

- Travata: 4 Travata 59 61 63 65 1001

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 5 a Tr 190x120x90x40 [cm] 190x120																

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

59	0.25	25.13	25.13			69274.6	107466.2	0.04	-10680.8	-105438.8	0.05							
					SLE Rare	7233.8			-288.9			0.2	3.9	262.8	45.0			
					SLE Freq.	6986.2			-261.9			0.2	3.8	253.8	43.5	0.0051		
					SLE Q.P.	6921.1			-254.9			0.2	3.8	251.4	43.1	0.0051		
Camp.	2.58	25.13	25.13			83568.0	107466.2	0.04	-8564.0	-105438.8	0.05							
					SLE Rare	44613.4			0.0			0.0	24.3	1620.6	277.8			
					SLE Freq.	42600.8			0.0			0.0	23.2	1547.5	265.3	0.0311		
					SLE Q.P.	42068.7			0.0			0.0	22.9	1528.1	262.0	0.0307		
61	4.91	44.33	50.27			38292.9	187692.4	0.05	-65119.6	-207571.7	0.07							
					SLE Rare	0.0			-44465.9			21.1	0.0	266.9	834.4			
					SLE Freq.	0.0			-42556.6			20.2	0.0	255.5	798.6	0.0639		
					SLE Q.P.	0.0			-42068.2			20.0	0.0	252.5	789.4	0.0631		
Trave di fondazione Sez. 5 a Tr 190x120x90x40 [cm] 190x120																		
61	0.25	44.94	50.27			14875.3	190166.1	0.05	-77274.1	-207644.3	0.07							
					SLE Rare	0.0			-45017.1			21.3	0.0	269.4	844.5			
					SLE Freq.	0.0			-43002.8			20.4	0.0	257.4	806.8	0.0645		
					SLE Q.P.	0.0			-42486.1			20.1	0.0	254.3	797.1	0.0637		
Camp.	2.58	25.13	25.13			29178.2	107466.2	0.04	-7760.3	-105438.8	0.05							
					SLE Rare	18830.1			0.0			0.0	10.2	684.0	117.3			
					SLE Freq.	17576.7			0.0			0.0	9.6	638.5	109.5	0.0128		
					SLE Q.P.	17219.5			0.0			0.0	9.4	625.5	107.2	0.0126		
63	4.91	44.52	50.27			11084.3	188434.7	0.05	-83065.1	-207593.5	0.07							
					SLE Rare	0.0			-49069.7			23.3	0.0	294.3	920.8			
					SLE Freq.	0.0			-47212.7			22.4	0.0	283.2	885.9	0.0709		
					SLE Q.P.	0.0			-46750.3			22.2	0.0	280.4	877.2	0.0702		
Trave di fondazione Sez. 5 a Tr 190x120x90x40 [cm] 190x120																		
63	0.25	44.33	50.27			10076.3	187692.5	0.05	-82097.7	-207571.7	0.07							
					SLE Rare	0.0			-48599.1			23.1	0.0	291.8	912.0			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Freq.	0.0				-46707.9			22.2	0.0	280.4	876.5	0.0701
				SLE Q.P.	0.0				-46238.2			22.0	0.0	277.6	867.7	0.0694
Camp.	2.58	25.13	25.13		70895.0	107466.2	0.04		-35238.5	-105438.8	0.05					
				SLE Rare	25616.4				0.0			0.0	13.9	930.5	159.5	
				SLE Freq.	24334.1				0.0			0.0	13.2	883.9	151.5	0.0178
				SLE Q.P.	24002.7				0.0			0.0	13.1	871.9	149.5	0.0175
65	4.90	34.67	43.98		79216.4	147632.5	0.05		-138320.7	-181613.2	0.07					
				SLE Rare	0.0				-30164.7			15.7	0.0	196.8	646.8	
				SLE Freq.	0.0				-27524.7			14.3	0.0	179.6	590.2	0.0499
				SLE Q.P.	0.0				-26723.8			13.9	0.0	174.3	573.0	0.0484
Trave di fondazione Sez. 5 a Tr 190x120x90x40 [cm] 190x120																
65	0.25	37.70	43.98		108891.4	160129.6	0.05		-175741.1	-181952.4	0.07					
				SLE Rare	0.0				-38395.9			19.7	0.0	246.4	822.1	
				SLE Freq.	0.0				-34917.7			17.9	0.0	224.1	747.6	0.0631
				SLE Q.P.	0.0				-33865.5			17.3	0.0	217.3	725.1	0.0612
Camp.	0.35	37.70	43.98		108891.4	160129.6	0.05		-175741.1	-181952.4	0.07					
				SLE Rare	0.0				-36551.7			18.7	0.0	234.5	782.6	
				SLE Freq.	0.0				-33026.0			16.9	0.0	211.9	707.1	0.0597
				SLE Q.P.	0.0				-31953.3			16.4	0.0	205.0	684.1	0.0578
1001	0.44	37.70	43.98		108891.4	160129.6	0.05		-175741.1	-181952.4	0.07					
				SLE Rare	0.0				-35077.6			18.0	0.0	225.1	751.0	
				SLE Freq.	0.0				-31484.9			16.1	0.0	202.0	674.1	0.0569
				SLE Q.P.	0.0				-30386.3			15.6	0.0	195.0	650.6	0.0549

Da	A	Dx	VSd	Vrd _c	VRd _{max}	Vrd _s	Staffe
[m]	[m]	[m]	[kg]	[kg]	[kg]	[kg]	
Trave di fondazione 59 61 Sez. 5 a Tr 190x120x90x40 [cm] 190x120							
0.30	4.86	4.56	88679.0	32149.5	264240.8	127896.9	ø 10 4br. 20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione 61 63 Sez. 5 a Tr 190x120x90x40 [cm] 190x120							
0.30	4.86	4.56	77506.6	32149.5	264240.8	127896.9	ø 10 4br. 20.0'
Trave di fondazione 63 65 Sez. 5 a Tr 190x120x90x40 [cm] 190x120							
0.30	4.86	4.56	97325.5	32149.5	264240.8	127896.9	ø 10 4br. 20.0'
Trave di fondazione 65 1001 Sez. 5 a Tr 190x120x90x40 [cm] 190x120							
0.29	0.44	0.15	88974.5	36802.0	264240.8	127896.9	ø 10 4br. 20.0'

- Travata: 5 Travata 60 62 64 66 1022

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 5 a Tr 190x120x90x40 [cm] 190x120																
60	0.25	25.13	25.13			71307.6	107466.2	0.04	-13942.5	-105438.8	0.05					
						SLE Rare	7473.4		-277.6			0.2	4.1	271.5	46.5	
						SLE Freq.	7154.5		-254.6			0.2	3.9	259.9	44.6	0.0052
						SLE Q.P.	7069.6		-248.6			0.2	3.8	256.8	44.0	0.0052
Camp.	2.58	25.13	25.13			84208.6	107466.2	0.04	-7473.2	-105438.8	0.05					
						SLE Rare	45934.3		0.0			0.0	25.0	1668.6	286.1	
						SLE Freq.	43545.3		0.0			0.0	23.7	1581.8	271.2	0.0318
						SLE Q.P.	42908.7		0.0			0.0	23.3	1558.7	267.2	0.0313
62	4.91	44.33	50.27			39193.6	187692.5	0.05	-67741.6	-207571.7	0.07					
						SLE Rare	0.0		-43868.6			20.8	0.0	263.4	823.2	
						SLE Freq.	0.0		-42145.3			20.0	0.0	253.0	790.9	0.0633
						SLE Q.P.	0.0		-41708.9			19.8	0.0	250.4	782.7	0.0626
Trave di fondazione Sez. 5 a Tr 190x120x90x40 [cm] 190x120																
62	0.25	44.94	50.27			23854.1	190166.1	0.05	-83691.4	-207644.3	0.07					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

					SLE Rare	0.0			-43839.8			20.8	0.0	262.4	822.5	
					SLE Freq.	0.0			-42175.3			20.0	0.0	252.4	791.2	0.0633
					SLE Q.P.	0.0			-41756.1			19.8	0.0	249.9	783.4	0.0627
Camp.	2.58	25.13	25.13			35167.2	107466.2	0.04	-12610.6	-105438.8	0.05					
					SLE Rare	22094.2			0.0			0.0	12.0	802.6	137.6	
					SLE Freq.	19991.4			0.0			0.0	10.9	726.2	124.5	0.0146
					SLE Q.P.	19398.9			0.0			0.0	10.6	704.7	120.8	0.0142
64	4.91	44.09	50.27			7885.5	186702.4	0.05	-80087.4	-207542.4	0.07					
					SLE Rare	0.0			-46287.6			22.0	0.0	278.2	868.7	
					SLE Freq.	0.0			-45061.6			21.4	0.0	270.8	845.7	0.0676
					SLE Q.P.	0.0			-44773.2			21.3	0.0	269.1	840.3	0.0672
Trave di fondazione Sez. 5 a Tr 190x120x90x40 [cm] 190x120																
64	0.25	44.33	50.27			13719.1	187692.4	0.05	-84112.5	-207571.7	0.07					
					SLE Rare	0.0			-44543.8			21.2	0.0	267.4	835.9	
					SLE Freq.	0.0			-43578.7			20.7	0.0	261.6	817.8	0.0654
					SLE Q.P.	0.0			-43364.0			20.6	0.0	260.3	813.8	0.0651
Camp.	2.58	25.13	25.13			78151.1	107466.2	0.04	-37844.9	-105438.8	0.05					
					SLE Rare	29409.7			0.0			0.0	16.0	1068.3	183.2	
					SLE Freq.	27700.6			0.0			0.0	15.1	1006.2	172.5	0.0202
					SLE Q.P.	27260.6			0.0			0.0	14.8	990.2	169.8	0.0199
66	4.90	40.84	47.12			85063.0	173198.3	0.05	-145338.9	-194741.3	0.07					
					SLE Rare	0.0			-33437.1			16.5	0.0	207.5	668.8	
					SLE Freq.	0.0			-28932.6			14.3	0.0	179.6	578.7	0.0475
					SLE Q.P.	0.0			-27597.3			13.6	0.0	171.3	552.0	0.0453
Trave di fondazione Sez. 5 a Tr 190x120x90x40 [cm] 190x120																
66	0.25	40.84	47.12			111427.8	173198.3	0.05	-185364.5	-194741.3	0.07					
					SLE Rare	0.0			-42988.2			21.2	0.0	266.8	859.9	
					SLE Freq.	0.0			-37149.9			18.3	0.0	230.6	743.1	0.0610

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Q.P.	0.0			-35423.0			17.5	0.0	219.9	708.6	0.0582	
Camp.	0.35	40.84	47.12			111427.8	173198.3	0.05	-185364.5	-194741.3	0.07					
				SLE Rare	0.0				-42375.0			20.9	0.0	263.0	847.6	
				SLE Freq.	0.0				-36169.2			17.8	0.0	224.5	723.5	0.0594
				SLE Q.P.	0.0				-34333.0			16.9	0.0	213.1	686.8	0.0564
1022	0.44	40.84	47.12			111427.8	173198.3	0.05	-185364.5	-194741.3	0.07					
				SLE Rare	0.0				-42159.7			20.8	0.0	261.7	843.3	
				SLE Freq.	0.0				-35560.3			17.5	0.0	220.7	711.3	0.0584
				SLE Q.P.	0.0				-33607.6			16.6	0.0	208.6	672.2	0.0552

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 60 62 Sez. 5 a Tr 190x120x90x40 [cm] 190x120							
0.30	4.86	4.56	89754.7	32149.5	264240.8	127896.9	ø 10 4br. 20.0'
Trave di fondazione 62 64 Sez. 5 a Tr 190x120x90x40 [cm] 190x120							
0.30	4.86	4.56	78964.4	32149.5	264240.8	127896.9	ø 10 4br. 20.0'
Trave di fondazione 64 66 Sez. 5 a Tr 190x120x90x40 [cm] 190x120							
0.30	4.86	4.56	93955.7	32149.5	264240.8	127896.9	ø 10 4br. 20.0'
Trave di fondazione 66 1022 Sez. 5 a Tr 190x120x90x40 [cm] 190x120							
0.29	0.44	0.15	89223.3	37797.1	264240.8	127896.9	ø 10 4br. 20.0'

- Travata: 6 Travata 1 6 11 16

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1	0.15	24.94	21.99			51255.4	106453.0	0.04	-9253.7	-92336.7	0.05							
					SLE Rare	5385.5			-1143.4			0.9	3.2	181.6	48.3			
					SLE Freq.	4401.3			-1266.0			1.0	2.6	148.4	53.5	0.0060		
					SLE Q.P.	4111.0			-1270.0			1.0	2.4	138.6	53.7	0.0060		
Camp.	2.63	21.99	21.99			60756.1	94194.0	0.04	-7989.8	-92168.2	0.05							
					SLE Rare	37579.3			0.0			0.0	23.2	1557.5	264.7			
					SLE Freq.	35371.6			0.0			0.0	21.8	1466.0	249.1	0.0297		
					SLE Q.P.	34769.1			0.0			0.0	21.4	1441.0	244.9	0.0292		
6	5.10	38.90	43.98			6169.4	164946.2	0.05	-116880.5	-181485.1	0.07							
					SLE Rare	0.0			-83927.7			46.6	0.0	590.7	1801.3			
					SLE Freq.	0.0			-73542.9			40.9	0.0	517.6	1578.4	0.1574		
					SLE Q.P.	0.0			-70618.7			39.2	0.0	497.0	1515.6	0.1490		
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																		
6	0.25	38.48	43.98			7637.0	163209.5	0.05	-119457.7	-181431.7	0.07							
					SLE Rare	0.0			-84518.9			47.1	0.0	596.4	1814.4			
					SLE Freq.	0.0			-73771.0			41.1	0.0	520.6	1583.7	0.1581		
					SLE Q.P.	0.0			-70710.6			39.4	0.0	499.0	1518.0	0.1493		
Camp.	3.45	21.99	21.99			60764.0	94194.0	0.04	0.0	-92168.2	0.05							
					SLE Rare	43392.5			0.0			0.0	26.8	1798.4	305.6			
					SLE Freq.	40773.6			0.0			0.0	25.1	1689.9	287.2	0.0342		
					SLE Q.P.	40080.0			0.0			0.0	24.7	1661.1	282.3	0.0336		
11	6.65	38.48	43.98			8436.3	163209.4	0.05	-112109.9	-181431.7	0.07							
					SLE Rare	0.0			-80107.7			44.6	0.0	565.3	1719.7			
					SLE Freq.	0.0			-72641.5			40.5	0.0	512.6	1559.4	0.1548		
					SLE Q.P.	0.0			-70680.7			39.4	0.0	498.8	1517.3	0.1492		
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																		
11	0.25	38.90	43.98			4715.3	164946.2	0.05	-112957.6	-181485.1	0.07							
					SLE Rare	0.0			-81967.1			45.5	0.0	576.9	1759.2			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Freq.	0.0			-73997.4			41.1	0.0	520.8	1588.1	0.1587
				SLE Q.P.	0.0			-71887.3			39.9	0.0	506.0	1542.8	0.1526
Camp.	2.72	21.99	21.99			54257.1	94194.0	0.04	-20963.6	-92168.2	0.05				
				SLE Rare	28946.6			0.0			0.0	17.8	1199.7	203.9	
				SLE Freq.	26779.3			0.0			0.0	16.5	1109.9	188.6	0.0225
				SLE Q.P.	26193.4			0.0			0.0	16.1	1085.6	184.5	0.0220
16	5.20	24.94	21.99			49042.2	106453.3	0.04	-30290.1	-92336.7	0.05				
				SLE Rare	5868.1			-262.8			0.2	3.5	197.9	40.5	
				SLE Freq.	4414.4			-495.6			0.4	2.6	148.8	30.5	0.0031
				SLE Q.P.	4074.3			-513.2			0.4	2.4	137.4	28.2	0.0029

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 1 6 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.95	0.80	60729.8	27239.8	220200.6	127896.9	ø 10 4br. 20.0'
0.95	4.25	3.30	81713.8	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.25	5.05	0.80	110297.2	27476.3	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 6 11 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.25	0.95	109372.5	27340.4	220200.6	127896.9	ø 10 4br. 20.0'
1.25	5.65	4.41	75599.3	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.65	6.60	0.95	104374.5	27340.4	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 11 16 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.12	0.82	99735.0	27449.6	220200.6	127896.9	ø 10 4br. 20.0'
1.12	4.38	3.25	72999.3	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.38	5.20	0.82	53106.3	27230.5	220200.6	127896.9	ø 10 4br. 20.0'

- Travata: 7 Travata 2 7 12 17

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
2	0.15	24.94	21.99			54184.8	106453.0	0.04	-1080.2	-92336.7	0.05					
					SLE Rare	8555.3			0.0			0.0	5.1	288.5	59.1	
					SLE Freq.	7539.8			0.0			0.0	4.5	254.2	52.1	0.0054
					SLE Q.P.	7233.0			0.0			0.0	4.3	243.9	50.0	0.0052
Camp.	2.63	21.99	21.99			62457.8	94194.0	0.04	-4471.0	-92168.2	0.05					
					SLE Rare	37874.2			0.0			0.0	23.3	1569.7	266.8	
					SLE Freq.	35533.1			0.0			0.0	21.9	1472.7	250.3	0.0298
					SLE Q.P.	34892.3			0.0			0.0	21.5	1446.1	245.8	0.0293
7	5.10	38.90	43.98			1281.6	164946.2	0.05	-117557.5	-181485.1	0.07					
					SLE Rare	0.0			-84732.1			47.1	0.0	596.4	1818.5	
					SLE Freq.	0.0			-74450.9			41.4	0.0	524.0	1597.9	0.1600
					SLE Q.P.	0.0			-71554.2			39.8	0.0	503.6	1535.7	0.1517
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
7	0.25	38.48	43.98			3660.7	163209.5	0.05	-119882.7	-181431.7	0.07					
					SLE Rare	0.0			-85078.5			47.4	0.0	600.3	1826.4	
					SLE Freq.	0.0			-74391.8			41.4	0.0	524.9	1597.0	0.1599
					SLE Q.P.	0.0			-71345.7			39.7	0.0	503.4	1531.6	0.1511
Camp.	3.45	21.99	21.99			60883.9	94194.0	0.04	0.0	-92168.2	0.05					
					SLE Rare	43903.2			0.0			0.0	27.1	1819.6	309.2	
					SLE Freq.	41045.3			0.0			0.0	25.3	1701.1	289.1	0.0344
					SLE Q.P.	40294.0			0.0			0.0	24.8	1670.0	283.8	0.0338
12	6.65	38.48	43.98			5710.7	163209.4	0.05	-109788.0	-181431.7	0.07					
					SLE Rare	0.0			-78594.1			43.8	0.0	554.6	1687.2	
					SLE Freq.	0.0			-71023.3			39.6	0.0	501.2	1524.7	0.1502
					SLE Q.P.	0.0			-69019.9			38.4	0.0	487.0	1481.7	0.1444

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
12	0.25	38.90	43.98			689.6	164946.2	0.05	-109489.5	-181485.1	0.07					
					SLE Rare	0.0			-79678.0			44.3	0.0	560.8	1710.1	
					SLE Freq.	0.0			-71602.8			39.8	0.0	504.0	1536.7	0.1518
					SLE Q.P.	0.0			-69445.6			38.6	0.0	488.8	1490.4	0.1456
Camp.	2.72	21.99	21.99			52948.4	94194.0	0.04	-9041.6	-92168.2	0.05					
					SLE Rare	32050.3			0.0			0.0	19.8	1328.3	225.7	
					SLE Freq.	30246.6			0.0			0.0	18.6	1253.6	213.0	0.0254
					SLE Q.P.	29779.8			0.0			0.0	18.4	1234.2	209.8	0.0250
17	5.20	24.64	21.99			45945.2	105200.7	0.04	-4877.8	-92320.0	0.05					
					SLE Rare	5766.4			-119.6			0.1	3.4	196.7	39.9	
					SLE Freq.	5100.2			-179.2			0.1	3.0	174.0	35.3	0.0037
					SLE Q.P.	4923.9			-180.5			0.1	2.9	168.0	34.1	0.0035

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 2 7 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.96	0.81	58249.6	27230.5	220200.6	127896.9	ø 10 4br. 20.0'
0.96	4.24	3.28	81799.1	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.24	5.05	0.81	110487.8	27464.0	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 7 12 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.16	0.86	109634.3	27465.9	220200.6	127896.9	ø 10 4br. 20.0'
1.16	5.74	4.58	79132.6	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.74	6.60	0.86	104407.4	27465.9	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 12 17 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.13	0.83	100936.6	27437.2	220200.6	127896.9	ø 10 4br. 20.0'
1.13	4.37	3.23	73446.7	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.37	5.20	0.83	51333.3	27230.5	220200.6	127896.9	ø 10 4br. 20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Travata: 8 Travata 3 8 13 18

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
3	0.15	24.64	21.99			52601.9	105200.4	0.04	-1555.6	-92320.0	0.05					
					SLE Rare	7984.4			0.0			0.0	4.7	272.4	55.3	
					SLE Freq.	6842.2			0.0			0.0	4.1	233.5	47.4	0.0049
					SLE Q.P.	6514.1			0.0			0.0	3.9	222.3	45.1	0.0047
Camp.	2.63	21.99	21.99			60569.2	94194.0	0.04	-5448.3	-92168.2	0.05					
					SLE Rare	36397.3			0.0			0.0	22.4	1508.5	256.4	
					SLE Freq.	34199.6			0.0			0.0	21.1	1417.4	240.9	0.0287
					SLE Q.P.	33608.3			0.0			0.0	20.7	1392.9	236.7	0.0282
8	5.10	38.90	43.98			233.9	164946.2	0.05	-118617.3	-181485.1	0.07					
					SLE Rare	0.0			-85563.3			47.5	0.0	602.2	1836.4	
					SLE Freq.	0.0			-75201.0			41.8	0.0	529.3	1614.0	0.1621
					SLE Q.P.	0.0			-72278.0			40.2	0.0	508.7	1551.2	0.1537
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
8	0.25	38.48	43.98			4131.3	163209.5	0.05	-120565.5	-181431.7	0.07					
					SLE Rare	0.0			-85633.8			47.7	0.0	604.3	1838.3	
					SLE Freq.	0.0			-74923.3			41.7	0.0	528.7	1608.4	0.1614
					SLE Q.P.	0.0			-71868.8			40.0	0.0	507.1	1542.8	0.1526
Camp.	3.45	21.99	21.99			60899.5	94194.0	0.04	0.0	-92168.2	0.05					
					SLE Rare	43897.6			0.0			0.0	27.1	1819.3	309.2	
					SLE Freq.	41153.5			0.0			0.0	25.4	1705.6	289.9	0.0345
					SLE Q.P.	40436.8			0.0			0.0	24.9	1675.9	284.8	0.0339
13	6.65	38.48	43.98			5737.7	163209.4	0.05	-108489.9	-181431.7	0.07					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		SLE Rare	0.0			-77660.2			43.2	0.0	548.0	1667.1	
		SLE Freq.	0.0			-70037.1			39.0	0.0	494.2	1503.5	0.1474
		SLE Q.P.	0.0			-68015.1			37.9	0.0	479.9	1460.1	0.1415
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120													
13	0.25	38.90	43.98			1089.7	164946.2	0.05	-107909.6	-181485.1	0.07		
		SLE Rare	0.0			-78545.2			43.6	0.0	552.8	1685.7	
		SLE Freq.	0.0			-70421.9			39.1	0.0	495.7	1511.4	0.1484
		SLE Q.P.	0.0			-68246.4			37.9	0.0	480.4	1464.7	0.1422
Camp.	2.72	21.99	21.99			55057.5	94194.0	0.04	-6296.4	-92168.2	0.05		
		SLE Rare	33575.2			0.0			0.0	20.7	1391.5	236.5	
		SLE Freq.	31829.0			0.0			0.0	19.6	1319.2	224.2	0.0267
		SLE Q.P.	31385.1			0.0			0.0	19.3	1300.8	221.1	0.0263
18	5.20	24.64	21.99			47210.3	105200.7	0.04	-2599.8	-92320.0	0.05		
		SLE Rare	6458.0			0.0			0.0	3.8	220.3	44.7	
		SLE Freq.	5699.1			0.0			0.0	3.4	194.5	39.5	0.0041
		SLE Q.P.	5480.3			0.0			0.0	3.3	187.0	37.9	0.0039

Da [m]	A [m]	Dx [m]	VSd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 3 8 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	0.98	0.83	57127.3	27230.5	220200.6	127896.9	ø 10 4br. 20.0'
0.98	4.22	3.24	80656.3	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.22	5.05	0.83	109862.3	27439.3	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 8 13 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.25	0.95	109657.8	27340.4	220200.6	127896.9	ø 10 4br. 20.0'
1.25	5.65	4.41	76208.5	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.65	6.60	0.95	104028.9	27340.4	220200.6	127896.9	ø 10 4br. 20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave di fondazione 13 18 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.08	0.78	101330.1	27498.9	220200.6	127896.9	ø 10 4br. 20.0'
1.08	4.42	3.33	75354.4	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.42	5.20	0.78	52355.0	27266.9	220200.6	127896.9	ø 10 4br. 20.0'

- Travata: 9 Travata 4 21 9 14 19

Nodo	x [m]	A _{fe} [cm ²]	A _{fi} [cm ²]	q _T [kg/m]	M _{rif} [kgm]	M _{de} [kgm]	M _{re} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	x/d	σ _{be} [kg/cm ²]	σ _{bi} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]	w mm
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
4	0.15	26.01	21.99			41432.0	110884.5	0.04	0.0	-92394.8	0.05					
					SLE Rare	8358.9			0.0			0.0	4.9	270.5	57.4	
					SLE Freq.	7508.2			0.0			0.0	4.4	243.0	51.5	0.0052
					SLE Q.P.	7249.6			0.0			0.0	4.2	234.6	49.8	0.0050
Camp.	1.29	21.99	21.99			44165.8	94194.0	0.04	0.0	-92168.2	0.05					
					SLE Rare	30659.4			0.0			0.0	18.9	1270.7	216.0	
					SLE Freq.	28590.9			0.0			0.0	17.6	1185.0	201.4	0.0240
					SLE Q.P.	28109.6			0.0			0.0	17.3	1165.0	198.0	0.0236
21	2.42	21.99	21.99			44165.8	94194.0	0.04	0.0	-92168.2	0.05					
					SLE Rare	21772.0			0.0			0.0	13.4	902.3	153.4	
					SLE Freq.	21030.3			0.0			0.0	13.0	871.6	148.1	0.0177
					SLE Q.P.	20879.2			0.0			0.0	12.9	865.3	147.1	0.0175
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120																
21	0.25	21.99	21.99			41209.5	94194.0	0.04	-26768.3	-92168.2	0.05					
					SLE Rare	18802.8			0.0			0.0	11.6	779.3	132.4	
					SLE Freq.	17997.2			0.0			0.0	11.1	745.9	126.8	0.0151
					SLE Q.P.	17845.6			0.0			0.0	11.0	739.6	125.7	0.0150
Camp.	1.34	21.99	29.23			39579.2	94348.9	0.04	-99844.5	-121217.7	0.06					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Rare	0.0			-14538.1		10.2	0.0	126.3	467.2	
				SLE Freq.	0.0			-12081.7		8.5	0.0	104.9	388.3	0.0374
				SLE Q.P.	0.0			-11296.2		7.9	0.0	98.1	363.1	0.0350
9	2.43	38.90	43.98			1921.3	164946.2	0.05	-107896.0	-181485.1	0.07			
				SLE Rare	0.0			-78976.5		43.9	0.0	555.9	1695.0	
				SLE Freq.	0.0			-70497.4		39.2	0.0	496.2	1513.0	0.1486
				SLE Q.P.	0.0			-68140.9		37.9	0.0	479.6	1462.4	0.1419
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120														
9	0.25	39.53	43.98			15115.8	167549.5	0.05	-104798.0	-181564.5	0.07			
				SLE Rare	0.0			-74362.9		41.2	0.0	521.4	1595.4	
				SLE Freq.	0.0			-66384.2		36.8	0.0	465.5	1424.2	0.1367
				SLE Q.P.	0.0			-64179.1		35.5	0.0	450.0	1376.9	0.1304
Camp.	3.45	21.99	21.99			62969.6	94194.0	0.04	0.0	-92168.2	0.05			
				SLE Rare	45479.1			0.0		0.0	28.0	1884.9	320.3	
				SLE Freq.	42722.1			0.0		0.0	26.3	1770.6	300.9	0.0359
				SLE Q.P.	41978.2			0.0		0.0	25.9	1739.8	295.7	0.0352
14	6.65	38.48	43.98			9145.1	163209.4	0.05	-109022.9	-181431.7	0.07			
				SLE Rare	0.0			-77968.5		43.4	0.0	550.2	1673.8	
				SLE Freq.	0.0			-69867.3		38.9	0.0	493.0	1499.9	0.1469
				SLE Q.P.	0.0			-67701.1		37.7	0.0	477.7	1453.4	0.1406
Trave di fondazione Sez. 1 a Tr 175x120x75x40 [cm] 175x120														
14	0.25	38.90	43.98			2693.2	164946.2	0.05	-108259.0	-181485.1	0.07			
				SLE Rare	0.0			-78714.4		43.7	0.0	554.0	1689.4	
				SLE Freq.	0.0			-70211.5		39.0	0.0	494.2	1506.9	0.1478
				SLE Q.P.	0.0			-67920.4		37.7	0.0	478.1	1457.7	0.1412
Camp.	2.72	21.99	21.99			54141.4	94194.0	0.04	-8178.8	-92168.2	0.05			
				SLE Rare	32808.0			0.0		0.0	20.2	1359.7	231.1	
				SLE Freq.	31378.9			0.0		0.0	19.3	1300.5	221.0	0.0263

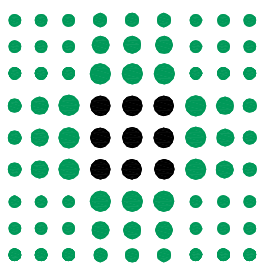
COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

				SLE Q.P.	31030.8			0.0			0.0	19.1	1286.1	218.6	0.0260
19	5.20	24.64	21.99		46694.6	105200.7	0.04	-2414.3	-92320.0	0.05					
				SLE Rare	6479.4			0.0			0.0	3.9	221.1	44.9	
				SLE Freq.	5574.2			0.0			0.0	3.3	190.2	38.6	0.0040
				SLE Q.P.	5322.7			0.0			0.0	3.2	181.6	36.8	0.0038

Da [m]	A [m]	Dx [m]	Vsd [kg]	Vrd _c [kg]	VRd _{max} [kg]	Vrd _s [kg]	Staffe
Trave di fondazione 4 21 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.15	2.38	2.23	45232.3	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 21 9 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	2.38	2.08	96682.2	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
Trave di fondazione 9 14 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.21	0.91	103399.9	27558.6	220200.6	127896.9	ø 10 4br. 20.0'
1.21	5.69	4.49	73523.3	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
5.69	6.60	0.91	103552.4	27396.3	220200.6	127896.9	ø 10 4br. 20.0'
Trave di fondazione 14 19 Sez. 1 a Tr 175x120x75x40 [cm] 175x120							
0.30	1.12	0.82	100377.4	27449.6	220200.6	127896.9	ø 10 4br. 20.0'
1.12	4.38	3.25	73594.6	27230.5	220200.6	102317.5	ø 10 4br. 25.0'
4.38	5.20	0.82	51562.0	27230.5	220200.6	127896.9	ø 10 4br. 20.0'



GRUPPO DI LAVORO:

geom. Giuliano Bastasini
geom. Lara Biavardi
per. ind. Giuseppe Carlassare
ing. Federica Ceresa
per. ind. Paolo Crovini
ing. Elisa Degiovanni
ing. jr. Roberto Degiovanni
geom. Laura Del Bono
ing. Vincenzo Facchino
geom. Roberto Gallarotti
arch. Andrea Mambriani
per. ind. Paolo Mazzina
geom. Roberto Mellini
per. ind. Paolo Robuschi
ing. Renato Maria Saviano
geom. Pier Paolo Taddei
geom. Michele Tagliavini
geom. Roberta Tagliavini

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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 6 - PROGETTO E VERIFICA SCALE, SOLAI,
MURI CONTROTERRA E TUNNEL VERSO CORPO ESIT.**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
Via Aristotele n. 5
Tel. 3356030441 - 0522 865441
42122 - Reggio Emilia

ELABORATO

RS. 07

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

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1 PROGETTO E VERIFICA SCALE

1.1 RELAZIONE SUI MATERIALI

1.1.1 ELENCO MATERIALI IMPIEGATI E LORO MODALITA' DI POSA IN OPERA

- Calcestruzzo:

Norma UNI EN 206-1 : 2006	
<i>Classe di resistenza</i>	<i>C28/35</i>
<i>Classe di esposizione</i>	<i>XC1 (I)</i>
<i>Contenuto max di cloruri</i>	<i>Cl 0.20</i>
<i>Dimensione nominale max degli inerti</i>	<i>D_{MAX} 20</i>
<i>Classe di consistenza</i>	<i>S4</i>

- Acciaio per calcestruzzo armato: B450C (saldabile)
- Malte antiritiro per inghisaggi: "TIPO" EMACO S55

NOTE DI POSA: il getto in opera di malte antiritiro ad alta resistenza - "tipo" EMACO - non può avvenire per temperature ambientali $T^{\circ} \leq +5^{\circ}C$.

1.1.2 VALORI DI CALCOLO

- **Calcestruzzo (C28/35):**

C28/35	N/mm²	CLASSE DI RESISTENZA
$R_{ck} = 350$	kg/cm ²	resistenza cubica alla compressione – valore caratteristico
$f_{ck} = 290.5$	kg/cm ²	resistenza cilindrica alla compressione – valore caratteristico
$f_{cd} = 164.6$	kg/cm ²	resistenza di calcolo alla compressione (SLU)
$f_{ctm} = 27.1$	kg/cm ²	resistenza media a trazione semplice
$f_{ctm} = 32.6$	kg/cm ²	resistenza media a trazione per flessione
$f_{ctd} = 12.9$	kg/cm ²	resistenza di calcolo a trazione (SLU)
$\sigma_c = 174.3$	kg/cm ²	tensione massima di compressione per combinazioni rare (SLE)
$\sigma_c = 130.7$	kg/cm ²	tensione massima di compress. per combinazione quasi perm. (SLE)
$E_c = 325881$	kg/cm ²	modulo elastico

- **Acciaio per calcestruzzo armato (B450C):**

B450C		
$f_{yk} = 4500$	kg/cm ²	tensione caratteristica di snervamento
$f_{yd} = 3913$	kg/cm ²	resistenza di calcolo (SLU)
$\sigma_s = 3600$	kg/cm ²	tensione massima in condizioni di esercizio (SLE)
$E_s = 2100000$	kg/cm ²	modulo elastico

1.2 RELAZIONE DI CALCOLO STRUTTURALE

1.2.1 QUADRO NORMATIVO DI RIFERIMENTO

NORME DI RIFERIMENTO COGENTI

- D.M. del 14 Gennaio 2008: *"NORME TECNICHE PER LE COSTRUZIONI"*.

ALTRE NORME E DOCUMENTI TECNICI INTEGRATIVI

- Circolare 2 Febbraio 2009, n. 617 del Ministero delle Infrastrutture e dei Trasporti approvata dal Consiglio Superiore dei Lavori Pubblici – *"ISTRUZIONI PER L'APPLICAZIONE DELLE "NUOVE NORME TECNICHE PER LE COSTRUZIONI"*
- Norma Europea: Eurocodice 2 "Progettazione delle strutture in calcestruzzo / Parte 1-1: Regole generali e regole per gli edifici" UNI EN 1992-1-1 Novembre 2005.
- Norma UNI EN 206-1 : 2006

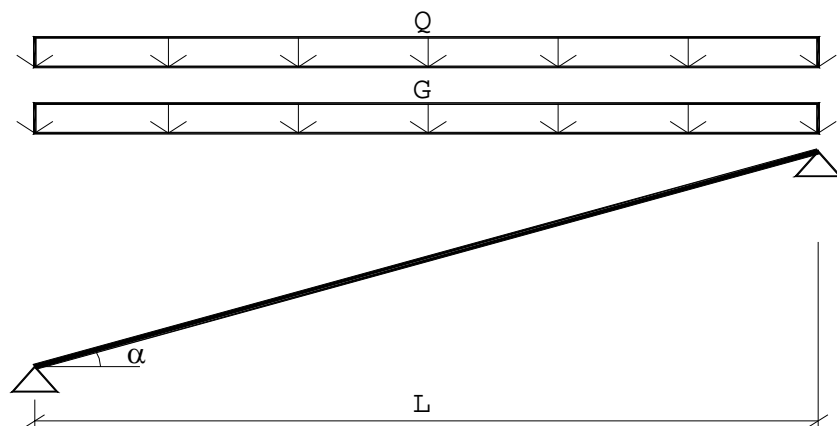
1.2.2 SCHEMI E METODI DI CALCOLO

Le verifiche sono eseguite con il metodo semiprobabilistico agli Stati Limite.

Nell'ambito delle norme tecniche adottate si precisa quanto segue:

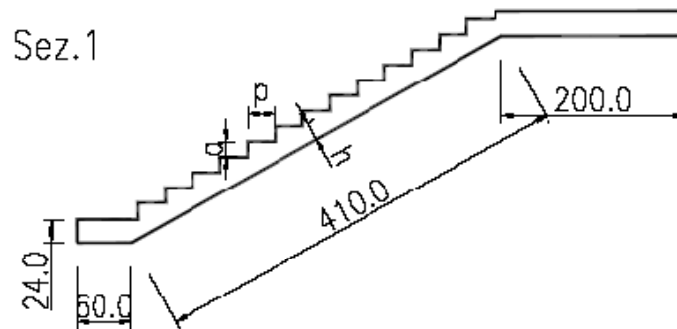
- Lo schema statico equivale a quello di trave appoggio-appoggio di stessa luce;
- I rapporti tra luce/altezza e base/altezza sempre minori di 5 configurano l'elemento strutturale come soletta piena unidirezionale (par. 5.3.1 EN 1992-1-1 /nov. 2005);
- In virtù del punto precedente gli elementi strutturali non avranno armatura minima a taglio (par. 6.2.1 EN 1992-1-1 /nov. 2005) ma armatura trasversale minima pari almeno al 20% di quella longitudinale (par. 9.3.1.1 EN 1992-1-1 /nov. 2005);
- Le verifiche per gli stati limite di deformazione saranno omesse ma garantendo il rispetto delle prescrizioni normative relative (par. 7.4.2 EN 1992-1-1 /nov.2005);
- Vengono considerate condizioni ambientali conformi alla normativa adottata. In considerazione dell'elemento strutturale in esame le verifiche per gli stati limite di tensione faranno riferimento a classi di esposizione 1, 2 e 5 del prospetto 4.1 EN 1992-1-1/nov. 2005 corrispondenti alle classi X0(1), XC1(2a), XC2(2a), XF1(2b), XF3(2b) riportate in UNI EN 206-1-2006 [UNI 11104-2004].

SCHEMA STATICO



1.2.3 PROGETTO E VERIFICA RAMPA

CARATTERISTICHE GEOMETRICHE



Lungh. rampa L (cm)	Largh. rampa B (cm)	Spessore Soletta h (cm)	Alzata Gradino a (cm)	Pedata Gradino p (cm)	Angolo inclinazione rampa α	Numero Alzate N
410	180	15	16,9	30	29.4°	12

$L_c = 410$ cm (luce di calcolo)

$c = 2$ cm (copriferro)

$h = 13$ cm (altezza utile di calcolo)

ANALISI DEI CARICHI

Carichi permanenti strutturali (G_1)

- Peso proprio soletta 375 kg/m²
- Gradini 185 kg/m²

$$G_1 = 560 \text{ kg/m}^2 \cdot (\cos \alpha) \cdot 1,8 = \mathbf{878 \text{ kg/m}}$$

Carichi permanenti non strutturali (G_2)

- Pavimento 250 kg/m^2

$$G_2 = 250 \text{ kg/m}^2 \cdot (\cos\alpha) \cdot 1,8 = \frac{250 \text{ kg/m}^2}{\text{-----}} = 395 \text{ kg/m}$$

Carichi variabili (Q)

- Variabili 500 kg/m^2

$$Q_k = 500 \text{ kg/m}^2 \cdot (\cos\alpha) \cdot 1,8 = \frac{500 \text{ kg/m}^2}{\text{-----}} = 785 \text{ kg/m}$$

COMBINAZIONI DI CARICO

Stati Limite Ultimi:

$$q_d = (\gamma_{G1} \cdot G_{k1}) + (\gamma_{G2} \cdot G_{k2}) + (\gamma_Q \cdot Q_k) = (1,3 \cdot 878) + (1,5 \cdot 395) + (1,5 \cdot 785) = 2915 \text{ kg/m}$$

Stati Limite di Esercizio:

Combinazione rara: $q_{\text{rara}} = G_{k1} + G_{k2} + Q_k = 878 + 395 + 785 = 2060 \text{ kg/m}$

Combinazione frequente: $q_{\text{freq}} = G_{k1} + G_{k2} + (\psi_{11} \cdot Q_k) = 878 + 395 + (0,7 \cdot 785) = 1825 \text{ kg/m}$

Combinazione quasi permanente: $q_{\text{q.p.}} = G_{k1} + G_{k2} + (\psi_{21} \cdot Q_k) = 878 + 395 + (0,6 \cdot 785) = 1745 \text{ kg/m}$

ARMATURA

$A_s = 15,8 \text{ cm}^2$ (14 Φ 12) area ferro teso

$A's = 5,0 \text{ cm}^2$ (10 Φ 8) area ferro compresso

Armatura di ripartizione St. $\Phi 8 / 20''$

VERIFICHE RAMPA

Stati Limite Ultimi:

- Flessione $M_{sd} = q_d \cdot (L_c)^2/8 = 6125 \text{ kgm}$
- Taglio $V_{sd} = q_d \cdot L_c/2 = 5975 \text{ kg}$

Stati Limite di Esercizio:

Combinazione rara :

- Flessione $M_{rara} = q_{rara} \cdot (L_c)^2/8 = 4330 \text{ kgm}$
- Taglio $V_{rara} = q_{rara} \cdot L_c/2 = 4225 \text{ kg}$

Combinazione frequente :

- Flessione $M_{freq} = q_{freq} \cdot (L_c)^2/8 = 3835 \text{ kgm}$
- Taglio $V_{freq} = q_{freq} \cdot L_c/2 = 3745 \text{ kg}$

Combinazione quasi permanente :

- Flessione $M_{q.p.} = q_{q.p.} \cdot (L_c)^2/8 = 3670 \text{ kgm}$
- Taglio $V_{q.p.} = q_{q.p.} \cdot L_c/2 = 3580 \text{ kg}$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

DEFINIZIONE DEI MATERIALI

Calcestruzzo - Rif. UNI EN 1992 - 1 - 1 : 2005

Resistenza caratteristica cubica	R_{ck}	35	[MPa]
Resistenza caratteristica cilindrica	f_{ck}	29,05	[MPa]
Coefficiente di sicurezza parziale per il calcestruzzo	γ_c	1,5	[-]
Coefficiente che tiene conto degli effetti di lungo termine	α_{cc}	0,85	[-]
Valore medio della resistenza a compressione cilindrica	f_{cm}	37,05	[MPa]
Valore medio della resistenza a trazione assiale del calcestruzzo	f_{ctm}	2,8	[MPa]
Valore caratteristico della resistenza a trazione assiale (frattile 5%)	$f_{ctk0,05}$	2,0	[MPa]
Valore caratteristico della resistenza a trazione assiale (frattile 95%)	$f_{ctk0,95}$	3,7	[MPa]
Modulo di elasticità secante del calcestruzzo	E_{cm}	32588	[MPa]
Deformazione di contrazione nel calcestruzzo alla tensione f_c	ε_{c1}	0,0020	[-]
Deformazione ultima di contrazione nel calcestruzzo	ε_{cu}	0,0035	[-]
Resistenza di progetto a compressione del calcestruzzo	f_{cd}	16,46	[MPa]
Resistenza di progetto a trazione del calcestruzzo	f_{ctd}	1,32	[MPa]
Tensione ammissibile nel calcestruzzo nella combinazione caratteristica	$\sigma_{c,caratt.}$	17,43	[MPa]
Tensione ammissibile nel calcestruzzo nella combinazione quasi permanente	$\sigma_{c,q.p.}$	13,0725	[MPa]

Acciaio - Rif. UNI EN 1992 - 1 - 1 : 2005

Resistenza a snervamento dell'acciaio	f_{yk}	450	[MPa]
Coefficiente di sicurezza parziale per l'acciaio	γ_s	1,15	[-]
Modulo di elasticità secante dell'acciaio	E_s	210000	[MPa]
Deformazione a snervamento dell'acciaio	ε_{yd}	0,001863	[-]
Deformazione ultima dell'acciaio	ε_{su}	0,01	[-]
Resistenza di progetto a trazione dell'acciaio	f_{yd}	391,3	[MPa]
Tensione ammissibile nell'acciaio per le combinazioni a SLS	σ_s	360	[MPa]

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

DEFINIZIONE DELLA GEOMETRIA			
SEZIONE TRASVERSALE			
Altezza della sezione trasversale di calcestruzzo	h	150	[mm]
Larghezza della sezione trasversale di calcestruzzo	b	1800	[mm]
Copriferro	d'	20	[mm]
Altezza utile della sezione	d	130	[mm]
ARMATURA TESA			
Diametro dei ferri correnti	ϕ_1	12	[mm]
Numero dei ferri correnti	n_1	14	[-]
Diametro dei ferri di eventuale infittimento	ϕ_2		[mm]
Numero dei ferri di eventuale infittimento	n_2		[-]
Area dell'armatura tesa	A_s	1583	[mm ²]
ARMATURA COMPRESSA			
Diametro dei ferri correnti	ϕ'_1	8	[mm]
Numero dei ferri correnti	n'_1	10	[-]
Diametro dei ferri di eventuale infittimento	ϕ'_2	0	[mm]
Numero dei ferri di eventuale infittimento	n'_2	0	[-]
Area dell'armatura compressa	A'_s	503	[mm ²]
CAMPO 2b			
Posizione adimensionale dell'asse neutro	ξ	0,1989	[-]
Posizione dell'asse neutro	x	25,85	[mm]
Deformazione massima nel calcestruzzo	$\varepsilon_{c,max}$	0,0025	[-]
Deformazione massima dell'acciaio	$\varepsilon_{s,max}$	0,0100	[-]
Coefficiente di riempimento	β	0,7314	[-]
Coefficiente di baricentro	κ	0,3904	[-]
Coefficiente $\alpha'_s = \sigma'_s / f_{yd}$	α'_s	0,3015	[-]
Tensione nell'armatura compressa	σ'_s	117,99	[MPa]
Deformazione dell'armatura compressa	ε'_s	0,0006	[-]
Momento resistente della sezione	M_{Rd}	73,70	[kNm]
Momento sollecitante a SLU assunto in valore assoluto	M_{Ed}	61,3	[kNm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

DETERMINAZIONE DELLE TENSIONI A SLS			
Controllo tensionale per la Combinazione Caratteristica			
Momento sollecitante assunto in valore assoluto	M_{Ed}	43,3	[kNm]
Coefficiente di omogeneizzazione	n	15,0	[-]
Altezza della sezione trasversale di calcestruzzo	h	150	[mm]
Larghezza della sezione trasversale di calcestruzzo	b	1800	[mm]
Copriferro	d'	20	[mm]
Altezza utile della sezione	d	130	[mm]
Area dell'armatura tesa	A_s	1583	[mm ²]
Area dell'armatura compressa	A'_s	503	[mm ²]
Posizione dell'asse neutro	x	45,07	[mm]
Momento d'inerzia della sezione rispetto a x	J	230983800,2	[mm ⁴]
Tensione ammissibile nel calcestruzzo nella combinazione caratteristica	$\sigma_{c,caratt.}$	17,43	[MPa]
Tensione ammissibile nell'acciaio per le combinazioni a SLS	σ_s	360	[MPa]
Tensione nel calcestruzzo	σ_c	8,45	[MPa]
Tensione nell'armatura tesa	σ_s	238,82	[MPa]
Controllo tensionale per la Combinazione Quasi Permanente			
Momento sollecitante assunto in valore assoluto	M_{Ed}	36,7	[kNm]
Coefficiente di omogeneizzazione	n	15,0	[-]
Altezza della sezione trasversale di calcestruzzo	j	150	[-]
Larghezza della sezione trasversale di calcestruzzo	b	1800	[-]
Copriferro	d'	20	[-]
Altezza utile della sezione	d'	130	[-]
Area dell'armatura tesa	A_s	1583	[mm ²]
Area dell'armatura compressa	A'_s	503	[mm ²]
Posizione dell'asse neutro	x	45,07	[mm]
Momento d'inerzia della sezione rispetto a x	J	230983800,2	[mm ⁴]
Tensione ammissibile nel calcestruzzo nella combinazione quasi permanente	$\sigma_{c,q.p.}$	13,0725	[MPa]
Tensione ammissibile nell'acciaio per le combinazioni a SLS	σ_s	360	[MPa]
Tensione nel calcestruzzo	σ_c	7,16	[MPa]
Tensione nell'armatura tesa	σ_s	202,41	[MPa]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

CONTROLLO DI FESSURAZIONE A SLS

Calcolo dell'ampiezza delle fessure - Combinazione Quasi Permanente

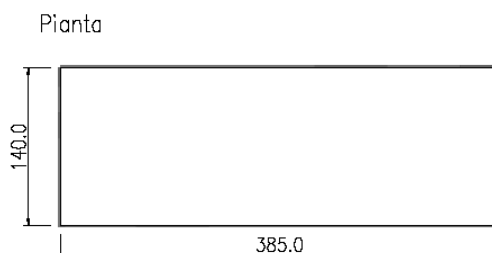
Momento sollecitante per la combinazione Quasi Permanente	$M_{Ed,q.p.}$	36,7 [kNm]
Durata del carico		lunga [-]
Posizione dell'asse neutro dal lembo superiore	x	45,07 [mm]
Tensione indotta nell'armatura tesa considerando la sezione fessurata	σ_s	202,41 [MPa]
Valore medio della resistenza a trazione efficace del calcestruzzo	$f_{ct,eff}$	2,8 [MPa]
Fattore dipendente dalla durata del carico	k_t	0,4 [-]
Altezza efficace	$h_{c,eff}$	34,9768821 [mm]
Area efficace del calcestruzzo teso attorno all'armatura	$A_{c,eff}$	62958,3877 [mm ²]
Rapporto geometrico sull'area efficace	$\rho_{o,eff}$	0,02515 [-]
Rapporto tra E_s/E_{cm}	α_e	6,44 [-]
Differenza tra la deformazione nell'acciaio e quella nel calcestruzzo	$\varepsilon_{sm} - \varepsilon_{cm}$	0,000714 [-]
		0,000714 [-]
Determinazione del diametro equivalente delle barre tese	ϕ_{eq}	12,00 [mm]
Coefficiente che tiene conto dell'aderenza migliorata delle barre	k_1	0,8 [-]
Coefficiente che tiene conto della flessione pura	k_2	0,5 [-]
	k_3	3,4 [-]
	k_4	0,425 [-]
Distanza massima tra le fessure	$s_{r,max}$	149,12 [mm]
		149,12 [mm]
Ampiezza delle fessure	w_k	0,1065 [mm]
Ampiezza massima delle fessure	w_{max}	0,3 [mm]

Calcolo dell'ampiezza delle fessure - Combinazione Frequente

Momento sollecitante per la combinazione Frequente	$M_{Ed,freq.}$	38,4 [kNm]
Durata del carico		lunga [-]
Posizione dell'asse neutro dal lembo superiore	x	45,07 [mm]
Tensione indotta nell'armatura tesa considerando la sezione fessurata	σ_s	211,79 [MPa]
Valore medio della resistenza a trazione efficace del calcestruzzo	$f_{ct,eff}$	2,8 [MPa]
Fattore dipendente dalla durata del carico	k_t	0,4 [-]
Altezza efficace	$h_{c,eff}$	34,9768821 [mm]
Area efficace del calcestruzzo teso attorno all'armatura	$A_{c,eff}$	62958,3877 [mm ²]
Rapporto geometrico sull'area efficace	$\rho_{o,eff}$	0,02515 [-]
Rapporto tra E_s/E_{cm}	α_e	6,44 [-]
Differenza tra la deformazione nell'acciaio e quella nel calcestruzzo	$\varepsilon_{sm} - \varepsilon_{cm}$	0,000759 [-]
		0,000759 [-]
Determinazione del diametro equivalente delle barre tese	ϕ_{eq}	12,00 [mm]
Coefficiente che tiene conto dell'aderenza migliorata delle barre	k_1	0,8 [-]
Coefficiente che tiene conto della flessione pura	k_2	0,5 [-]
	k_3	3,4 [-]
	k_4	0,425 [-]
Distanza massima tra le fessure	$s_{r,max}$	149,12 [mm]
		149,12 [mm]
Ampiezza delle fessure	w_k	0,1132 [mm]
Ampiezza massima delle fessure	w_{max}	0,4 [mm]

1.2.4 PROGETTO E VERIFICA PIANEROTTOLO

CARATTERISTICHE GEOMETRICHE



$L_c = 385 \text{ cm}$ (luce di calcolo)

$h = 24 \text{ cm}$ (altezza)

$c = 2 \text{ cm}$ (copriferro)

$d = 22 \text{ cm}$ (altezza utile)

ANALISI DEI CARICHI

Carichi permanenti strutturali (G_1)

- Peso proprio soletta 600 kg/m^2

$$G_1 = 625 \text{ kg/m}^2 \cdot 1,4 = \frac{\quad}{\quad} \quad \mathbf{840 \text{ kg/m}}$$

Carichi permanenti non strutturali (G_2)

- Pavimento 250 kg/m^2

$$G_2 = 250 \text{ kg/m}^2 \cdot 1,4 = \frac{\quad}{\quad} \quad \mathbf{350 \text{ kg/m}}$$

Carichi variabili (Q)

- Variabili 500 kg/m^2

$$Q_k = 500 \text{ kg/m}^2 \cdot 1,4 = \frac{\quad}{\quad} \quad \mathbf{700 \text{ kg/m}}$$

COMBINAZIONI DI CARICO

Stati Limite Ultimi:

$$q_d = (\gamma_{G1} \cdot G_{k1}) + (\gamma_{G2} \cdot G_{k2}) + (\gamma_Q \cdot Q_k) = (1,3 \cdot 840) + (1,5 \cdot 350) + (1,5 \cdot 700) = 2670 \text{ kg/m}$$

Stati Limite di Esercizio:

Combinazione rara: $q_{\text{rara}} = G_{k1} + G_{k2} + Q_k = 840+350+700 = 1890 \text{ kg/m}$
Combinazione frequente: $q_{\text{freq}} = G_{k1} + G_{k2} + (\psi_{11} \cdot Q_k) = 840+350+(0,7 \cdot 700) = 1680 \text{ kg/m}$
Combinazione quasi permanente: $q_{\text{q.p.}} = G_{k1} + G_{k2} + (\psi_{21} \cdot Q_k) = 840+350+(0,6 \cdot 700) = 1610 \text{ kg/m}$

ARMATURA

$A_s = 7,9 \text{ cm}^2$ (7 Φ 12) area ferro teso

$A's = 5,5 \text{ cm}^2$ (7 Φ 10) area ferro compresso

Armatura di ripartizione St. $\Phi 8 / 20''$

VERIFICHE PIANEROTTOLO

Stati Limite Ultimi:

- Flessione $M_{sd} = q_d \cdot (L_c)^2 / 8 = 4950 \text{ kgm}$
- Taglio $V_{sd} = q_d \cdot L_c / 2 = 5140 \text{ kg}$

Stati Limite di Esercizio:

Combinazione rara :

- Flessione $M_{\text{rara.}} = q_{\text{rara}} \cdot (L_c)^2 / 8 = 3500 \text{ kgm}$
- Taglio $V_{\text{rara.}} = q_{\text{rara}} \cdot L_c / 2 = 3640 \text{ kg}$

Combinazione frequente :

- Flessione $M_{\text{freq}} = q_{\text{freq}} \cdot (L_c)^2 / 8 = 3115 \text{ kgm}$
- Taglio $V_{\text{freq}} = q_{\text{freq}} \cdot L_c / 2 = 3235 \text{ kg}$

Combinazione quasi permanente :

- Flessione $M_{\text{q.p.}} = q_{\text{q.p.}} \cdot (L_c)^2 / 8 = 2985 \text{ kgm}$
- Taglio $V_{\text{q.p.}} = q_{\text{q.p.}} \cdot L_c / 2 = 3100 \text{ kg}$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

DEFINIZIONE DELLA GEOMETRIA			
SEZIONE TRASVERSALE			
Altezza della sezione trasversale di calcestruzzo	h	240	[mm]
Larghezza della sezione trasversale di calcestruzzo	b	2000	[mm]
Copriferro	d'	20	[mm]
Altezza utile della sezione	d	220	[mm]
ARMATURA TESA			
Diametro dei ferri correnti	ϕ_1	12	[mm]
Numero dei ferri correnti	n ₁	7	[-]
Diametro dei ferri di eventuale infittimento	ϕ_2	0	[mm]
Numero dei ferri di eventuale infittimento	n ₂	0	[-]
Area dell'armatura tesa	A _s	792	[mm ²]
ARMATURA COMPRESSA			
Diametro dei ferri correnti	ϕ'_1	10	[mm]
Numero dei ferri correnti	n' ₁	7	[-]
Diametro dei ferri di eventuale infittimento	ϕ'_2	0	[mm]
Numero dei ferri di eventuale infittimento	n' ₂	0	[-]
Area dell'armatura compressa	A' _s	550	[mm ²]
CAMPO 2a			
Posizione adimensionale dell'asse neutro	ξ	0,0959	[-]
Posizione dell'asse neutro	x	21,10	[mm]
Deformazione massima nel calcestruzzo	$\varepsilon_{c,max}$	0,0011	[-]
Deformazione massima dell'acciaio	$\varepsilon_{s,max}$	0,0100	[-]
Coefficiente di riempimento	β	0,4367	[-]
Coefficiente di baricentro	κ	0,3512	[-]
Coefficiente $\alpha'_s = \sigma'_s / f_{yd}$	α'_s	0,0297	[-]
Tensione nell'armatura compressa	σ'_s	11,64	[MPa]
Deformazione dell'armatura compressa	ε'_s	0,0001	[-]
Momento resistente della sezione	M_{Rd}	65,78	[kNm]
Momento sollecitante a SLU assunto in valore assoluto	M_{Ed}	49,5	[kNm]

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DETERMINAZIONE DELLE TENSIONI A SLS

Controllo tensionale per la Combinazione Caratteristica

Momento sollecitante assunto in valore assoluto	M_{Ed}	35,0	[kNm]
Coefficiente di omogeneizzazione	n	15,0	[-]
Altezza della sezione trasversale di calcestruzzo	h	240	[mm]
Larghezza della sezione trasversale di calcestruzzo	b	2000	[mm]
Copriferro	d'	20	[mm]
Altezza utile della sezione	d	220	[mm]
Area dell'armatura tesa	A_s	792	[mm ²]
Area dell'armatura compressa	$A's$	550	[mm ²]
Posizione dell'asse neutro	x	43,59	[mm]
Momento d'inerzia della sezione rispetto a x	J	429368430,3	[mm ⁴]
Tensione ammissibile nel calcestruzzo nella combinazione caratteristica	$\sigma_{c,caratt.}$	17,43	[MPa]
Tensione ammissibile nell'acciaio per le combinazioni a SLS	σ_s	360	[MPa]
Tensione nel calcestruzzo	σ_c	3,55	[MPa]
Tensione nell'armatura tesa	σ_s	215,70	[MPa]

Controllo tensionale per la Combinazione Quasi Permanente

Momento sollecitante assunto in valore assoluto	M_{Ed}	29,9	[kNm]
Coefficiente di omogeneizzazione	n	15,0	[-]
Altezza della sezione trasversale di calcestruzzo	j	240	[-]
Larghezza della sezione trasversale di calcestruzzo	b	2000	[-]
Copriferro	d'	20	[-]
Altezza utile della sezione	d'	220	[-]
Area dell'armatura tesa	A_s	792	[mm ²]
Area dell'armatura compressa	$A's$	550	[mm ²]
Posizione dell'asse neutro	x	43,59	[mm]
Momento d'inerzia della sezione rispetto a x	J	429368430,3	[mm ⁴]
Tensione ammissibile nel calcestruzzo nella combinazione quasi permanente	$\sigma_{c,q.p.}$	13,0725	[MPa]
Tensione ammissibile nell'acciaio per le combinazioni a SLS	σ_s	360	[MPa]
Tensione nel calcestruzzo	σ_c	3,04	[MPa]
Tensione nell'armatura tesa	σ_s	184,27	[MPa]

CONTROLLO DI FESSURAZIONE A SLS		
Calcolo dell'ampiezza delle fessure - Combinazione Quasi Permanente		
Momento sollecitante per la combinazione Quasi Permanente	$M_{Ed,q.p.}$	29,9 [kNm]
Durata del carico		lunga [-]
Posizione dell'asse neutro dal lembo superiore	x	43,59 [mm]
Tensione indotta nell'armatura tesa considerando la sezione fessurata	σ_s	184,27 [MPa]
Valore medio della resistenza a trazione efficace del calcestruzzo	$f_{ct,eff}$	2,8 [MPa]
Fattore dipendente dalla durata del carico	k_t	0,4 [-]
Altezza efficace	$h_{c,eff}$	50 [mm]
Area efficace del calcestruzzo teso attorno all'armatura	$A_{c,eff}$	100000 [mm ²]
Rapporto geometrico sull'area efficace	$\rho_{p,eff}$	0,00792 [-]
Rapporto tra E_s/E_{cm}	α_e	6,44 [-]
Differenza tra la deformazione nell'acciaio e quella nel calcestruzzo	$\varepsilon_{sm} - \varepsilon_{cm}$	0,000161 [-] 0,000526 [-]
Determinazione del diametro equivalente delle barre tese	ϕ_{eq}	12,00 [mm]
Coefficiente che tiene conto dell'aderenza migliorata delle barre	k_1	0,8 [-]
Coefficiente che tiene conto della flessione pura	k_2	0,5 [-]
	k_3	3,4 [-]
	k_4	0,425 [-]
Distanza massima tra le fessure	$s_{r,max}$	325,68 [mm] 255,33 [mm]
Ampiezza delle fessure	w_k	0,1344 [mm]
Ampiezza massima delle fessure	w_{max}	0,3 [mm]
Calcolo dell'ampiezza delle fessure - Combinazione Frequente		
Momento sollecitante per la combinazione Frequente	$M_{Ed,freq.}$	31,2 [kNm]
Durata del carico		lunga [-]
Posizione dell'asse neutro dal lembo superiore	x	43,59 [mm]
Tensione indotta nell'armatura tesa considerando la sezione fessurata	σ_s	192,28 [MPa]
Valore medio della resistenza a trazione efficace del calcestruzzo	$f_{ct,eff}$	2,8 [MPa]
Fattore dipendente dalla durata del carico	k_t	0,4 [-]
Altezza efficace	$h_{c,eff}$	50 [mm]
Area efficace del calcestruzzo teso attorno all'armatura	$A_{c,eff}$	100000 [mm ²]
Rapporto geometrico sull'area efficace	$\rho_{p,eff}$	0,00792 [-]
Rapporto tra E_s/E_{cm}	α_e	6,44 [-]
Differenza tra la deformazione nell'acciaio e quella nel calcestruzzo	$\varepsilon_{sm} - \varepsilon_{cm}$	0,000199 [-] 0,000549 [-]
Determinazione del diametro equivalente delle barre tese	ϕ_{eq}	12,00 [mm]
Coefficiente che tiene conto dell'aderenza migliorata delle barre	k_1	0,8 [-]
Coefficiente che tiene conto della flessione pura	k_2	0,5 [-]
	k_3	3,4 [-]
	k_4	0,425 [-]
Distanza massima tra le fessure	$s_{r,max}$	325,68 [mm] 255,33 [mm]
Ampiezza delle fessure	w_k	0,1403 [mm]
Ampiezza massima delle fessure	w_{max}	0,4 [mm]

1.2.5 PROGETTO E VERIFICA TRAVE PORTA RAMPE

CARATTERISTICHE GEOMETRICHE

b = 60 cm (larghezza trave)

L_c = 385 cm (luce di calcolo)

h = 24 cm (altezza)

c = 2 cm (copriferro)

d = 22 cm (altezza utile)

ANALISI DEI CARICHI

Carichi permanenti strutturali (G₁)

- Peso proprio rampa portata 878 kg/m
- Peso proprio trave 360 kg/m

$$G_1 = 878 \text{ kg/m} \cdot (L_c/2) / 1,8 + 360 = \underline{\underline{1360 \text{ kg/m}}}$$

Carichi permanenti non strutturali (G₂)

- Peso pavimento rampa 395 kg/m

$$G_2 = 395 \text{ kg/m} \cdot (L_c/2) / 1,8 = \underline{\underline{450 \text{ kg/m}}}$$

Carichi variabili (Q)

- Variabili rampa 785 kg/m

$$Q_k = 785 \text{ kg/m} \cdot (L_c/2) / 1,8 = \underline{\underline{895 \text{ kg/m}}}$$

COMBINAZIONI DI CARICO

Stati Limite Ultimi:

$$q_d = (\gamma_{G1} \cdot G_{k1}) + (\gamma_{G2} \cdot G_{k2}) + (\gamma_Q \cdot Q_k) = (1,3 \cdot 1360) + (1,5 \cdot 450) + (1,5 \cdot 895) = 3785 \text{ kg/m}$$

Stati Limite di Esercizio:

$$\text{Combinazione rara: } q_{\text{rara}} = G_{k1} + G_{k2} + Q_k = 1360 + 450 + 895 = 2705 \text{ kg/m}$$

Combinazione frequente: $q_{freq} = G_{k1} + G_{k2} + (\psi_{11} \cdot Q_k) = 1360 + 450 + (0,7 \cdot 895) = 2440 \text{ kg/m}$
 Combinazione quasi permanente: $q_{q.p.} = G_{k1} + G_{k2} + (\psi_{21} \cdot Q_k) = 1360 + 450 + (0,6 \cdot 895) = 2350 \text{ kg/m}$

ARMATURA

$A_s = 12,1 \text{ cm}^2$ (6 Φ 16) area ferro teso

$A'_s = 6,8 \text{ cm}^2$ (6 Φ 12) area ferro compresso

Armatura di ripartizione St. $\Phi 8 / 15''$

VERIFICHE TRAVE PORTA RAMPE

Stati Limite Ultimi:

- Flessione $M_{sd} = q_d \cdot (L_c)^2 / 8 = 7015 \text{ kgm}$
- Taglio $V_{sd} = q_d \cdot L_c / 2 = 7290 \text{ kg}$
- Momento resistente $M_{Rd} = 9585 \text{ kgm}$
- Taglio resistente

$$V_{Rsd} = 0,9 \cdot d \cdot \frac{A_{sw}}{s} \cdot f_{yd} \cdot (ctg\alpha + ctg\theta) \cdot \sin\alpha = 0,9 \cdot 22 \cdot \frac{1,0}{15} \cdot 3913 \cdot 1,5 = 7750 \text{ kg}$$

$$V_{Rcd} = 0,9 \cdot d \cdot b_w \cdot \alpha_c \cdot f'_{cd} \cdot \frac{(ctg\alpha + ctg\theta)}{(1 + ctg^2\theta)} = 0,9 \cdot 22 \cdot 60 \cdot 0,5 \cdot 164,6 \cdot \frac{1,5}{3,25} = 45125 \text{ kg}$$

Titolo: Trave Porta Rampe

N° strati barre: 2 Zoom

N°	b [cm]	h [cm]	N°	As [cm²]	d [cm]
1	60	24	1	12,06	22
			2	6,79	2

Tipologia sezione: Rettan.re Trapezi
 a T Circolare
 Rettangoli Coord.

Diagramma di sezione:

Sollecitazioni: S.L.U. Metodo n

Carichi: $N_{Ed} = 0$ kN, $M_{xEd} = 0$ kNm, $M_{yEd} = 0$ kNm

P.to applicazione N: Centro Baricentro cls
 Coord.[cm] xN: 0, yN: 0

Tipologia rottura: Lato calcestruzzo - Acciaio snervato

M_{Rd}: 95,85 kNm

Materiali:

Proprietà	B450C	C28/35
ϵ_{su}	67,5 ‰	2 ‰
f_{yd}	391,3 N/mm²	3,5
E_s	200.000 N/mm²	15,87
E_s/E_c	15	0,8
ϵ_{syd}	1,957 ‰	11
$\sigma_{s,adm}$	255 N/mm²	0,6667
τ_{c1}		1,971

Proprietà di calcolo:

σ_c	-15,87 N/mm²
σ_s	391,3 N/mm²
ϵ_c	3,5 ‰
ϵ_s	18,57 ‰
d	22 cm
x	3,488 x/d
	0,1586
δ	0,7

Metodo di calcolo: S.L.U.+ S.L.U.- Metodo n

Tipologia flessione: Retta Deviata

N° rett.: 100

Calcola MRd Dominio M-N

L₀: 0 cm Col. modello

Precompresso

Stati Limite di Esercizio:

Combinazione rara :

- Flessione $M_{\text{rara.}} = q_{\text{rara}} \cdot (L_c)^2/8 = 5015 \text{ kgm}$
- Taglio $V_{\text{rara.}} = q_{\text{rara}} \cdot L_c/2 = 5210 \text{ kg}$
- Tensione nell'acciaio $\sigma_{\text{rara.}} = 2133 \text{ kg/cm}^2$
- Tensione nel cls $\sigma_{\text{rara.}} = 81,3 \text{ kg/cm}^2$

Titolo: Trave Porta Rampe

N° strati barre: 2

N°	b [cm]	h [cm]	N°	As [cm²]	d [cm]
1	60	24	1	12,06	22
			2	6,79	2

Tipologia Sezione: Rettan.re Trapezi
 a T Circolare
 Rettangoli Coord.

Sollecitazioni: S.L.U. Metodo n

P.to applicazione N: Centro Baricentro cls
 Coord.[cm] xN: 0 yN: 0

Materiali: B450C C28/35

ϵ_{su} 67,5 ‰	ϵ_{c2} 2 ‰	σ_c -8,13 N/mm ²
f_{yd} 391,3 N/mm ²	ϵ_{cu} 3,5 ‰	σ_s 213,3 N/mm ²
E_s 200.000 N/mm ²	f_{cd} 15,87	ϵ_s 1,067 ‰
E_s/E_c 15	f_{cc}/f_{cd} 0,8	d 22 cm
ϵ_{syd} 1,957 ‰	$\sigma_{c,adm}$ 11	x 8,002 x/d 0,3637
$\sigma_{s,adm}$ 255 N/mm ²	τ_{co} 0,6667	δ 0,8947
	τ_{c1} 1,971	

Metodo di calcolo: S.L.U.+ S.L.U.- Metodo n

Verifica: N° iterazioni: 4

Precompresso

Combinazione frequente :

- Flessione $M_{\text{freq}} = q_{\text{freq}} \cdot (L_c)^2/8 = 4520 \text{ kgm}$
- Taglio $V_{\text{freq}} = q_{\text{freq}} \cdot L_c/2 = 4700 \text{ kg}$
- Tensione nell'acciaio $\sigma_{\text{freq.}} = 1923 \text{ kg/cm}^2$
- Tensione nel cls $\sigma_{\text{freq.}} = 73,3 \text{ kg/cm}^2$

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Titolo: Trave Porta Rampe

N° strati barre: 2 Zoom

N°	b [cm]	h [cm]
1	60	24

N°	As [cm²]	d [cm]
1	12,06	22
2	6,79	2

Tipologia Sezione:
 Rettan.re Trapezi
 a T Circolare
 Rettangoli Coord.

Sezione C.A.
 File

Metodo di calcolo:
 S.L.U.+ S.L.U.-
 Metodo n

Sollecitazioni:
 S.L.U. Metodo n
 N_{Ed} 0 0 kN
 M_{Ed} 0 45,20 kNm
 M_{yEd} 0 0

P.to applicazione N:
 Centro Baricentro cls
 Coord.[cm] xN 0 yN 0

Materiali:
 B450C C28/35
 ε_{su} 67,5 ‰ ε_{c2} 2 ‰
 f_{yd} 391,3 N/mm² ε_{cu} 3,5 ‰
 E_s 200.000 N/mm² f_{cd} 15,87 ‰
 E_s/E_c 15 f_{cc}/f_{cd} 0,8
 ε_{syd} 1,957 ‰ σ_{c,adm} 11
 σ_{s,adm} 255 N/mm² τ_{co} 0,6667
 τ_{c1} 1,971

σ_c -7,327 N/mm²
 σ_s 192,3 N/mm²
 ε_s 0,9613 ‰
 d 22 cm
 x 8,002 x/d 0,3637
 δ 0,8947

Verifica N° iterazioni: 4

Precompresso

Combinazione quasi permanente :

- Flessione $M_{q.p.} = q_{q.p.} \cdot (L_c)^2/8 = 4360 \text{ kgm}$
- Taglio $V_{q.p.} = q_{q.p.} \cdot L_c/2 = 4525 \text{ kg}$
- Tensione nell'acciaio $\sigma_{q.p.} = 1855 \text{ kg/cm}^2$
- Tensione nel cls $\sigma_{q.p.} = 70,7 \text{ kg/cm}^2$

Titolo: Trave Porta Rampe

N° strati barre: 2 Zoom

N°	b [cm]	h [cm]
1	60	24

N°	As [cm²]	d [cm]
1	12,06	22
2	6,79	2

Tipologia Sezione:
 Rettan.re Trapezi
 a T Circolare
 Rettangoli Coord.

Sezione C.A.
 File

Metodo di calcolo:
 S.L.U.+ S.L.U.-
 Metodo n

Sollecitazioni:
 S.L.U. Metodo n
 N_{Ed} 0 0 kN
 M_{Ed} 0 43,60 kNm
 M_{yEd} 0 0

P.to applicazione N:
 Centro Baricentro cls
 Coord.[cm] xN 0 yN 0

Materiali:
 B450C C28/35
 ε_{su} 67,5 ‰ ε_{c2} 2 ‰
 f_{yd} 391,3 N/mm² ε_{cu} 3,5 ‰
 E_s 200.000 N/mm² f_{cd} 15,87 ‰
 E_s/E_c 15 f_{cc}/f_{cd} 0,8
 ε_{syd} 1,957 ‰ σ_{c,adm} 11
 σ_{s,adm} 255 N/mm² τ_{co} 0,6667
 τ_{c1} 1,971

σ_c -7,068 N/mm²
 σ_s 185,5 N/mm²
 ε_s 0,9273 ‰
 d 22 cm
 x 8,002 x/d 0,3637
 δ 0,8947

Verifica N° iterazioni: 4

Precompresso

2 PROGETTO E VERIFICA SOLAI

2.1 RELAZIONE SUI MATERIALI

2.1.1 ELENCO MATERIALI IMPIEGATI E LORO MODALITA' DI POSA IN OPERA

- Calcestruzzo:

Norma UNI EN 206-1 : 2006	
<i>Classe di resistenza</i>	<i>C28/35</i>
<i>Classe di esposizione</i>	<i>XC1 (I)</i>
<i>Contenuto max di cloruri</i>	<i>Cl 0.20</i>
<i>Dimensione nominale max degli inerti</i>	<i>D_{MAX} 20</i>
<i>Classe di consistenza</i>	<i>S4</i>

- Acciaio per calcestruzzo armato: B450C (saldabile)

2.1.2 VALORI DI CALCOLO

- **Calcestruzzo (C28/35):**

C28/35	N/mm²	CLASSE DI RESISTENZA
$R_{ck} = 350$	kg/cm ²	resistenza cubica alla compressione – valore caratteristico
$f_{ck} = 290.5$	kg/cm ²	resistenza cilindrica alla compressione – valore caratteristico
$f_{cd} = 164.6$	kg/cm ²	resistenza di calcolo alla compressione (SLU)
$f_{ctm} = 27.1$	kg/cm ²	resistenza media a trazione semplice
$f_{ctm} = 32.6$	kg/cm ²	resistenza media a trazione per flessione
$f_{ctd} = 12.9$	kg/cm ²	resistenza di calcolo a trazione (SLU)
$\sigma_c = 174.3$	kg/cm ²	tensione massima di compressione per combinazioni rare (SLE)
$\sigma_c = 130.7$	kg/cm ²	tensione massima di compress. per combinazione quasi perm. (SLE)
$E_c = 325881$	kg/cm ²	modulo elastico

- **Acciaio per calcestruzzo armato (B450C):**

B450C		
$f_{yk} = 4500$	kg/cm ²	tensione caratteristica di snervamento
$f_{yd} = 3913$	kg/cm ²	resistenza di calcolo (SLU)
$\sigma_s = 3600$	kg/cm ²	tensione massima in condizioni di esercizio (SLE)
$E_s = 2100000$	kg/cm ²	modulo elastico

2.2 RELAZIONE DI CALCOLO STRUTTURALE

2.2.1 QUADRO NORMATIVO DI RIFERIMENTO

NORME DI RIFERIMENTO COGENTI

- D.M. del 14 Gennaio 2008: *"NORME TECNICHE PER LE COSTRUZIONI"*.

ALTRE NORME E DOCUMENTI TECNICI INTEGRATIVI

- Circolare 2 Febbraio 2009, n. 617 del Ministero delle Infrastrutture e dei Trasporti approvata dal Consiglio Superiore dei Lavori Pubblici – *"ISTRUZIONI PER L'APPLICAZIONE DELLE "NUOVE NORME TECNICHE PER LE COSTRUZIONI"*
- Norma Europea: Eurocodice 2 "Progettazione delle strutture in calcestruzzo / Parte 1-1: Regole generali e regole per gli edifici" UNI EN 1992-1-1 Novembre 2005.
- Norma UNI EN 206-1 : 2006

2.2.2 SCHEMI E METODI DI CALCOLO

Il solaio a più campate è risolto secondo lo schema della trave continua.

Le combinazioni di carichi considerate sono le più gravose per la determinazione delle sollecitazioni massime in campata e sugli appoggi.

Il calcolo delle sollecitazioni è eseguito secondo gli Stati Limite Ultimi, adottando come coeff. di incremento dei carichi:

Carichi permanenti strutturali : $g_1 = 1,30$

Carichi perm. non strutturali : $g_2 = 1,50$

Carichi variabili: $q = 1,50$

I valori dei Momenti Massimi Negativi, in corrispondenza dell'asse degli appoggi intermedi, sono quelli effettivi, senza tener conto del raccordo parabolico del diagramma per maggiore rigidità dell'appoggio rispetto il solaio.

In campata si assume, ai fini del calcolo dell'armatura, un momento minimo pari a: $1/24 ql^2$

All'estremità delle campate senza mensole si assume comunque un momento negativo pari a: $1/16 ql^2$

Le verifiche sono condotte nei confronti degli Stati Limite Ultimi e degli Stati Limite di Esercizio :

- Stato Limite di Tensione
- Stato Limite di Fessurazione
- Stato Limite di Deformazione

2.2.3 PROGETTO E VERIFICA SOLAIO TIPO

Verifica in campata: è eseguita in corrispondenza del momento massimo di campata.

Verifica su appoggi: è eseguita ad asse appoggi valutando la sezione in c.a. piena.

Verifica fine appoggi: è eseguita sul bordo dell'appoggio, con momento opportunamente ridotto e sezione dello spessore della canaletta.

Note: se la verifica a fine appoggio non è soddisfatta, viene ripetuta ad una distanza dal bordo appoggio tale da garantire il rispetto della resistenza ultima della sez. del solaio; la distanza è indicata come banchinaggio.

La rete superiore non è considerata collaborante nella verifica ai momenti negativi.

L'armatura di confezione inferiore (rete e/o tralicci) non è considerata collaborante ai fini della verifica

Verifica al taglio: è indicato il valore del taglio di calcolo a bordo appoggio (V_d .filo) e il valore del taglio ultimo senza armatura (V_{rd1}).

Se: $V_d > V_{rd1}$ si calcola la distanza alla quale risulta : ($V_d = V_{rd1}$) tale distanza è indicata come banchinaggio.

Note: il valore del Taglio (V_d .asse) è il taglio di calcolo ad asse appoggio, utile per la determinazione della reazione vincolare.

STATO LIMITE DI DEFORMAZIONE

- f.max (1° pagina): valore della freccia istantanea (comb. rara) con sezione non fessurata
- freccia a tempo inf.: calcolata con sezione fessurata e modulo elastico ridotto (comb. quasi perm.). Verifica stato limite di Deformazione

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
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Solaio tipo

acc. : $f_{yk} = 4500 \text{ daN/cm}^2$
 cls. : $R_{ck} = 350 \text{ daN/cm}^2$
 Coeff.Car.Perm. Strutturali = 1,30
 Coeff.Car.Perm. Non Strutt. = 1,50

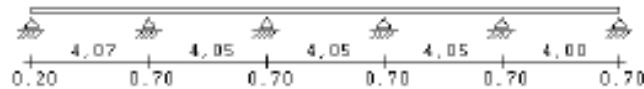
$f_{yd} = f_{yk} / 1,15 = 3913 \text{ daN/cm}^2$
 $f_{cd} = 0,85 \times f_{ck} / 1,50 = 159 \text{ daN/cm}^2$
 $E_c = 323080 \text{ daN/cm}^2$

Solaio Lastra-Predalle

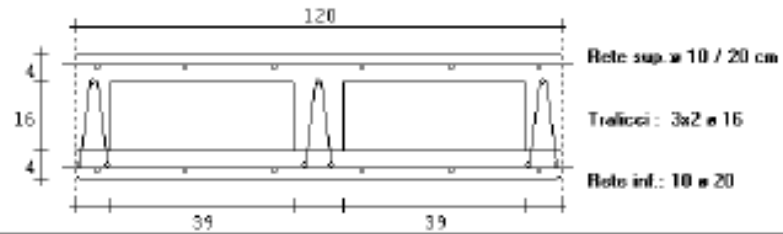
copriferro sup : 3,00 cm
 copriferro inf : 3,00 cm
 Coeff.Car.Variabili = 1,50
 Coeff.Car.Sismici = 0,60

CARICHI (daN/m²)

Q	300	300	300	300	300
G2	100	100	100	100	100
G1	200	200	200	200	200
P.P.	340	340	340	340	340



f.max. (cm)	-0,065	-0,028	-0,040	-0,029	-0,061
f/l	1/6256	1/14419	1/10210	1/14150	1/6611



Rete Sup.: Non Collaborante
 Rete Inf.: Non Collaborante

MOMENTI MAX. (+) IN CAMPATA

asta	Md[daNm]	Mslu[daNm]	arm.inf.[cm²]	arm.sup.[cm²]	M.reale[daNm]
1	2342	< 2533	1Ø10+1Ø10+2Ø10 (3,14)		2342
2	(2017)	< 2184	1Ø12+2Ø10 (2,70)		1537
3	(2017)	< 2184	1Ø12+2Ø10 (2,70)		1769
4	(2017)	< 2184	1Ø12+2Ø10 (2,70)		1543
5	2265	< 2533	1Ø10+1Ø10+2Ø10 (3,14)		2265

MOMENTI MAX. (-) ASSE-FILO APPOGGI

app.	Md[daNm]	Mfilo	Mslu[daNm]	arm.sup.[cm²]	arm.inf.[cm²]	M.reale[daNm]
1	-1618	< -1619	-1660	2Ø8+2Ø8 (2,01)	(0,33)	0
dx.						
ax.	-1662	< -3086		(3,83)		
2	-2931	< -3086		2Ø10+2Ø12 (3,83)		-2931
dx.	-1766	< -3086		(3,83)		
ax.	-1417	< -2533		(3,14)		
3	-2502	< -2533		2Ø10+2Ø10 (3,14)		-2502
dx.	-1375	< -2533		(3,14)		
ax.	-1383	< -2533		(3,14)		
4	-2513	< -2533		2Ø10+2Ø10 (3,14)		-2513
dx.	-1425	< -2533		(3,14)		
ax.	-1711	< -3086		(3,83)		
5	-2869	< -3086		2Ø10+2Ø12 (3,83)		-2869
dx.	-1620	< -3086		(3,83)		
ax.		< -939		(1,16)		
6	-1562	< -1619		2Ø8+2Ø8 (2,01)		0

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TAGLIO MAX. ESTREMITA'

app.	Vd.asse[daN]	Vd.filo	VRd [daN]	banch.Taglio(cm)	banch.Mom.(cm)
1 sx.					
1 dx.	2705	2549	< 8001		
2 sx.	3900	3353	< 8001		
2 dx.	3602	3055	< 4809		
3 sx.	3375	2828	< 8001		
3 dx.	3496	2949	< 4537		
4 sx.	3504	2957	< 8001		
4 dx.	3384	2837	< 4537		
5 sx.	3582	3035	< 8001		
5 dx.	3842	3295	< 4809		
6 sx.	2660	2114	< 8001		
6 dx.					

$$ro = Asl / (bw d)$$

incidenza armatura longitudinale $\leq 2\%$

$$VRd = [0.18 k (100 ro fck)^{1/3}] / 1,50 bw d$$

$$VRmin = [0.035 k^{3/2} fck^{1/2}] bw d$$

Taglio Res.senza staffe

$$k = 1 + (20/d)^{1/2} \leq 2$$

Taglio Res.Min.

$$VRd \geq VRmin$$

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STATO LIMITE DI TENSIONI DI ESERCIZIO

Condizioni ambientali : ordinarie (a)

Asta	Q.var.	M[daNm]	$\sigma.f.$ [daN/cm ²]	$\sigma.c.t$ [daN/cm ²]	$\sigma.c.c$ [daN/cm ²]
1	RARA	1580		16,09	16,79 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	1401		14,27	14,88 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	1342		13,67	14,26 < 130,73 = 0,45 fck
2	RARA	883		9,06	9,40 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	743		7,62	7,91 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	696		7,14	7,41 < 130,73 = 0,45 fck
3	RARA	1083		11,11	11,52 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	932		9,56	9,92 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	881		9,04	9,37 < 130,73 = 0,45 fck
4	RARA	892		9,15	9,49 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	752		7,72	8,00 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	705		7,23	7,50 < 130,73 = 0,45 fck
5	RARA	1524		15,52	16,19 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	1351		13,76	14,35 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	1294		13,18	13,75 < 130,73 = 0,45 fck

Tensione di Trazione CLS : $f_{ctm}/1.2$ 23,05 {sez.non fessurata}

Tensione di Trazione ACC : $0.8 f_{yk}$ 3600 {sez. fessurata}

Nodo	Q.var.	M[daNm]	$\sigma.f.$ [daN/cm ²]	$\sigma.c.t$ [daN/cm ²]	$\sigma.c.c$ [daN/cm ²]
1	RARA	0			
	FREQUENTE (0,7)	0			
	QUASI FERM.(0,6)	0			
2	RARA	-2046		20,61	21,68 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	-1833		18,46	19,43 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	-1762		17,74	18,67 < 130,73 = 0,45 fck
3	RARA	-1647		16,78	17,50 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	-1450		14,77	15,41 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	-1384		14,10	14,70 < 130,73 = 0,45 fck
4	RARA	-1658		16,89	17,62 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	-1461		14,88	15,52 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	-1395		14,21	14,82 < 130,73 = 0,45 fck
5	RARA	-2000		20,14	21,20 < 174,30 = 0.60 fck
	FREQUENTE (0,7)	-1791		18,04	18,98 < 130,73 = 0,45 fck
	QUASI FERM.(0,6)	-1721		17,33	18,24 < 130,73 = 0,45 fck
6	RARA	0			
	FREQUENTE (0,7)	0			
	QUASI FERM.(0,6)	0			

Tensione di Trazione CLS : $f_{ctm}/1.2$ 23,05 {sez.non fessurata}

Tensione di Trazione ACC : $0.8 f_{yk}$ 3600 {sez. fessurata}

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STATO LIMITE DI FESSURAZIONE

Condizioni ambientali : Ordinarie

Asta	Comb.Carichi : FREQUENTE		Comb.Carichi : QUASI PERMANENTE	
	$E_{sm} \times S_{rm}$	$= W_n \times 1,70 = W_k$ (mm)	$E_{sm} \times S_{rm}$	$= W_n \times 1,70 = W_k$ (mm)
1	$0,00043 \times 140,85 = 0,0610$	$0,104 < 0,40$	$0,00041 \times 140,85 = 0,0577$	$0,098 < 0,30$
2	$0,00026 \times 171,28 = 0,0450$	$0,077 < 0,40$	$0,00025 \times 171,28 = 0,0428$	$0,073 < 0,30$
3	$0,00033 \times 171,28 = 0,0570$	$0,097 < 0,40$	$0,00031 \times 171,28 = 0,0531$	$0,090 < 0,30$
4	$0,00027 \times 171,28 = 0,0460$	$0,078 < 0,40$	$0,00025 \times 171,28 = 0,0428$	$0,073 < 0,30$
5	$0,00041 \times 140,85 = 0,0580$	$0,099 < 0,40$	$0,00040 \times 140,85 = 0,0563$	$0,096 < 0,30$

Nodo	Comb.Carichi : FREQUENTE		Comb.Carichi : QUASI PERMANENTE	
	$E_{sm} \times S_{rm}$	$= W_n \times 1,70 = W_k$ (mm)	$E_{sm} \times S_{rm}$	$= W_n \times 1,70 = W_k$ (mm)
1				
2	$0,00004 \times 137,49 = 0,0050$	$0,009 < 0,40$	$0,00004 \times 137,49 = 0,0055$	$0,009 < 0,30$
3	$0,00003 \times 137,49 = 0,0040$	$0,007 < 0,40$	$0,00003 \times 137,49 = 0,0041$	$0,007 < 0,30$
4	$0,00003 \times 137,49 = 0,0040$	$0,007 < 0,40$	$0,00003 \times 137,49 = 0,0041$	$0,007 < 0,30$
5	$0,00004 \times 137,49 = 0,0050$	$0,009 < 0,40$	$0,00004 \times 137,49 = 0,0055$	$0,009 < 0,30$
6				

E_{sm} = deformazione media
 S_{rm} = distanza media tra le fessure (mm)
 $W_n = E_{sm} \times S_{rm}$: valore medio dell'apertura
 $W_k = 1,7 \times W_n$: valore caratteristico apertura

$S_{rm} = 2 (c + s/10) + k_1 k_2 s/r_0$
 c = copriferro
 s = interasse barre ($\leq 14 \phi$)
 $k_1 = 0,4$ per acciaio aderenza migliorata
 $k_2 = 0,125$ per flessione
 $r_0 = A_f / A_{c,eff}$ (rapporto tra Area Ferro e Area Cls efficace)

$E_{sm} = \sigma_s / E_s \zeta$
 $\zeta = 1 - \beta_1 \beta_2 (f_{ctm} / \sigma_{c,t})^2$
 σ_s = trazione acciaio in fase fessurata
 $\sigma_{c,t}$ = trazione cls in fase non fessurata
 $\beta_1 = 1,0$ per barre nervate : coeff. di aderenza
 $\beta_2 = 1,0$ per azioni breve durata (cdc rare)
 $0,5$ per azioni lunga durata (cdc frequenti/quasi permanenti)
 $f_{ctm} = 33,20$ (daN/cm²) resistenza media di trazione per flessione nel cls
 $f_{ctm} = 1,2 f_{ctm}$
 $f_{ctm} = 0,3 \times (f_{ck})^{(2/3)}$ f_{ck} (N/mm²)

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STATO LIMITE DI DEFORMAZIONE

Snellezza Limite Campate

Asta	L[cm]	h[cm]	$\lambda=L/h$	λ_{lim}	k	ρ	ρ'	$\frac{500 A_{s,eff.}}{f_{yk} A_{s,calc}}$
1	407	24	17 <	30	1,30		0,00192	1,202
2	405	24	17 <	30	1,50		0,00166	1,579
3	405	24	17 <	30	1,50		0,00166	1,372
4	405	24	17 <	30	1,50		0,00166	1,573
5	400	24	17 <	30	1,30		0,00192	1,243

Freccia a tempo infinito per carico Quasi Permanente

Asta	Jc[cm4]	Jf[cm4]	Mf[daNm]	$\phi_{(inf)}$	Ec[daN/cm²]	E(t=inf)	f(cm)	f/L
1	111616	15570	2573	2,02	323080	106944	0,164	1/2475
2	111616	13269	2573	2,02	323080	106944	0,061	1/6608
3	111616	13269	2573	2,02	323080	106944	0,094	1/4325
4	111616	13269	2573	2,02	323080	106944	0,063	1/6433
5	111616	15570	2573	2,02	323080	106944	0,153	1/2621

Jc = Inerzia sezione non fessurata
 Jf = Inerzia sezione fessurata
 Mf = Momento di fessurazione

$$Mf = f_{ctm} \times W_i$$

$$f_{ctm} = 0,3 \times (f_{ck})^{2/3} = 2,766 \text{ N/mm}^2$$

Ec = Modulo elastico medio cls

E(inf) = Modulo elastico per carichi di lunga durata

$$E(inf) = Ec / (1 + \phi_{(inf)})$$

f(cm) = freccia per carico quasi permanente

$\phi_{(inf)}$ = coefficiente di viscosità a tempo infinito

$$J^* = \zeta Jf + (1 - \zeta) Jc \quad \text{Inerzia ridotta di calcolo freccia}$$

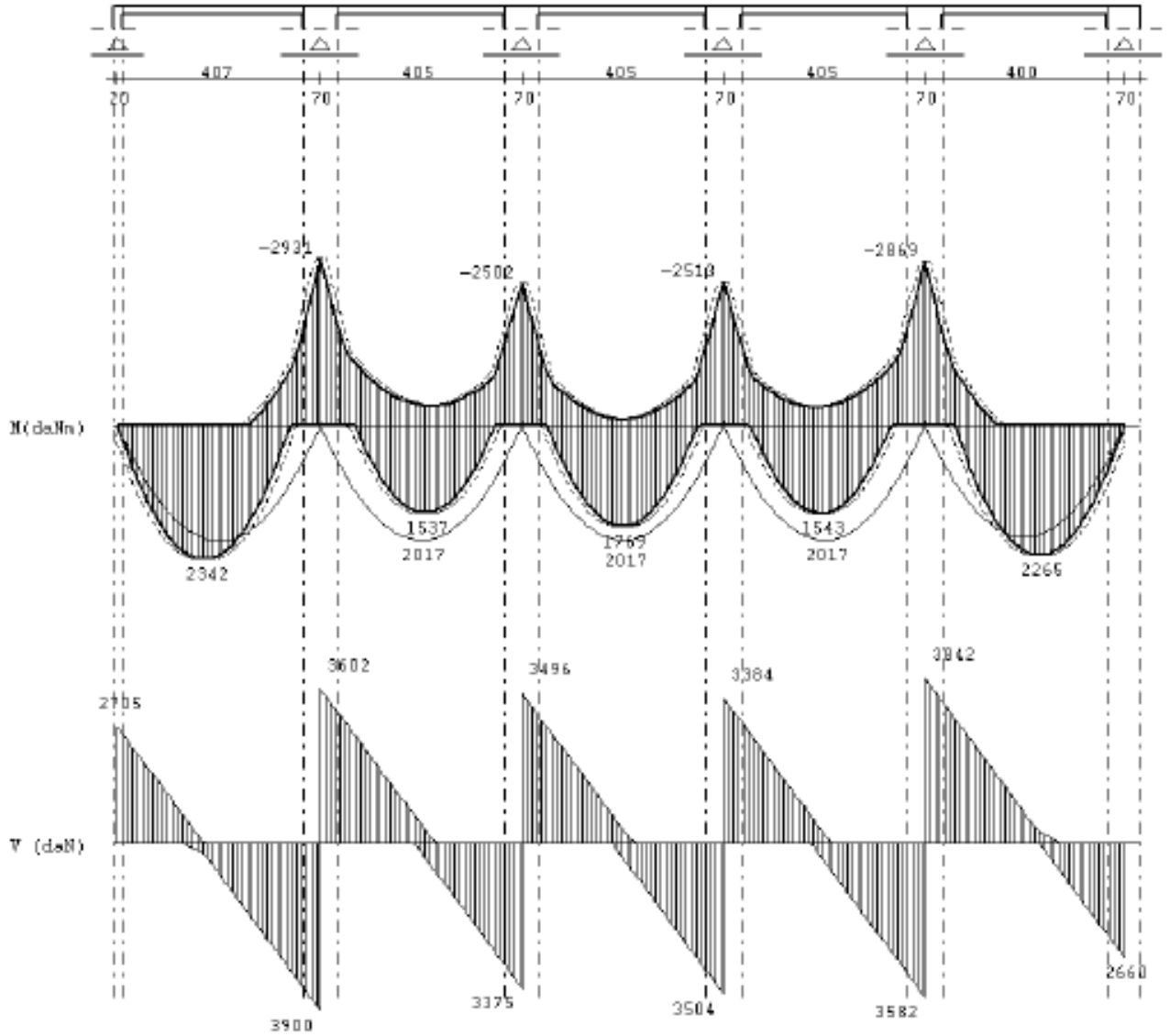
$$\zeta = 1 - c (Mf/M)^2 \quad c = 0.5 \text{ (carico lunga durata)}$$

$$\lambda_{lim} = k \left(11 + \frac{0,0015 f_{ck}}{(\rho + \rho')} \right) \times \left(\frac{500 A_{s,eff}}{f_{yk} A_{s,calc}} \right)$$

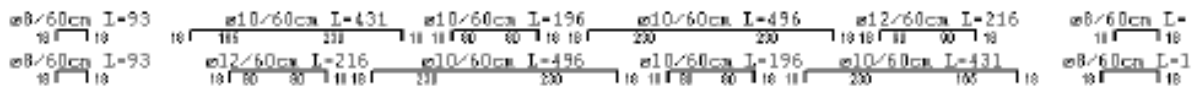
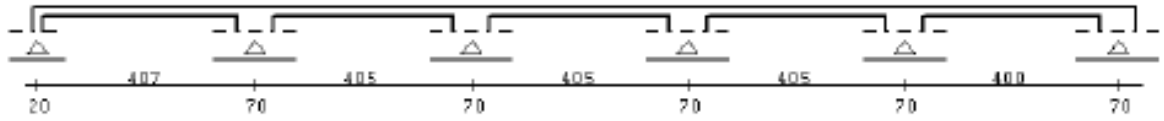
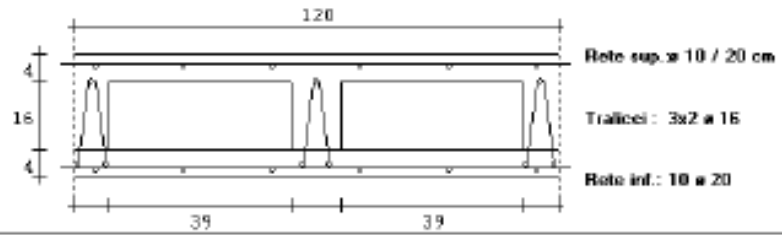
$(\rho + \rho')$ = incidenza armatura sup. e inf.

As,eff = Armatura effettivamente presente
 As,calc = Armatura richiesta da calcolo

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C - 1ø10 L=407
C - 1ø10 L=340
I - 2ø10 L=407

C - 1ø12 L=405
I - 2ø10 L=405

C - 1ø12 L=405
I - 2ø10 L=405

C - 1ø12 L=405
I - 2ø10 L=405

C - 1ø10 L=400
C - 1ø10 L=320

I - 2ø10 L=400

3 PROGETTO E VERIFICA MURI CONTROTERRA

3.1 RELAZIONE SUI MATERIALI

3.1.1 ELENCO MATERIALI IMPIEGATI E LORO MODALITA' DI POSA IN OPERA

- Calcestruzzo:

Norma UNI EN 206-1 : 2006	
<i>Classe di resistenza</i>	<i>C28/35</i>
<i>Classe di esposizione</i>	<i>XC1 (I)</i>
<i>Contenuto max di cloruri</i>	<i>Cl 0.20</i>
<i>Dimensione nominale max degli inerti</i>	<i>D_{MAX} 20</i>
<i>Classe di consistenza</i>	<i>S4</i>

- Acciaio per calcestruzzo armato: B450C (saldabile)
- Malte antiritiro per inghisaggi: "TIPO" EMACO S55

NOTE DI POSA: il getto in opera di malte antiritiro ad alta resistenza - "tipo" EMACO - non può avvenire per temperature ambientali $T^{\circ} \leq +5^{\circ}C$.

3.1.2 VALORI DI CALCOLO

- **Calcestruzzo (C28/35):**

C28/35	N/mm²	CLASSE DI RESISTENZA
$R_{ck} = 350$	kg/cm ²	resistenza cubica alla compressione – valore caratteristico
$f_{ck} = 290.5$	kg/cm ²	resistenza cilindrica alla compressione – valore caratteristico
$f_{cd} = 164.6$	kg/cm ²	resistenza di calcolo alla compressione (SLU)
$f_{ctm} = 27.1$	kg/cm ²	resistenza media a trazione semplice
$f_{ctm} = 32.6$	kg/cm ²	resistenza media a trazione per flessione
$f_{ctd} = 12.9$	kg/cm ²	resistenza di calcolo a trazione (SLU)
$\sigma_c = 174.3$	kg/cm ²	tensione massima di compressione per combinazioni rare (SLE)
$\sigma_c = 130.7$	kg/cm ²	tensione massima di compress. per combinazione quasi perm. (SLE)
$E_c = 325881$	kg/cm ²	modulo elastico

- **Acciaio per calcestruzzo armato (B450C):**

B450C		
$f_{yk} = 4500$	kg/cm ²	tensione caratteristica di snervamento
$f_{yd} = 3913$	kg/cm ²	resistenza di calcolo (SLU)
$\sigma_s = 3600$	kg/cm ²	tensione massima in condizioni di esercizio (SLE)
$E_s = 2100000$	kg/cm ²	modulo elastico

3.2 RELAZIONE DI CALCOLO STRUTTURALE

3.2.1 QUADRO NORMATIVO DI RIFERIMENTO

NORME DI RIFERIMENTO COGENTI

- D.M. del 14 Gennaio 2008: *"NORME TECNICHE PER LE COSTRUZIONI"*.

ALTRE NORME E DOCUMENTI TECNICI INTEGRATIVI

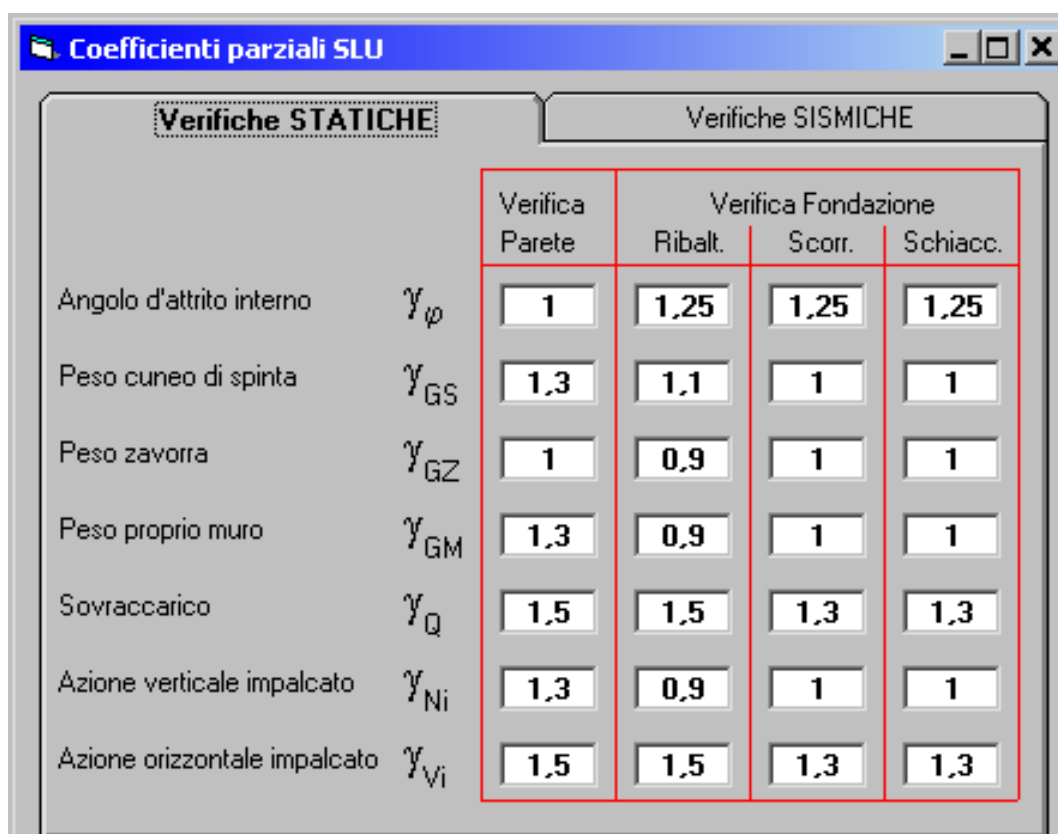
- Circolare 2 Febbraio 2009, n. 617 del Ministero delle Infrastrutture e dei Trasporti approvata dal Consiglio Superiore dei Lavori Pubblici – *"ISTRUZIONI PER L'APPLICAZIONE DELLE "NUOVE NORME TECNICHE PER LE COSTRUZIONI"*
- Norma Europea: Eurocodice 2 "Progettazione delle strutture in calcestruzzo / Parte 1-1: Regole generali e regole per gli edifici" UNI EN 1992-1-1 Novembre 2005.
- Norma UNI EN 206-1 : 2006

3.2.2 SCHEMI E METODI DI CALCOLO

Tutti i muri controterra presenti sono strutturalmente giuntati rispetto alle parti principali della struttura in elevazione: questo fa sì che essi vadano calcolati con lo schema statico della mensola a sbalzo, in quanto non hanno un vincolo orizzontale in sommità, ma presentano solamente un incastro alla base costituito dalla fondazione.

Tutti i muri controterra presentano le stesse caratteristiche geometriche, che sono riportate nel seguito, così come i parametri geotecnici del terreno e i parametri sismici del sito.

Le verifiche geotecniche della fondazione al di sotto del muro (ribaltamento, scorrimento e schiacciamento) non sono necessarie, in quanto la ciabatta sotto al muro controterra è bilanciata posteriormente dalla presenza delle travi rovesce di fondazione, che assolvono al compito trasmettendo al terreno tutti i carichi provenienti dalla struttura di elevazione.



		Verifiche SISMICHE			
Verifiche STATICHE		Verifica Parete	Verifica Fondazione		
			Ribalt.	Scorr.	Schiacc.
Angolo d'attrito interno	γ_{φ}	1	1,25	1,25	1,25
Peso cuneo di spinta	γ_{GS}	1,3	1,1	1	1
Peso zavorra	γ_{GZ}	1	0,9	1	1
Peso proprio muro	γ_{GM}	1,3	0,9	1	1
Sovraccarico	γ_Q	1,5	1,5	1,3	1,3
Azione verticale impalcato	γ_{Ni}	1,3	0,9	1	1
Azione orizzontale impalcato	γ_{Vi}	1,5	1,5	1,3	1,3

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Coefficienti parziali SLU

Verifiche STATICHE **Verifiche SISMICHE**

		Verifica Parete	Verifica Fondazione		
			Ribalt.	Scorr.	Schiacc.
Angolo d'attrito interno	γ_{φ}	1	1,25	1,25	1,25
Peso cuneo di spinta	γ_{GS}	1	1	1	1
Peso zavorra	γ_{GZ}	1	1	1	1
Peso proprio muro	γ_{GM}	1	1	1	1
Sovraccarico	γ_Q	1	1	1	1
Azione verticale impalcato	γ_{Ni}	1	1	1	1
Azione orizzontale impalcato	γ_{Vi}	1	1	1	1

Ricerca del sito

Ricerca per coordinate Ricerca per comune Isole

Longitudine: **10,0413** Latitudine: **44,8471**

Nodi del reticolo

TR	ag	Fo	Tc*
30	0,046	2,454	0,232
50	0,058	2,463	0,252
72	0,069	2,442	0,258
101	0,080	2,444	0,263
140	0,093	2,430	0,268
201	0,108	2,445	0,269
475	0,151	2,449	0,275
975	0,192	2,466	0,283
2475	0,251	2,505	0,296

OK Annulla

Le sigle individuano isole per le quali è necessaria una valutazione ad hoc
 Elaborazione: aprile 2004

V_R 100 Stato Limite SLV $\rightarrow a_g$ 0,1902 F_o 2,4655 T_{c^*} 0,2829
 Suolo C S_s 1,4187 Topo T1 h/H 0 S_T 1,0000
 a_{max} 0,2698 g β_m 0,2400 k_h 0,0648 k_v 0,0324

3.2.3 PROGETTO E VERIFICA MURO CONTROTERRA

Muro/Spalla - Unità di misura [kN, m] - File: Muro H=3,42 m

File Armature Impostazioni Normativa: NTC 2008 ?

Titolo : **Muro H=3,42 m**

Altezza paraghiaia (m) h1 Angolo attrito interno φ°
 Spessore paraghiaia (m) s1 Ang. attrito terra-muro δ°
 Inclinazione parete (%) i Ang. attrito fondazione φ_f°
 Altezza parete (m) h2 Peso spec. terre [kN/m3] γ_t
 Spessore in testa (m) s2 Peso spec. muro [kN/m3] γ_m
 Spessore alla base (m) s3 Dati Sisma K_v K_h
 Altezza fondazione (m) h3 N° lati terreno
 Sbalzo fond. contro terra L1
 Larghezza totale fond. L2

	Lungh.	Dislivello	q
Lato 1	10	0	3

Parete

St kN
 Sq kN
 Ss kN
 Si kN
 M kNm
 N kN
 V kN

L'armatura di innesto del muro è individuata in 1Φ14/15" su entrambi i lati, che risulta essere verificata in quanto:

$$\sigma_s = \frac{586800}{0,9 \cdot 22 \cdot \left(1,54 \cdot \frac{100}{15}\right)} = 2887 \text{ kg/cm}^2 < f_{yd}$$

A 1 metro di altezza dall'incastro di fondazione il momento sollecitante vale:

$$M_{sd} = \frac{138 \cdot 2,42^2}{2} + \frac{2595 \cdot 2,42^3}{6 \cdot 3,42} = 2196 \text{ kg} \cdot \text{m}$$

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L'armatura verticale del muro è individuata in 1Φ10/15" su entrambi i lati, che risulta essere verificata in quanto:

$$\sigma_s = \frac{219600}{0,9 \cdot 22 \cdot \left(0,79 \cdot \frac{100}{15}\right)} = 2105 \text{ kg/cm}^2 < f_{yd}$$

4 PROGETTO E VERIFICA TUNNEL VERSO CORPO "B"

4.1 RELAZIONE SUI MATERIALI

4.1.1 ELENCO MATERIALI IMPIEGATI E LORO MODALITA' DI POSA IN OPERA

- Calcestruzzo:

Norma UNI EN 206-1 : 2006	
<i>Classe di resistenza</i>	<i>C28/35</i>
<i>Classe di esposizione</i>	<i>XC1 (I)</i>
<i>Contenuto max di cloruri</i>	<i>Cl 0.20</i>
<i>Dimensione nominale max degli inerti</i>	<i>D_{MAX} 20</i>
<i>Classe di consistenza</i>	<i>S4</i>

- Calcestruzzo strutture di fondazione:

Norma UNI EN 206-1 : 2006	
<i>Classe di resistenza</i>	<i>C25/30</i>
<i>Classe di esposizione</i>	<i>XC2 (I)</i>
<i>Contenuto max di cloruri</i>	<i>Cl 0.20</i>
<i>Dimensione nominale max degli inerti</i>	<i>D_{MAX} 22</i>
<i>Classe di consistenza</i>	<i>S4</i>

- Acciaio per calcestruzzo armato: B450C (saldabile)
- Malte antiritiro per inghisaggi: "TIPO" EMACO S55

NOTE DI POSA: il getto in opera di malte antiritiro ad alta resistenza - "tipo" EMACO - non può avvenire per temperature ambientali $T^{\circ} \leq +5^{\circ}C$.

4.1.2 VALORI DI CALCOLO

- **Calcestruzzo (C28/35):**

C28/35	N/mm^2	CLASSE DI RESISTENZA
$R_{ck} = 350$	kg/cm^2	<i>resistenza cubica alla compressione – valore caratteristico</i>
$f_{ck} = 290.5$	kg/cm^2	<i>resistenza cilindrica alla compressione – valore caratteristico</i>
$f_{cd} = 164.6$	kg/cm^2	<i>resistenza di calcolo alla compressione (SLU)</i>
$f_{cm} = 27.1$	kg/cm^2	<i>resistenza media a trazione semplice</i>
$f_{cfm} = 32.6$	kg/cm^2	<i>resistenza media a trazione per flessione</i>
$f_{ctd} = 12.9$	kg/cm^2	<i>resistenza di calcolo a trazione (SLU)</i>
$\sigma_c = 174.3$	kg/cm^2	<i>tensione massima di compressione per combinazioni rare (SLE)</i>
$\sigma_c = 130.7$	kg/cm^2	<i>tensione massima di compress. per combinazione quasi perm. (SLE)</i>
$E_c = 325881$	kg/cm^2	<i>modulo elastico</i>

- **Calcestruzzo strutture di fondazione (C25/30):**

C25/30	N/mm^2	CLASSE DI RESISTENZA
$R_{ck} = 300$	kg/cm^2	<i>resistenza cubica alla compressione – valore caratteristico</i>
$f_{ck} = 249.0$	kg/cm^2	<i>resistenza cilindrica alla compressione – valore caratteristico</i>
$f_{cd} = 141.1$	kg/cm^2	<i>resistenza di calcolo alla compressione (SLU)</i>
$f_{cm} = 25.6$	kg/cm^2	<i>resistenza media a trazione semplice</i>
$f_{cfm} = 30.7$	kg/cm^2	<i>resistenza media a trazione per flessione</i>
$f_{ctd} = 11.9$	kg/cm^2	<i>resistenza di calcolo a trazione (SLU)</i>
$\sigma_c = 149.4$	kg/cm^2	<i>tensione massima di compressione per combinazioni rare (SLE)</i>
$\sigma_c = 112.1$	kg/cm^2	<i>tensione massima di compress. per combinazione quasi perm. (SLE)</i>
$E_c = 314472$	kg/cm^2	<i>modulo elastico</i>

- **Acciaio per calcestruzzo armato (B450C):**

B450C		
$f_{yk} = 4500$	kg/cm^2	tensione caratteristica di snervamento
$f_{yd} = 3913$	kg/cm^2	resistenza di calcolo (SLU)
$\sigma_s = 3600$	kg/cm^2	tensione massima in condizioni di esercizio (SLE)
$E_s = 2100000$	kg/cm^2	modulo elastico

4.2 RELAZIONE DI CALCOLO STRUTTURALE

4.2.1 QUADRO NORMATIVO DI RIFERIMENTO

NORME DI RIFERIMENTO COGENTI

- D.M. del 14 Gennaio 2008: "*NORME TECNICHE PER LE COSTRUZIONI*".

ALTRE NORME E DOCUMENTI TECNICI INTEGRATIVI

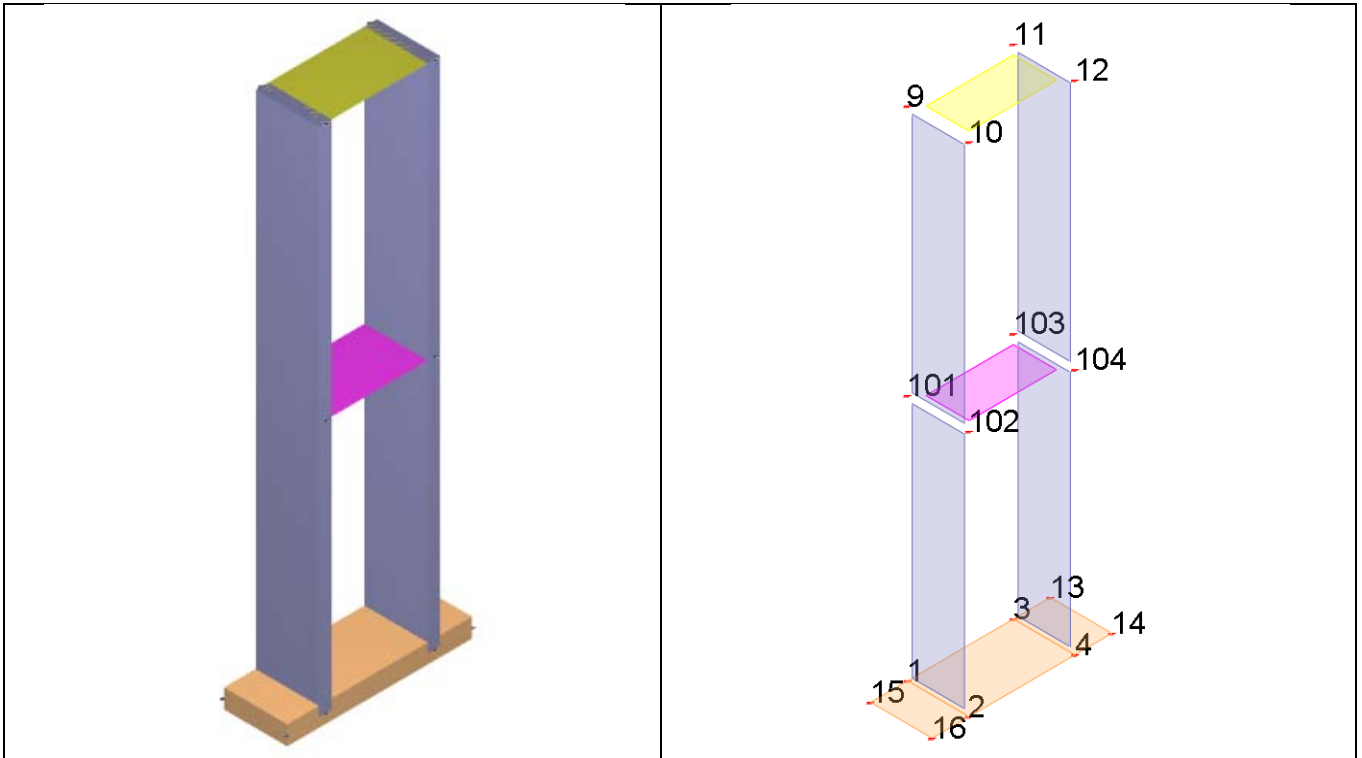
- Circolare 2 Febbraio 2009, n. 617 del Ministero delle Infrastrutture e dei Trasporti approvata dal Consiglio Superiore dei Lavori Pubblici – "*ISTRUZIONI PER L'APPLICAZIONE DELLE "NUOVE NORME TECNICHE PER LE COSTRUZIONI"*"
- Norma Europea: Eurocodice 2 "Progettazione delle strutture in calcestruzzo / Parte 1-1: Regole generali e regole per gli edifici" UNI EN 1992-1-1 Novembre 2005.
- Norma UNI EN 206-1 : 2006

4.2.2 SCHEMI E METODI DI CALCOLO

Una striscia di profondità unitaria del tunnel è stata modellata con Enexsys, e nel seguito sono riportati i risultati ottenuti.

Il fattore di struttura assunto per il tunnel in oggetto è $q = 1$.

La vista della struttura modellata è illustrata qua di seguito.



4.2.3 PROGETTO E VERIFICA TUNNEL VERSO CORPO "B"

Si verifica per semplicità una striscia di profondità unitaria del tunnel.

Sezione Numero	Dimensioni	Calcestruzzo	f_{cd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro [cm]
3	s 20 [cm]	Rbk 350	164.6	174.3	130.7	B 450 C	3913.0	3600.0	4500.0	3.00

Verifica a taglio con il metodo dell'inclinazione variabile del traliccio. $\cotg \theta = 1.00$

- Armature su ogni faccia: Verticali : $\varnothing 12$ 20' [cm], Orizzontali : $\varnothing 8$ 15' [cm]

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	1	-7444.6	0.0	-0.0	0.02
Som.	1	-6020.0	0.0	-0.0	0.02

S.L.E.	Combinazione	N [kg]	Mx [kgm]	My [kgm]	σ [kg/cm ²]
Base					
Cls.	6	-5496.4	0.0	-0.0	-2.5
Cls.Med	6	-5496.4	0.0	-0.0	-2.5
Ft.	6	-5496.4	0.0	-0.0	-38.0
Fc.	6	-5496.4	0.0	-0.0	-38.0
Sommita					
Cls.	6	-5496.4	0.0	-0.0	-2.5

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Cls.Med	6	-5496.4	0.0	-0.0	-2.5
Ft.	6	-5496.4	0.0	-0.0	-38.0
Fc.	6	-5496.4	0.0	-0.0	-38.0

VERIFICA A TAGLIO

Nodi	Comb.	V _d [kg]	α	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kg]	V _{Rcd} [kg]	V _{Rsd} [kg]	V _{Rd,scorrimento} [kg]	V _S / V _R
2 101	1	0.0	1.00	0.0	-7444.6	-0.0	71847.9	22894.6	42083.5	0.00

4.2.4 PROGETTO E VERIFICA FONDAZIONE DEL TUNNEL VERSO CORPO "B"

- Sezione

- sezione 1 H=30.00 [cm]

- Verifiche SLU Flessione elemento nodi 3 14

Estradosso

Intradosso

Af _x [cm ²] / m	cf _{x,Eq} [cm]	Af _y [cm ²] / m	cf _{y,Eq} [cm]	Af _x [cm ²] / m	cf _{x,Eq} [cm]	Af _y [cm ²] / m	cf _{y,Eq} [cm]
3.35	3.00	5.65	3.00	3.35	3.00	5.65	3.00

- Azioni di verifica combinazione 2 (2.62 0.50 [m])

M _{xx}	-1067.44	[kgm/m]	M ₁₁	-46.45	[kgm/m]
M _y	-51.10	[kgm/m]	M ₂₂	-970.40	[kgm/m]
M _{xy}	0.00	[kgm/m]	α	-0.00	[°]

- Verifiche

Cr=S_D/S_R

Posizione

Acciaio

Calcestruzzo

Cr=S _D /S _R	Posizione	Acciaio		Calcestruzzo		θ [°]
		ε _x %	ε _y %	ε _{min} %	ε _{max} %	
0.30	Estradosso	1.422	-0.006	-0.007	-3.500	0.00
	Intradosso	39.157	0.006	44.079	0.007	-90.00

- Verifiche SLE Rare Flessione elemento nodi 1 4

Estradosso

Intradosso

Af _x [cm ²] / m	cf _{x,Eq} [cm]	Af _y [cm ²] / m	cf _{y,Eq} [cm]	Af _x [cm ²] / m	cf _{x,Eq} [cm]	Af _y [cm ²] / m	cf _{y,Eq} [cm]
3.35	3.00	5.65	3.00	3.35	3.00	5.65	3.00

- Azioni di verifica combinazione 4 (1.46 0.50 [m])

M _{xx}	-457.53	[kgm/m]	M ₁₁	-47.07	[kgm/m]
M _y	-47.07	[kgm/m]	M ₂₂	-457.53	[kgm/m]
M _{xy}	0.00	[kgm/m]	α	-0.00	[°]

- Verifiche

Cr=S_D/S_R

Posizione

Acciaio

Calcestruzzo

Stato

Ampiezza

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		σ_x [kg/cm ²]	σ_y [kg/cm ²]	$\sigma_{c,Max}$ [kg/cm ²]	θ [°]		Fessure mm
0.13	Estradosso	-32.9	-3.3	-3.2	0.00	NON Fessurato	0.000
	Intradosso	32.9	3.3	0.0	-90.00	NON Fessurato	0.000

- Verifiche SLE Frequenti Flessione elemento nodi 1 4

Estradosso				Intradosso			
Af_x [cm ² / m]	$cf_{x,Eq}$ [cm]	Af_y [cm ² / m]	$cf_{y,Eq}$ [cm]	Af_x [cm ² / m]	$cf_{x,Eq}$ [cm]	Af_y [cm ² / m]	$cf_{y,Eq}$ [cm]
3.35	3.00	5.65	3.00	3.35	3.00	5.65	3.00

- Azioni di verifica combinazione 5 (1.46 0.50 [m])

M_{xx}	-449.15	[kgm/m]	M_{11}	-46.24	[kgm/m]
M_y	-46.24	[kgm/m]	M_{22}	-449.15	[kgm/m]
M_{xy}	0.00	[kgm/m]	α	-0.00	[°]

- Verifiche

$Cr=S_D/S_R$	Posizione	Acciaio		Calcestruzzo		Stato	Ampiezza Fessure mm
		σ_x [kg/cm ²]	σ_y [kg/cm ²]	$\sigma_{c,Max}$ [kg/cm ²]	θ [°]		
0.13	Estradosso	-32.3	-3.2	-3.1	0.00	NON Fessurato	0.000
	Intradosso	32.3	3.2	0.0	-90.00	NON Fessurato	0.000

- Verifiche SLE Quasi Permanenti Flessione elemento nodi 1 4

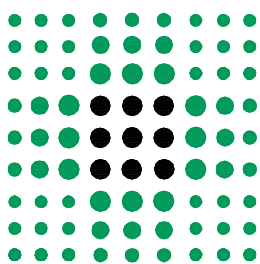
Estradosso				Intradosso			
Af_x [cm ² / m]	$cf_{x,Eq}$ [cm]	Af_y [cm ² / m]	$cf_{y,Eq}$ [cm]	Af_x [cm ² / m]	$cf_{x,Eq}$ [cm]	Af_y [cm ² / m]	$cf_{y,Eq}$ [cm]
3.35	3.00	5.65	3.00	3.35	3.00	5.65	3.00

- Azioni di verifica combinazione 6 (1.46 0.50 [m])

M_{xx}	-446.36	[kgm/m]	M_{11}	-45.97	[kgm/m]
M_y	-45.97	[kgm/m]	M_{22}	-446.36	[kgm/m]
M_{xy}	0.00	[kgm/m]	α	-0.00	[°]

- Verifiche

$Cr=S_D/S_R$	Posizione	Acciaio		Calcestruzzo		Stato	Ampiezza Fessure mm
		σ_x [kg/cm ²]	σ_y [kg/cm ²]	$\sigma_{c,Max}$ [kg/cm ²]	θ [°]		
0.13	Estradosso	-32.1	-3.2	-3.1	0.00	NON Fessurato	0.000
	Intradosso	32.1	3.2	0.0	-90.00	NON Fessurato	0.000



GRUPPO DI LAVORO:

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geom. Lara Biavardi
per. ind. Giuseppe Carlassare
ing. Federica Ceresa
per. ind. Paolo Crovini
ing. Elisa Degiovanni
ing. jr. Roberto Degiovanni
geom. Laura Del Bono
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geom. Roberto Gallarotti
arch. Andrea Mambriani
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geom. Roberto Mellini
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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 7 - VERIFICA ELEMENTI IN TERMINI DI
RESISTENZA (§7.3.7.1) - TRAVI PREFABBRICATE IN C.A.**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
Via Aristotele n. 5
Tel. 3356030441 - 0522 865441
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ELABORATO

RS. 08

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

- Verifiche travi

- Modalità di verifica

Le travi vengono progettate-verificate a flessione retta e taglio nel piano longitudinale della trave sulla base dell'involuppo delle sollecitazioni, in conformità al *Decreto Legge del 26 Marzo 1980* e successivi aggiornamenti.

Viene comunque sempre predisposta l'armatura minima mentre gli sforzi di taglio vengono integralmente assorbiti dalle staffe.

Le operazioni di progetto-verifica vengono condotte, per ogni asta, in tre diverse sezioni e precisamente in corrispondenza dei fili esterni dei pilastri e della sezione in campata nella quale viene riscontrato il massimo momento positivo (negativo).

I momenti si intendono positivi se tendono le fibre di intradosso (inferiori).

Per quanto concerne il progetto e la verifica delle travi a taglio esse vengono condotte nel modo seguente:

- Si controlla se la trave necessita o meno di armatura aggiuntiva a taglio:
 1. Se non occorre armatura aggiuntiva a taglio si procede a disporre la staffatura minima di regolamento e la progettazione ha termine.
 2. Se occorre armatura aggiuntiva a taglio la staffatura viene progettata andando a suddividere la trave, a seconda del caso, in uno, tre o cinque conci:
 - due tronchi in prossimità degli appoggi di lunghezza pari all'altezza della sezione;
 - due altri (eventuali) tronchi dall'ascissa precedente a quella in cui il taglio può essere assorbito con la sola staffatura minima da regolamento
 - un restante (eventuale) concio di chiusura centrale.
- In ogni caso l'armatura a taglio si intende simmetrica rispetto alla mezzeria della trave e viene progettata considerando, rispetto alla mezzeria, la zona della trave più sollecitata.

Per quanto concerne le verifiche a taglio esse vengono condotte suddividendo la trave in cinque conci:

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due tronchi in prossimità degli appoggi di lunghezza pari all'altezza della sezione; due altri (eventuali) tronchi dall'ascissa precedente a quella in cui il taglio può essere assorbito con la sola staffatura minima da regolamento; il restante (eventuale) concio di chiusura centrale.

L'armatura a taglio si intende simmetrica rispetto alla mezzeria della trave e viene progettata considerando, rispetto alla mezzeria, la zona della trave più sollecitata.

Simbologia utilizzata:

Af Es.

Area di ferro all'estradosso

Af In.

Area di ferro all'intradosso

Sigb. Es.

Tensione del calcestruzzo estradosso

Sigb. In.

Tensione del calcestruzzo intradosso

Sigf. Es.

Tensione dell'acciaio estradosso

Sigf. In.

Tensione dell'acciaio intradosso

- Sezioni Impiegate:

- Trave Sezioni Impiegate:

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Sezione Numero	Dimensioni	Cls Prefabbr.	f_{cd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{QP} [kg/cm ²]	Cls In Opera	f_{cd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Cf Gabbie Es [cm]	Cf Gabbie In [cm]	Cf Spez. Es [cm]	Cf Spez. In [cm]
1	B 70 [cm] H 34 [cm]	C35/45	211.6	224.1	168.1	C28/35	164.6	174.3	130.7	B 450 C	3739.0	3600.0	3600.0	2.50	2.50	2.50	10.00
2	B 30 [cm] H 34 [cm]	C35/45	211.6	224.1	168.1	C28/35	164.6	174.3	130.7	B 450 C	3739.0	3600.0	3600.0	2.50	2.50	2.50	10.00
5	B 50 [cm] H 49 [cm]	C35/45	211.6	224.1	168.1	C28/35	164.6	174.3	130.7	B 450 C	3739.0	3600.0	3600.0	2.50	2.50	2.50	10.00

- Verifiche Travate :

- Travata: 101 Travata 101 106 111 116

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 102 107 112 117
- 103 108 113 118

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	Mri	x/d	σ_{bE}	σ_{bI}	σ_{fE}	σ_{fI}
Trave 101 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}7997.3 [kg/m] (VALORE CARATTERISTICO)																				
101	SLU	0.15	12.57	0.00	7.63		11135.8	16577.4	0.67	0.29	-270.3	7129.7	0.04	0.19						
CAM	SLU	2.63	7.63	0.00	22.62	6035.3	-10796.5	0.0	11033.6	0.00	0.13	-10778.2	26113.8	0.41	0.28					
106	SLU	5.10	27.14	0.00	15.21		17821.3	29072.0	0.61	0.43	0.0	13000.1	0.00	0.24						

- Controllo Fessurazione

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Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 101 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																		
106	SLU	0.25	27.14	0.00	15.21		17174.1	29072.0	0.59	0.43	0.0	13000.1	0.00	0.24				
CAM	SLU	3.45	7.63	0.00	19.67	3828.0	-11390.7	0.0	11040.2	0.00	0.12	-11390.7	22937.1	0.50	0.24			
111	SLU	6.65	18.10	0.00	12.57		16262.4	21510.2	0.76	0.35	0.0	11007.7	0.00	0.23				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 101 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																		
111	SLU	0.25	18.10	0.00	12.57		13632.3	21615.6	0.63	0.35	0.0	11134.3	0.00	0.22				
CAM	SLU	2.72	7.63	0.00	12.57	3828.0	-6848.0	0.0	10795.0	0.00	0.11	-6836.3	15278.5	0.45	0.18			
116	SLU	5.20	7.63	0.00	7.63		8363.9	12119.3	0.69	0.25	-1190.2	7163.7	0.17	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 101 106 Sez. 1 70x34 70x34 [cm] L_{asse} 5.35 L_{netta} 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.62	0.47	15463.4	10057.8	72037.5	38297.6	∅ 10 2br. 7.5'
0.62	1.61	0.99	12626.0	13102.8	92738.0	30386.5	Tr.∅ 12 2br. 25.0'
1.61	3.64	2.03	8883.1	14445.9	92738.0	21101.8	Tr.∅ 10 2br. 25.0'

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3.64	4.63	0.99	14794.4	14445.9	92738.0	30386.5	Tr.ø 12 2br. 25.0'
4.63	5.10	0.47	17631.9	12654.6	72037.5	38297.6	ø 10 2br. 7.5'

- VERIFICHE A TAGLIO Trave 106 111 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	13575.2	12654.6	72037.5	38297.6	ø 10 2br. 7.5'
0.63	1.55	0.92	12146.2	13835.2	92738.0	30386.5	Tr.ø 12 2br. 25.0'
1.55	5.35	3.80	8648.7	13787.7	92738.0	21101.8	Tr.ø 10 2br. 25.0'
5.35	6.27	0.92	11865.5	13792.1	92738.0	30386.5	Tr.ø 12 2br. 25.0'
6.27	6.65	0.38	13294.6	11875.5	72037.5	38297.6	ø 10 2br. 7.5'

- VERIFICHE A TAGLIO Trave 111 116 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	11997.4	11875.5	72037.5	24510.5	ø 8 2br. 7.5'
0.59	4.86	4.27	10706.8	11828.9	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	10284.7	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 102 Travata 121 167

Nodo	x [m]	Afe [cm ²]	Afe _r [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{Mre} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 102 /1 Sez. 1 70x34 70x34 [cm] Lasse 4.00 Lnetta 3.60 q_{medio} 4058.1 [kg/m] (VALORE CARATTERISTICO)																		
121	SLU	0.25	7.31	0.00	7.63		9038.0	11800.7	0.77	0.24	-3681.0	7163.3	0.51	0.18				
CAM	SLU	2.05	7.63	0.00	10.18	3549.9	-3549.9	0.0	10698.7	0.00	0.10	-4264.8	12610.8	0.34	0.16			
167	SLU	3.85	6.91	0.00	7.63		7361.2	11378.5	0.65	0.24	-3804.7	7162.7	0.53	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 121 167 Sez. 1 70x34 70x34 [cm] Lasse 4.00 Lnetta 3.60 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	9663.2	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.62	3.48	2.85	8332.7	10710.9	92738.0	21101.8	Tr.ø 10 2br. 25.0'
3.48	3.85	0.37	9315.0	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 102 Travata 1122 101 102 103 104 105

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 102 /1 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																		
1122	SLU	0.10	9.42	0.00	7.63		4597.5	10788.3	0.43	0.38	-2489.2	6627.5	0.38	0.24				
CAM	SLU	1.99	4.02	0.00	7.63	1231.8	-1310.0	0.0	5511.6	0.00	0.11	-1610.5	9208.4	0.17	0.21			
101	SLU	3.88	7.63	0.00	7.63		5028.9	9281.3	0.54	0.35	-2540.4	6639.4	0.38	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 102 /2 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																		
101	SLU	0.25	7.63	0.00	7.63		5460.6	9281.3	0.59	0.35	-3071.0	6639.4	0.46	0.24				
CAM	SLU	2.03	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1319.0	9208.4	0.14	0.21			
102	SLU	3.80	7.63	0.00	7.63		5473.3	9281.3	0.59	0.35	-3004.0	6639.4	0.45	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 102 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
102	SLU	0.25	7.63	0.00	7.63		5431.4	9281.3	0.59	0.35	-3048.5	6639.4	0.46	0.24				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1311.7	9208.4	0.14	0.21			
103	SLU	3.80	7.63	0.00	7.63		5461.3	9281.3	0.59	0.35	-3023.2	6639.4	0.46	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 102 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
103	SLU	0.25	7.63	0.00	7.63		5252.4	9281.3	0.57	0.35	-3178.1	6639.4	0.48	0.24				
CAM	SLU	2.03	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1278.4	9208.4	0.14	0.21			
104	SLU	3.80	7.63	0.00	7.63		5700.5	9281.3	0.61	0.35	-2615.9	6639.4	0.39	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 102 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}3094.3 [kg/m] (VALORE CARATTERISTICO)																		
104	SLU	0.25	7.63	0.00	7.63		6583.8	9281.3	0.71	0.35	-2218.8	6639.4	0.33	0.24				
CAM	SLU	2.00	4.02	0.00	7.63	2840.1	-2840.1	0.0	5511.6	0.00	0.11	-2840.1	9208.4	0.31	0.21			
105	SLU	3.75	7.63	0.00	7.63		6843.4	9281.3	0.74	0.35	-2281.9	6639.4	0.34	0.24				

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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1122 101 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.47	0.37	4200.3	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.47	3.50	3.03	3784.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.50	3.88	0.37	4246.3	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 101 102 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	4505.5	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.43	2.80	4067.0	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	4527.3	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 102 103 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4502.8	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4049.4	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4517.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 103 104 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4342.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4150.4	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4619.0	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 104 105 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

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Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	7287.5	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.37	2.75	6280.5	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.37	3.75	0.37	7345.5	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 105 Travata 104 121 109 114 119

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 105 /1 Sez. 1 70x34 70x34 [cm] L_{asse}2.67 L_{netta}2.27 q_{medio}6915.1 [kg/m] (VALORE CARATTERISTICO)																		
104	SLU	0.15	7.63	0.00	9.42		5954.7	12345.8	0.48	0.26	-5651.3	8603.9	0.66	0.20				
CAM	SLU	1.29	7.63	0.00	8.16	5563.1	-2488.0	0.0	10835.0	0.00	0.10	-3562.3	10117.0	0.35	0.14			
121	SLU	2.42	10.18	0.00	7.63		8309.9	14469.4	0.57	0.26	-1635.3	7166.4	0.23	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 105 /2 Sez. 1 70x34 70x34 [cm] L_{asse}2.68 L_{netta}2.18 q_{medio}6915.1 [kg/m] (VALORE CARATTERISTICO)																		
121	SLU	0.25	10.18	0.00	7.63		9331.1	14469.4	0.64	0.26	-2763.0	7166.4	0.39	0.18				
CAM	SLU	1.34	10.56	0.00	9.14	5563.1	-2488.0	1858.0	14597.0	0.13	0.11	-3429.3	10908.4	0.31	0.15			
109	SLU	2.43	18.10	0.00	11.40		10865.9	21621.6	0.50	0.35	-6315.1	10150.4	0.62	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 105 /3 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4257.6 [kg/m] (VALORE CARATTERISTICO)																			
109	SLU	0.25	18.10	0.00	11.40			16593.1	21621.6	0.77	0.35	0.0	10150.4	0.00	0.21				
CAM	SLU	3.45	7.63	0.00	19.01	3774.6	-11231.7	0.0	10937.7	0.00	0.12	-11231.7	22359.8	0.50	0.24				
114	SLU	6.65	22.62	0.00	11.40			17719.2	25514.9	0.69	0.38	0.0	10148.2	0.00	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 105 /4 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4257.6 [kg/m] (VALORE CARATTERISTICO)																			
114	SLU	0.25	22.62	0.00	11.40			14914.3	25514.9	0.58	0.38	0.0	10148.2	0.00	0.21				
CAM	SLU	2.72	7.63	0.00	11.37	3774.6	-6752.4	0.0	10750.8	0.00	0.11	-6740.9	13947.3	0.48	0.17				
119	SLU	5.20	8.55	0.00	7.63			9472.4	12930.2	0.73	0.25	-2202.4	7173.2	0.31	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 104 121 Sez. 1 70x34 70x34 [cm] Lasse 2.67 Lnetta 2.27 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.50	0.35	9473.4	10789.6	72037.5	24510.5	ø 8 2br. 7.5'
0.50	2.07	1.57	10225.6	10084.8	92738.0	21101.8	Tr.ø 10 2br. 25.0'
2.07	2.42	0.35	12181.0	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 121 109 Sez. 1 70x34 70x34 [cm] Lasse 2.68 Lnetta 2.18 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	12927.3	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.62	2.05	1.43	10865.5	10199.6	92738.0	21101.8	Tr.ø 10 2br. 25.0'
2.05	2.43	0.37	12032.2	11497.5	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 109 114 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	13496.1	11497.5	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	12358.8	13592.5	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	13779.8	11497.5	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 114 119 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	12426.5	11497.5	72037.5	24510.5	ø 8 2br. 7.5'
0.59	4.86	4.27	11143.1	11486.9	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	10705.5	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 113 Travata 105 167 110 115 120

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 113 /1 Sez. 1 70x34 70x34 [cm] Lasse 2.67 Lnetta 2.27 q_{medio} 3118.2 [kg/m] (VALORE CARATTERISTICO)																		
105	SLU	0.15	7.63	0.00	10.18		7048.3	12349.7	0.57	0.26	-6594.3	9268.1	0.71	0.20				
CAM	SLU	1.29	7.63	0.00	10.18	2738.2	-1224.6	1357.9	10698.7	0.13	0.10	-3206.7	12610.8	0.25	0.16			
167	SLU	2.42	7.63	0.00	7.63		6072.2	12119.3	0.50	0.25	-2505.4	7163.7	0.35	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 113 /2 Sez. 1 70x34 70x34 [cm] L_{asse}2.68 L_{netta}2.18 q_{medio}3118.2 [kg/m] (VALORE CARATTERISTICO)																		
167	SLU	0.25	7.63	0.00	7.63		7309.1	12119.3	0.60	0.25	-3808.8	7163.7	0.53	0.18				
CAM	SLU	1.34	7.63	0.00	10.18	2738.2	-1224.6	3215.9	10698.7	0.30	0.10	-3914.4	12610.8	0.31	0.16			
110	SLU	2.43	10.18	0.00	12.57		10910.0	14840.4	0.74	0.29	-8720.8	11166.9	0.78	0.22				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 113 /3 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
110	SLU	0.25	10.18	0.00	12.57		12389.2	14840.4	0.83	0.29	-764.7	11166.9	0.07	0.22				
CAM	SLU	3.45	7.63	0.00	10.18	2043.2	-6079.8	0.0	10698.7	0.00	0.10	-6079.8	12610.8	0.48	0.16			
115	SLU	6.65	12.57	0.00	7.63		13064.3	16614.2	0.79	0.28	-630.9	7177.4	0.09	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 113 /4 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
115	SLU	0.25	12.57	0.00	7.63		12059.5	16614.2	0.73	0.28	-2715.4	7177.4	0.38	0.18				
CAM	SLU	2.72	7.63	0.00	10.18	2043.2	-3655.1	0.0	10698.7	0.00	0.10	-3679.0	12610.8	0.29	0.16			
120	SLU	5.20	7.63	0.00	7.63		8460.4	12119.3	0.70	0.25	-4433.3	7163.7	0.62	0.18				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 105 167 Sez. 1 70x34 70x34 [cm] Lasse 2.67 Lnetta 2.27 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.52	0.37	7292.7	11070.0	72037.5	24510.5	ø 8 2br. 7.5'
0.52	2.05	1.53	7477.8	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
2.05	2.42	0.37	8493.8	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 167 110 Sez. 1 70x34 70x34 [cm] Lasse 2.68 Lnetta 2.18 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	10023.9	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.62	2.05	1.43	9009.0	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
2.05	2.43	0.37	9447.6	11875.5	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 110 115 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	8371.7	11875.5	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	7745.9	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	8515.1	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 115 120 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	8236.2	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.59	4.86	4.27	7541.5	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	7225.5	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 123 Travata 109 110

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 123 /1 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}2117.5 [kg/m] (VALORE CARATTERISTICO)																		
109	SLU	0.25	7.63	0.00	5.09		5094.7	9244.2	0.55	0.34	-2421.3	4565.4	0.53	0.21				
CAM	SLU	2.00	4.02	0.00	7.63	1863.3	-1863.3	0.0	5511.6	0.00	0.11	-1863.3	9208.4	0.20	0.21			
110	SLU	3.75	7.63	0.00	5.09		5503.0	9244.2	0.60	0.34	-2041.5	4565.4	0.45	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 109 110 Sez. 2 30x34 30x34 [cm] L_{asse} 4.00 L_{netta} 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	5170.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.41	2.82	4769.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.41	3.75	0.34	5403.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 7 Travata 1114 116 117 118 119 120

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 7 /1 Sez. 2 30x34 30x34 [cm] L_{asse}4.13 L_{netta}3.77 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
1114	SLU	0.10	9.42	0.00	7.63		2304.4	10788.3	0.21	0.38	-357.4	6627.5	0.05	0.24				
CAM	SLU	1.99	4.02	0.00	7.63	1231.8	-1310.0	0.0	5511.6	0.00	0.11	-2030.6	9208.4	0.22	0.21			
116	SLU	3.88	7.63	0.00	7.63		2928.7	9281.3	0.32	0.35	-842.7	6639.4	0.13	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 7 / 2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
116	SLU	0.25	7.63	0.00	7.63		2757.6	9281.3	0.30	0.35	-682.1	6639.4	0.10	0.24				
CAM	SLU	2.03	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21			
117	SLU	3.80	7.63	0.00	7.63		2840.7	9281.3	0.31	0.35	-592.4	6639.4	0.09	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 7 / 3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
117	SLU	0.25	7.63	0.00	7.63		2740.9	9281.3	0.30	0.35	-679.2	6639.4	0.10	0.24				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21			
118	SLU	3.80	7.63	0.00	7.63		2843.8	9281.3	0.31	0.35	-588.6	6639.4	0.09	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 7 / 4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
118	SLU	0.25	7.63	0.00	7.63		2741.1	9281.3	0.30	0.35	-685.9	6639.4	0.10	0.24				
CAM	SLU	2.03	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21			
119	SLU	3.80	7.63	0.00	7.63		2845.0	9281.3	0.31	0.35	-596.2	6639.4	0.09	0.24				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	A _{fe} [cm ²]	A _{fe_t} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{d_{plaf}} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 7 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
119	SLU	0.25	7.63	0.00	7.63			2559.5	9281.3	0.28	0.35	-812.9	6639.4	0.12	0.24				
CAM	SLU	2.00	4.02	0.00	7.63	1231.8	-1231.8	0.0	5511.6	0.00	0.11	-1231.8	9208.4	0.13	0.21				
120	SLU	3.75	7.63	0.00	7.63			2908.8	9281.3	0.31	0.35	-628.1	6639.4	0.09	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1114 116 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	V _{Sd} [kg]	V _{Rd,c} [kg]	V _{Rd,max} [kg]	V _{Rd,s} [kg]	Staffe
0.10	0.50	0.40	3043.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.50	3.47	2.97	2545.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.47	3.88	0.40	3028.2	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 116 117 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	V _{Sd} [kg]	V _{Rd,c} [kg]	V _{Rd,max} [kg]	V _{Rd,s} [kg]	Staffe
0.25	0.62	0.37	3030.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.43	2.80	2620.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	3081.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 117 118 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	V _{Sd} [kg]	V _{Rd,c} [kg]	V _{Rd,max} [kg]	V _{Rd,s} [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.25	0.63	0.38	3024.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2612.7	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3081.2	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 118 119 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3027.2	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2615.0	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3083.5	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 119 120 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	2966.6	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.37	2.75	2662.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.37	3.75	0.37	3124.2	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 205 Travata 205 210 215 220

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 305 310 315 320
- 405 410 415 420

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 205 /1 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 q_{medio} 2283.2 [kg/m] (VALORE CARATTERISTICO)																		
205	SLU	0.15	11.33	0.00	11.40		11531.6	15757.1	0.73	0.29	-6329.7	10158.8	0.62	0.22				
CAM	SLU	2.63	7.63	0.00	10.18	2043.2	-3655.1	0.0	10698.7	0.00	0.10	-4168.7	12610.8	0.33	0.16			
210	SLU	5.10	15.21	0.00	9.42		14448.0	19066.2	0.76	0.31	-5745.3	8606.7	0.67	0.20				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 205 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
210	SLU	0.25	15.21	0.00	9.42		16075.8	19066.2	0.84	0.31	-3050.7	8606.7	0.35	0.20				
CAM	SLU	3.45	7.63	0.00	10.18	2043.2	-6079.8	0.0	10698.7	0.00	0.10	-6079.8	12610.8	0.48	0.16			
215	SLU	6.65	15.21	0.00	9.42		15614.0	19066.2	0.82	0.31	-3494.1	8606.7	0.41	0.20				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 205 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
215	SLU	0.25	15.21	0.00	9.42		14998.9	19066.2	0.79	0.31	-5272.0	8606.7	0.61	0.20				
CAM	SLU	2.72	7.63	0.00	10.18	2043.2	-3655.1	0.0	10698.7	0.00	0.10	-4048.9	12610.8	0.32	0.16			
220	SLU	5.20	11.33	0.00	11.40		11026.3	15757.0	0.70	0.29	-6807.9	10158.8	0.67	0.22				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 205 210 Sez. 1 70x34 70x34 [cm] L_{asse} 5.35 L_{netta} 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.15	0.49	0.34	8499.9	11497.5	72037.5	24510.5	ø 8 2br. 7.5'
0.49	4.76	4.27	8436.6	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	9131.3	10789.6	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 210 215 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	9437.1	10789.6	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	8667.9	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	9293.1	10789.6	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 215 220 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	9346.2	10789.6	72037.5	24510.5	ø 8 2br. 7.5'
0.59	4.86	4.27	8651.5	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	8295.5	11497.5	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 222 Travata 1222 201 202 203 204 205

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1322 301 302 303 304 305
- 1422 401 402 403 404 405

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 222 /1 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 q_{medio} 1227.0 [kg/m] (VALORE CARATTERISTICO)																		
1222	SLU	0.10	11.33	0.00	11.40		7616.1	12353.6	0.62	0.41	-4903.1	9528.7	0.51	0.29				
CAM	SLU	1.99	5.09	0.00	7.63	1227.0	-1304.9	96.4	6743.9	0.01	0.12	-2179.1	9206.3	0.24	0.20			
201	SLU	3.88	11.40	0.00	11.40		7822.3	12415.3	0.63	0.41	-5931.6	9529.2	0.62	0.29				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 222 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
201	SLU	0.25	11.40	0.00	11.40		8834.2	12415.3	0.71	0.41	-6655.6	9529.2	0.70	0.29				
CAM	SLU	2.03	4.02	0.00	7.63	1227.0	-1257.9	97.4	5511.6	0.02	0.11	-1756.7	9208.4	0.19	0.21			
202	SLU	3.80	11.40	0.00	11.40		8994.6	12415.3	0.72	0.41	-6383.2	9529.2	0.67	0.29				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 222 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
202	SLU	0.25	11.40	0.00	11.40		8824.3	12415.3	0.71	0.41	-6584.8	9529.2	0.69	0.29				
CAM	SLU	2.02	4.02	0.00	7.63	1227.0	-1257.9	96.1	5511.6	0.02	0.11	-1718.6	9208.4	0.19	0.21			
203	SLU	3.80	11.40	0.00	11.40		8991.2	12415.3	0.72	0.41	-6411.5	9529.2	0.67	0.29				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 222 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
203	SLU	0.25	11.40	0.00	11.40			8789.3	12415.3	0.71	0.41	-6636.3	9529.2	0.70	0.29				
CAM	SLU	2.03	4.02	0.00	7.63	1227.0	-1257.9	90.3	5511.6	0.02	0.11	-1734.0	9208.4	0.19	0.21				
204	SLU	3.80	11.40	0.00	11.40			9021.7	12415.3	0.73	0.41	-6390.4	9529.2	0.67	0.29				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	A_{fe} [cm ²]	A_{fe1} [cm ²]	A_{fi} [cm ²]	q^{II} [kg/m]	M_{dplaf} [kgm]	M_{de} [kgm]	M_{re} [kgm]	M_{de} [kgm]	x/d	M_{di} [kgm]	M_{ri} [kgm]	M_{di} [kgm]	x/d	σ_{bE} [kg/cm ²]	σ_{bI} [kg/cm ²]	σ_{fE} [kg/cm ²]	σ_{fI} [kg/cm ²]	
Trave 222 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
204	SLU	0.25	11.40	0.00	11.40			8339.5	12415.3	0.67	0.41	-7130.1	9529.2	0.75	0.29				
CAM	SLU	2.00	4.02	0.00	7.63	1227.0	-1227.0	410.0	5511.6	0.07	0.11	-1925.4	9208.4	0.21	0.21				
205	SLU	3.75	11.33	0.00	11.40			9824.9	12353.6	0.80	0.41	-6517.3	9528.7	0.68	0.29				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1222 201 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.47	0.37	5887.3	6535.6	30873.2	24510.5	ø 8 2br. 7.5'
0.47	3.50	3.03	5427.7	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.50	3.88	0.37	5613.4	6535.6	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 201 202 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6347.1	6535.6	30873.2	24510.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.63	3.42	2.79	5999.0	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6465.6	6535.6	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 202 203 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6352.1	6535.6	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5978.6	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6445.3	6535.6	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 203 204 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	6336.7	6535.6	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.78	5997.2	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	6467.8	6535.6	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 204 205 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	6274.1	6535.6	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.41	2.82	6435.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.41	3.75	0.34	6852.5	6535.6	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 221 Travata 1373 1374

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1273 1274
- 1473 1474

Nodo	x [m]	Afe [cm ²]	Afe _l [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 221 /1 Sez. 2 30x34 30x34 [cm] L_{asse}2.95 L_{netta}2.95 q_{medio}255.0 [kg/m] (VALORE CARATTERISTICO)																	
1373	SLU	0.00	12.72	0.00	12.79			7900.7	13390.8	0.59	0.44	-7378.2	10424.0	0.71	0.24		
CAM	SLU	1.47	5.09	0.00	5.09	255.0	-138.7	984.8	6726.8	0.15	0.12	-1253.6	6284.9	0.20	0.16		
1374	SLU	2.95	12.67	0.00	12.72			7585.3	13325.2	0.57	0.44	-7627.3	10341.4	0.74	0.23		

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1373 1374 Sez. 2 30x34 30x34 [cm] Lasse 2.95 Lnetta 2.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.00	0.34	0.34	5639.8	6790.4	30873.2	55148.5	∅ 12 2br. 7.5'
0.34	2.61	2.27	5553.1	4994.4	39744.8	13505.1	Tr.∅ 8 2br. 25.0'
2.61	2.95	0.34	5448.5	6777.2	30873.2	55148.5	∅ 12 2br. 7.5'

- Travata: 323 Travata 1414 416 417 418 419 420

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1314 316 317 318 319 320

Nodo	x [m]	A _{fe} [cm ²]	A _{feI} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de Mre} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 323 /1 Sez. 2 30x34 30x34 [cm] L_{asse}4.13 L_{netta}3.77 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
1414	SLU	0.10	9.42	0.00	9.42		6858.1	10801.7	0.63	0.38	-3677.9	8027.0	0.46	0.27				
CAM	SLU	1.99	5.09	0.00	7.63	1227.0	-1304.9	0.0	6743.9	0.00	0.12	-2052.5	9206.3	0.22	0.20			
416	SLU	3.88	9.42	0.00	9.42		6563.0	10801.7	0.61	0.38	-5179.9	8027.0	0.65	0.27				

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 323 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
416	SLU	0.25	9.42	0.00	9.42		6813.5	10801.7	0.63	0.38	-4928.5	8027.0	0.61	0.27				
CAM	SLU	2.03	4.02	0.00	7.63	1227.0	-1257.9	0.0	5511.6	0.00	0.11	-1532.2	9208.4	0.17	0.21			
417	SLU	3.80	9.42	0.00	9.42		7320.2	10801.7	0.68	0.38	-4460.8	8027.0	0.56	0.27				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 323 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
417	SLU	0.25	9.42	0.00	9.42		6931.3	10801.7	0.64	0.38	-4946.6	8027.0	0.62	0.27				
CAM	SLU	2.02	4.02	0.00	7.63	1227.0	-1257.9	0.0	5511.6	0.00	0.11	-1519.3	9208.4	0.16	0.21			
418	SLU	3.80	9.42	0.00	9.42		7372.3	10801.7	0.68	0.38	-4525.2	8027.0	0.56	0.27				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 323 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
418	SLU	0.25	9.42	0.00	9.42		6939.3	10801.7	0.64	0.38	-4992.7	8027.0	0.62	0.27				
CAM	SLU	2.03	4.02	0.00	7.63	1227.0	-1257.9	0.0	5511.6	0.00	0.11	-1544.6	9208.4	0.17	0.21			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

419	SLU	3.80	9.42	0.00	9.42			7373.1	10801.7	0.68	0.38	-4561.7	8027.0	0.57	0.27				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _l	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 323 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																			
419	SLU	0.25	9.42	0.00	9.42			6336.5	10801.7	0.59	0.38	-5624.0	8027.0	0.70	0.27				
CAM	SLU	2.00	4.02	0.00	7.63	1227.0	-1227.0	183.7	5511.6	0.03	0.11	-1637.4	9208.4	0.18	0.21				
420	SLU	3.75	9.42	0.00	9.42			8268.3	10801.7	0.77	0.38	-4422.4	8027.0	0.55	0.27				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1414 416 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.48	0.38	5492.6	6133.2	30873.2	24510.5	ø 8 2br. 7.5'
0.48	3.49	3.01	5020.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.49	3.88	0.38	4963.9	6133.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 416 417 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5266.8	6133.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.78	5062.2	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5533.7	6133.2	30873.2	24510.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 417 418 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5316.7	6133.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5086.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5553.0	6133.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 418 419 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5328.9	6133.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5099.1	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5565.8	6133.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 419 420 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	5135.8	6133.2	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.37	2.75	5546.1	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.37	3.75	0.37	6006.2	6133.2	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 122 Travata 1573 1574

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1173 1174

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{Mre} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 122 /1 Sez. 2 30x34 30x34 [cm] Lasse 2.95 Lnetta 2.95 q_{medio} 255.0 [kg/m] (VALORE CARATTERISTICO)																			
1573	SLU	0.00	9.58	0.00	9.42		6366.8	10797.3	0.59	0.40	-5823.6	7777.5	0.75	0.29					
CAM	SLU	1.47	5.09	0.00	5.09	255.0	-138.7	784.7	6726.8	0.12	0.12	-1035.8	6284.9	0.16	0.16				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1574	SLU	2.95	9.53	0.00	9.42			5998.4	10754.4	0.56	0.39	-6044.5	7777.3	0.78	0.29				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1573 1574 Sez. 2 30x34 30x34 [cm] Lasse 2.95 Lnetta 2.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.00	0.34	0.34	4583.3	6133.2	30873.2	55148.5	∅ 12 2br. 7.5'
0.34	2.61	2.27	4496.6	4994.4	39744.8	13505.1	Tr.∅ 8 2br. 25.0'
2.61	2.95	0.34	4383.6	6133.2	30873.2	55148.5	∅ 12 2br. 7.5'

- Travata: 201 Travata 501 506 511 516

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 201 206 211 216
- 202 207 212 217
- 203 208 213 218
- 204 209 214 219
- 301 306 311 316
- 302 307 312 317
- 303 308 313 318
- 304 309 314 319
- 401 406 411 416
- 402 407 412 417
- 403 408 413 418
- 404 409 414 419
- 502 507 512 517
- 503 508 513 518

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 504 509 514 519

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 201 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																		
501	SLU	0.15	12.57	0.00	7.63		12082.5	16614.2	0.73	0.28	-3601.9	7177.4	0.50	0.18				
CAM	SLU	2.63	7.63	0.00	11.37	3828.0	-6848.0	0.0	10750.8	0.00	0.11	-6836.3	13947.3	0.49	0.17			
506	SLU	5.10	22.62	0.00	11.40		16641.9	25514.9	0.65	0.38	-1074.8	10148.2	0.11	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 201 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																		
506	SLU	0.25	22.61	0.00	11.40		20097.9	25509.7	0.79	0.38	0.0	10148.2	0.00	0.21				
CAM	SLU	3.45	7.63	0.00	19.67	3828.0	-11390.7	0.0	11040.2	0.00	0.12	-11390.7	22937.1	0.50	0.24			
511	SLU	6.65	22.62	0.00	11.40		19694.4	25514.9	0.77	0.38	0.0	10148.2	0.00	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 201 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4318.5 [kg/m] (VALORE CARATTERISTICO)																		
511	SLU	0.25	22.62	0.00	11.40		17144.2	25514.9	0.67	0.38	-758.7	10148.2	0.07	0.21				
CAM	SLU	2.72	7.63	0.00	11.37	3828.0	-6848.0	0.0	10750.8	0.00	0.11	-6836.3	13947.3	0.49	0.17			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

516	SLU	5.20	12.57	0.00	7.63			11639.3	16614.2	0.70	0.28	-3974.4	7177.4	0.55	0.18				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 501 506 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	11772.9	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.49	4.76	4.27	11779.0	11486.9	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	13062.3	11497.5	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 506 511 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	14479.2	11497.5	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	13058.1	13412.4	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	14353.5	11497.5	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 511 516 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	13262.4	11497.5	72037.5	24510.5	ø 8 2br. 7.5'
0.62	4.83	4.21	11861.1	11486.9	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.83	5.20	0.37	11598.5	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 223 Travata 1514 516 517 518 519 520

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 1214 216 217 218 219 220

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 223 /1 Sez. 2 30x34 30x34 [cm] L_{asse}4.13 L_{netta}3.77 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
1514	SLU	0.10	7.63	0.00	7.63		6455.5	9281.3	0.70	0.35	-2974.9	6639.4	0.45	0.24				
CAM	SLU	1.99	4.02	0.00	7.63	1367.0	-1453.8	0.0	5511.6	0.00	0.11	-2085.3	9208.4	0.23	0.21			
516	SLU	3.88	7.63	0.00	7.63		5970.1	9281.3	0.64	0.35	-4480.9	6639.4	0.67	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 223 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
516	SLU	0.25	7.63	0.00	7.63		6243.1	9281.3	0.67	0.35	-4025.8	6639.4	0.61	0.24				
CAM	SLU	2.03	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1608.4	9208.4	0.17	0.21			
517	SLU	3.80	7.63	0.00	7.63		6527.3	9281.3	0.70	0.35	-3460.4	6639.4	0.52	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 223 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
517	SLU	0.25	7.63	0.00	7.63		6023.8	9281.3	0.65	0.35	-3662.5	6639.4	0.55	0.24				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1523.3	9208.4	0.17	0.21			
518	SLU	3.80	7.63	0.00	7.63		6260.9	9281.3	0.67	0.35	-3279.2	6639.4	0.49	0.24				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 223 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
518	SLU	0.25	7.63	0.00	7.63			5897.9	9281.3	0.64	0.35	-3493.9	6639.4	0.53	0.24				
CAM	SLU	2.03	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1494.8	9208.4	0.16	0.21				
519	SLU	3.80	7.63	0.00	7.63			6112.3	9281.3	0.66	0.35	-3229.5	6639.4	0.49	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 223 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
519	SLU	0.25	7.63	0.00	7.63			5078.0	9281.3	0.55	0.35	-3910.9	6639.4	0.59	0.24				
CAM	SLU	2.00	4.02	0.00	7.63	1367.0	-1367.0	0.0	5511.6	0.00	0.11	-1464.0	9208.4	0.16	0.21				
520	SLU	3.75	7.63	0.00	7.63			6616.7	9281.3	0.71	0.35	-3065.6	6639.4	0.46	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1514 516 Sez. 2 30x34 30x34 [cm] L_{asse} 4.13 L_{netta} 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.10	0.48	0.38	5472.2	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.48	3.49	3.01	4946.7	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.49	3.88	0.38	4878.3	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 516 517 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	5084.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.43	2.80	4806.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	5317.7	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 517 518 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4975.2	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4625.2	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5145.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 518 519 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4927.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4538.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5058.3	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 519 520 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	4534.8	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.37	2.75	4804.0	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.37	3.75	0.37	5316.6	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 505 Travata 505 510 515 520

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 505 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
505	SLU	0.15	7.63	0.00	7.63		8313.9	12119.3	0.69	0.25	-3763.3	7163.7	0.53	0.18				
CAM	SLU	2.63	7.63	0.00	10.18	2043.2	-3655.1	0.0	10698.7	0.00	0.10	-3674.0	12610.8	0.29	0.16			
510	SLU	5.10	11.40	0.00	7.63		10400.2	15497.2	0.67	0.27	-1659.5	7186.3	0.23	0.19				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 505 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
510	SLU	0.25	11.40	0.00	7.63		11863.2	15497.2	0.77	0.27	0.0	7186.3	0.00	0.19				
CAM	SLU	3.45	7.63	0.00	10.18	2043.2	-6079.8	0.0	10698.7	0.00	0.10	-6079.8	12610.8	0.48	0.16			
515	SLU	6.65	11.40	0.00	7.63		11518.5	15497.2	0.74	0.27	-87.6	7186.3	0.01	0.19				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 505 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2283.2 [kg/m] (VALORE CARATTERISTICO)																		
515	SLU	0.25	11.40	0.00	7.63		10813.7	15497.2	0.70	0.27	-1330.8	7186.3	0.19	0.19				
CAM	SLU	2.72	7.63	0.00	10.18	2043.2	-3655.1	0.0	10698.7	0.00	0.10	-3681.4	12610.8	0.29	0.16			
520	SLU	5.20	7.63	0.00	7.63		7955.8	12119.3	0.66	0.25	-4143.4	7163.7	0.58	0.18				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 505 510 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	6974.3	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.49	4.76	4.27	7055.0	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	7749.6	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 510 515 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	8148.5	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	7379.3	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	8042.9	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 515 520 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	7915.4	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.59	4.86	4.27	7220.7	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	6830.8	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 522 Travata 1522 501 502 503 504 505

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 522 /1 Sez. 2 30x34 30x34 [cm] Lasse 4.13 Lnetta 3.77 q_{medio} 1367.0 [kg/m] (VALORE CARATTERISTICO)																		
1522	SLU	0.10	9.42	0.00	7.63		6597.7	10788.3	0.61	0.38	-3484.6	6627.5	0.53	0.24				
CAM	SLU	1.99	4.02	0.00	7.63	1367.0	-1453.8	0.0	5511.6	0.00	0.11	-2110.6	9208.4	0.23	0.21			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

501	SLU	3.88	7.63	0.00	7.63			6574.2	9281.3	0.71	0.35	-4605.2	6639.4	0.69	0.24				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 522 /2 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
501	SLU	0.25	7.63	0.00	7.63			7301.7	9281.3	0.79	0.35	-4930.5	6639.4	0.74	0.24				
CAM	SLU	2.03	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1726.3	9208.4	0.19	0.21				
502	SLU	3.80	7.63	0.00	7.63			7403.7	9281.3	0.80	0.35	-4462.7	6639.4	0.67	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 522 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
502	SLU	0.25	7.63	0.00	7.63			7039.8	9281.3	0.76	0.35	-4544.1	6639.4	0.68	0.24				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1630.7	9208.4	0.18	0.21				
503	SLU	3.80	7.63	0.00	7.63			7131.7	9281.3	0.77	0.35	-4284.2	6639.4	0.65	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 522 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
503	SLU	0.25	7.63	0.00	7.63		6871.1	9281.3	0.74	0.35	-4396.6	6639.4	0.66	0.24				
CAM	SLU	2.03	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1599.7	9208.4	0.17	0.21			
504	SLU	3.80	7.63	0.00	7.63		7015.5	9281.3	0.76	0.35	-4201.3	6639.4	0.63	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 522 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.00 L_{netta}3.50 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
504	SLU	0.25	7.63	0.00	7.63		5958.2	9281.3	0.64	0.35	-4700.5	6639.4	0.71	0.24				
CAM	SLU	2.00	4.02	0.00	7.63	1367.0	-1367.0	0.0	5511.6	0.00	0.11	-1593.4	9208.4	0.17	0.21			
505	SLU	3.75	7.63	0.00	7.63		7438.4	9281.3	0.80	0.35	-3645.5	6639.4	0.55	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1522 501 Sez. 2 30x34 30x34 [cm] L_{asse} 4.13 L_{netta} 3.77 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.10	0.47	0.37	5541.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.47	3.50	3.03	5029.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.50	3.88	0.37	5177.2	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 501 502 Sez. 2 30x34 30x34 [cm] L_{asse} 4.05 L_{netta} 3.55 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	5649.6	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.43	2.80	5294.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	5805.7	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 502 503 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5528.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5105.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5625.3	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 503 504 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	5460.0	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	5033.1	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	5553.0	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 504 505 Sez. 2 30x34 30x34 [cm] Lasse 4.00 Lnetta 3.50 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	5060.0	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.41	2.82	5299.4	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.41	3.75	0.34	5764.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 622 Travata 1673 1674

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 622 /1 Sez. 2 30x34 30x34 [cm] Lasse 2.95 Lnetta 2.95 q_{medio} 255.0 [kg/m] (VALORE CARATTERISTICO)																		
1673	SLU	0.00	7.46	0.00	7.63		5596.9	8836.3	0.63	0.19	-5084.4	9027.0	0.56	0.20				
CAM	SLU	1.47	5.09	0.00	5.09	255.0	-138.7	696.6	6726.8	0.10	0.12	-1103.6	6284.9	0.18	0.16			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1674	SLU	2.95	7.41	0.00	7.63			5494.7	8777.9	0.63	0.19	-5642.0	9026.9	0.63	0.20				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 1673 1674 Sez. 2 30x34 30x34 [cm] Lasse 2.95 Lnetta 2.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.00	0.34	0.34	4185.9	5717.2	30873.2	55148.5	∅ 12 2br. 7.5'
0.34	2.61	2.27	4099.2	4994.4	39744.8	13505.1	Tr.∅ 8 2br. 25.0'
2.61	2.95	0.34	3962.3	5717.2	30873.2	55148.5	∅ 12 2br. 7.5'

- Travata: 701 Travata 122 123 124 125 126 127 128 129 130 131 1151

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 701 /1 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																		
122	SLU	0.25	5.09	0.00	5.09		3267.9	6974.6	0.47	0.30	-1189.3	4567.3	0.26	0.21				
CAM	SLU	1.88	4.02	0.00	7.63	1231.8	-1082.6	0.0	5511.6	0.00	0.11	-1082.6	9208.4	0.12	0.21			
123	SLU	3.50	4.02	0.00	5.09		2847.5	6034.5	0.47	0.28	-1334.9	4571.5	0.29	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 701 /2 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																		
123	SLU	0.25	4.02	0.00	5.09		3086.4	6034.5	0.51	0.28	-1069.6	4571.5	0.23	0.21				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

CAM	SLU	1.90	4.02	0.00	7.63	1231.8	-1111.7	0.0	5511.6	0.00	0.11	-1111.7	9208.4	0.12	0.21				
124	SLU	3.55	4.02	0.00	5.09			2956.3	6034.5	0.49	0.28	-1178.3	4571.5	0.26	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /3 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
124	SLU	0.25	4.02	0.00	5.09			2981.3	6034.5	0.49	0.28	-1367.1	4571.5	0.30	0.21				
CAM	SLU	1.90	4.02	0.00	7.63	1231.8	-1111.7	0.0	5511.6	0.00	0.11	-1111.7	9208.4	0.12	0.21				
125	SLU	3.55	5.09	0.00	5.09			3311.3	6974.6	0.47	0.30	-1095.3	4567.3	0.24	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /4 Sez. 2 30x34 30x34 [cm] L_{asse}0.59 L_{netta}0.09 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
125	SLU	0.25	5.09	0.00	5.09			1319.1	6965.0	0.19	0.31	-454.2	4465.7	0.10	0.23				
CAM	SLU	0.30	5.09	0.00	5.09	1231.8	-26.8	1319.1	8542.3	0.15	0.17	-454.2	4465.7	0.10	0.23				
126	SLU	0.34	5.09	0.00	5.09			1319.1	6965.0	0.19	0.31	-487.3	4465.7	0.11	0.23				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 701 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
126	SLU	0.25	5.09	0.00	5.09			3251.9	6974.6	0.47	0.30	-975.9	4567.3	0.21	0.21				
CAM	SLU	2.03	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21				
127	SLU	3.80	4.02	0.00	5.09			3066.7	6034.5	0.51	0.28	-1136.6	4571.5	0.25	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 701 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
127	SLU	0.25	4.02	0.00	5.09			3167.1	6034.5	0.52	0.28	-891.9	4571.5	0.20	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21				
128	SLU	3.80	4.02	0.00	5.09			3084.7	6034.5	0.51	0.28	-971.6	4571.5	0.21	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 701 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
128	SLU	0.25	4.02	0.00	5.09			3169.8	6034.5	0.53	0.28	-893.2	4571.5	0.20	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21				
129	SLU	3.80	4.02	0.00	5.09			3086.5	6034.5	0.51	0.28	-967.0	4571.5	0.21	0.21				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
129	SLU	0.25	4.02	0.00	5.09			3171.1	6034.5	0.53	0.28	-892.5	4571.5	0.20	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21				
130	SLU	3.80	4.02	0.00	5.09			3085.8	6034.5	0.51	0.28	-968.7	4571.5	0.21	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 701 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
130	SLU	0.25	4.02	0.00	5.09			3159.7	6034.5	0.52	0.28	-891.6	4571.5	0.20	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21				
131	SLU	3.80	4.02	0.00	7.63			3067.0	6141.4	0.50	0.30	-932.9	6631.9	0.14	0.28				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 701 /10 Sez. 2 30x34 30x34 [cm] L_{asse} 4.17 L_{netta} 3.82 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																		
131	SLU	0.25	4.02	0.00	7.63			3611.5	6141.4	0.59	0.30	-1346.0	6631.9	0.20	0.28			
CAM	SLU	2.16	4.02	0.00	7.63	1231.8	-1335.5	0.0	5511.6	0.00	0.11	-1446.2	9208.4	0.16	0.21			
1151	SLU	4.07	9.42	0.00	5.09			3231.2	10777.9	0.30	0.37	-1146.2	4561.3	0.25	0.21			

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 122 123 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	3338.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.16	2.57	2920.0	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	3158.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 123 124 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	3240.5	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.21	2.62	2821.7	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	3165.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 124 125 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	3181.5	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.21	2.62	2951.5	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	3370.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 125 126 Sez. 2 30x34 30x34 [cm] Lasse 0.59 Lnetta 0.09 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.25	0.34	0.09	9388.6	4994.4	30873.2	55148.5	ø 12 2br. 7.5'
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- VERIFICHE A TAGLIO Trave 126 127 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	3333.0	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.43	2.80	2872.7	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	3232.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 127 128 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3260.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2791.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3213.2	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 128 129 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3259.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2791.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3214.1	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 129 130 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3260.7	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2792.1	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3213.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 130 131 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3246.9	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2778.4	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.42	3.80	0.38	3207.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
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- VERIFICHE A TAGLIO Trave 131 1151 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.66	0.41	3492.4	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.66	3.66	3.00	2998.7	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.66	4.07	0.41	3502.2	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 706 Travata 150 151 152 153 154 155 156 157 158 1169

Nodo	x [m]	Afe [cm ²]	Afe _T [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 706 /1 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																		
150	SLU	0.25	7.63	0.00	7.63		2886.7	9281.3	0.31	0.35	-857.8	6639.4	0.13	0.24				
CAM	SLU	1.88	4.02	0.00	7.63	1231.8	-1082.6	0.0	5511.6	0.00	0.11	-1082.6	9208.4	0.12	0.21			
151	SLU	3.50	5.09	0.00	5.09		2505.5	6974.6	0.36	0.30	-1035.9	4567.3	0.23	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _T [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 706 /2 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 q_{medio} 1231.8 [kg/m] (VALORE CARATTERISTICO)																		
151	SLU	0.25	5.09	0.00	5.09		2769.1	6974.6	0.40	0.30	-792.8	4567.3	0.17	0.21				
CAM	SLU	1.90	4.02	0.00	7.63	1231.8	-1111.7	0.0	5511.6	0.00	0.11	-1111.7	9208.4	0.12	0.21			
152	SLU	3.55	5.09	0.00	5.09		2692.7	6974.6	0.39	0.30	-875.6	4567.3	0.19	0.21				

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 706 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.39 L_{netta}3.89 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
152	SLU	0.25	5.09	0.00	5.09		3009.9	6974.6	0.43	0.30	-383.4	4567.3	0.08	0.21				
CAM	SLU	2.19	4.02	0.00	7.63	1231.8	-1483.7	0.0	5511.6	0.00	0.11	-1483.7	9208.4	0.16	0.21			
153	SLU	4.14	5.09	0.00	5.09		2938.7	6974.6	0.42	0.30	-453.7	4567.3	0.10	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 706 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
153	SLU	0.25	5.09	0.00	5.09		2875.1	6974.6	0.41	0.30	-619.6	4567.3	0.14	0.21				
CAM	SLU	2.03	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21			
154	SLU	3.80	5.09	0.00	5.09		2788.5	6974.6	0.40	0.30	-688.0	4567.3	0.15	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 706 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																		
154	SLU	0.25	5.09	0.00	5.09		2865.4	6974.6	0.41	0.30	-627.6	4567.3	0.14	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21			

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

155	SLU	3.80	5.09	0.00	5.09			2785.9	6974.6	0.40	0.30	-697.6	4567.3	0.15	0.21				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 706 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
155	SLU	0.25	5.09	0.00	5.09			2865.7	6974.6	0.41	0.30	-627.3	4567.3	0.14	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21				
156	SLU	3.80	5.09	0.00	5.09			2785.7	6974.6	0.40	0.30	-698.1	4567.3	0.15	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 706 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
156	SLU	0.25	5.09	0.00	5.09			2866.0	6974.6	0.41	0.30	-626.6	4567.3	0.14	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21				
157	SLU	3.80	5.09	0.00	5.09			2783.9	6974.6	0.40	0.30	-698.3	4567.3	0.15	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 706 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
157	SLU	0.25	5.09	0.00	5.09			2864.1	6974.6	0.41	0.30	-630.0	4567.3	0.14	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1231.8	-1262.8	0.0	5511.6	0.00	0.11	-1262.8	9208.4	0.14	0.21				
158	SLU	3.80	5.09	0.00	5.09			2808.7	6974.6	0.40	0.30	-704.4	4567.3	0.15	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 706 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.17 L_{netta}3.82 q_{medio}1231.8 [kg/m] (VALORE CARATTERISTICO)																			
158	SLU	0.25	5.09	0.00	5.09			2732.1	6974.6	0.39	0.30	-549.4	4567.3	0.12	0.21				
CAM	SLU	2.16	4.02	0.00	7.63	1231.8	-1335.5	0.0	5511.6	0.00	0.11	-1412.5	9208.4	0.15	0.21				
1169	SLU	4.07	7.63	0.00	5.09			2260.8	9244.2	0.24	0.34	-302.5	4565.4	0.07	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 150 151 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	3122.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.16	2.57	2703.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	2943.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 151 152 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3046.0	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.17	2.54	2577.0	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.17	3.55	0.38	2996.1	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 152 153 Sez. 2 30x34 30x34 [cm] Lasse 4.39 Lnetta 3.89 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.64	0.39	3182.2	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.64	3.75	3.12	2707.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.75	4.14	0.39	3144.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 153 154 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.66	0.41	3092.9	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.66	3.39	2.73	2588.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.39	3.80	0.41	3047.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 154 155 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3092.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2624.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3049.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 155 156 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3093.1	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2624.5	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3049.2	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 156 157 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3093.2	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2624.7	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3048.5	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 157 158 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	3094.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	2625.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3056.7	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 158 1169 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.66	0.41	3020.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.66	3.66	3.00	2517.1	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.66	4.07	0.41	3018.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 325 Travata 350 351 352 353 354 355 356 357 358 1369

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 450 451 452 453 454 455 456 457 458 1469

Nodo	x [m]	Afe [cm ²]	Afe _T [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{Mre} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 325 /1 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 q_{medio} 1227.0 [kg/m] (VALORE CARATTERISTICO)																		
350	SLU	0.25	7.63	0.00	7.63		6699.5	9281.3	0.72	0.35	-3474.9	6639.4	0.52	0.24				
CAM	SLU	1.88	4.02	0.00	7.63	1227.0	-1078.4	144.2	5511.6	0.03	0.11	-1409.4	9208.4	0.15	0.21			
351	SLU	3.50	7.63	0.00	7.63		5134.5	9281.3	0.55	0.35	-4440.0	6639.4	0.67	0.24				

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 325 /2 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
351	SLU	0.25	7.63	0.00	7.63		5928.3	9281.3	0.64	0.35	-3512.8	6639.4	0.53	0.24				
CAM	SLU	1.90	4.02	0.00	7.63	1227.0	-1107.4	0.0	5511.6	0.00	0.11	-1343.6	9208.4	0.15	0.21			
352	SLU	3.55	7.63	0.00	7.63		5610.7	9281.3	0.60	0.35	-3897.6	6639.4	0.59	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 325 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.39 L_{netta}3.89 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
352	SLU	0.25	7.63	0.00	7.63		5911.7	9281.3	0.64	0.35	-2813.9	6639.4	0.42	0.24				
CAM	SLU	2.19	4.02	0.00	7.63	1227.0	-1477.9	0.0	5511.6	0.00	0.11	-1477.9	9208.4	0.16	0.21			
353	SLU	4.14	7.63	0.00	5.09		5654.9	9244.2	0.61	0.34	-3065.7	4565.4	0.67	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 325 /4 Sez. 2 30x34 30x34 [cm] L _{asse} 4.05 L _{netta} 3.55 q _{medio} 1227.0 [kg/m] (VALORE CARATTERISTICO)																			
353	SLU	0.25	7.63	0.00	5.09			5839.0	9244.2	0.63	0.34	-3270.3	4565.4	0.72	0.21				
CAM	SLU	2.03	4.02	0.00	7.63	1227.0	-1257.9	0.0	5511.6	0.00	0.11	-1333.1	9208.4	0.14	0.21				
354	SLU	3.80	7.63	0.00	5.09			5681.9	9244.2	0.61	0.34	-3399.7	4565.4	0.74	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	A _{fe} [cm ²]	A _{feI} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} / M _{re}	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} / M _{ri}	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 325 /5 Sez. 2 30x34 30x34 [cm] L _{asse} 4.05 L _{netta} 3.55 q _{medio} 1227.0 [kg/m] (VALORE CARATTERISTICO)																			
354	SLU	0.25	7.63	0.00	5.09			5865.4	9244.2	0.63	0.34	-3241.5	4565.4	0.71	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1227.0	-1257.9	0.0	5511.6	0.00	0.11	-1350.0	9208.4	0.15	0.21				
355	SLU	3.80	7.63	0.00	5.09			5656.4	9244.2	0.61	0.34	-3450.9	4565.4	0.76	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	A _{fe} [cm ²]	A _{feI} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} / M _{re}	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} / M _{ri}	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 325 /6 Sez. 2 30x34 30x34 [cm] L _{asse} 4.05 L _{netta} 3.55 q _{medio} 1227.0 [kg/m] (VALORE CARATTERISTICO)																			
355	SLU	0.25	7.63	0.00	5.09			5866.4	9244.2	0.63	0.34	-3245.0	4565.4	0.71	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1227.0	-1257.9	0.0	5511.6	0.00	0.11	-1351.8	9208.4	0.15	0.21				
356	SLU	3.80	7.63	0.00	5.09			5658.9	9244.2	0.61	0.34	-3454.9	4565.4	0.76	0.21				

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 325 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
356	SLU	0.25	7.63	0.00	5.09		5870.9	9244.2	0.64	0.34	-3247.5	4565.4	0.71	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1227.0	-1257.9	0.0	5511.6	0.00	0.11	-1352.2	9208.4	0.15	0.21			
357	SLU	3.80	7.63	0.00	7.63		5662.7	9281.3	0.61	0.35	-3459.2	6639.4	0.52	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 325 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
357	SLU	0.25	7.63	0.00	7.63		5882.3	9281.3	0.63	0.35	-3230.1	6639.4	0.49	0.24				
CAM	SLU	2.02	4.02	0.00	7.63	1227.0	-1257.9	0.0	5511.6	0.00	0.11	-1382.0	9208.4	0.15	0.21			
358	SLU	3.80	7.63	0.00	7.63		5643.7	9281.3	0.61	0.35	-3521.7	6639.4	0.53	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 325 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.17 L_{netta}3.82 q_{medio}1227.0 [kg/m] (VALORE CARATTERISTICO)																		
358	SLU	0.25	7.63	0.00	7.63		5117.7	9281.3	0.55	0.35	-3596.2	6639.4	0.54	0.24				
CAM	SLU	2.16	4.02	0.00	7.63	1227.0	-1330.3	0.0	5511.6	0.00	0.11	-1810.4	9208.4	0.20	0.21			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1369	SLU	4.07	9.42	0.00	7.63			5495.5	10788.3	0.51	0.38	-2409.8	6627.5	0.36	0.24				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 350 351 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	5319.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.16	2.57	4901.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	4563.8	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 351 352 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4914.5	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.21	2.62	4497.4	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	4707.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 352 353 Sez. 2 30x34 30x34 [cm] Lasse 4.39 Lnetta 3.89 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.65	0.40	4632.5	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.65	3.74	3.08	4135.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.74	4.14	0.40	4498.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 353 354 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.65	0.40	4709.1	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.65	3.40	2.74	4214.4	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.40	3.80	0.40	4630.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 354 355 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4730.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4263.6	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4615.7	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 355 356 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4731.7	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4265.0	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4617.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 356 357 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4734.1	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4267.4	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4619.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 357 358 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4754.3	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4287.6	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4609.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 358 1369 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4242.1	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.68	3.05	4254.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.68	4.07	0.38	4722.4	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Travata: 1008 Travata 422 432 441 450

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 222 232 241 250
- 322 332 341 350

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 1008 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																		
422	SLU	0.15	15.11	0.00	15.21		13988.8	19191.4	0.73	0.33	-9439.6	13196.4	0.72	0.24				
CAM	SLU	2.63	9.42	0.00	10.18	1936.3	-3463.9	0.0	12742.6	0.00	0.11	-4380.5	12610.3	0.35	0.16			
432	SLU	5.10	19.01	0.00	15.21		17710.0	22550.5	0.79	0.36	-8681.5	13195.7	0.66	0.23				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 1008 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																		
432	SLU	0.25	19.01	0.00	15.21		18557.6	22550.5	0.82	0.36	-6407.3	13195.7	0.49	0.23				
CAM	SLU	3.45	9.42	0.00	10.18	1936.3	-5761.8	0.0	12742.6	0.00	0.11	-5761.8	12610.3	0.46	0.16			
441	SLU	6.65	19.01	0.00	15.21		18559.0	22550.5	0.82	0.36	-6391.1	13195.7	0.48	0.23				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	x	Afe	Afe _l	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bt}	σ _{fE}	σ _{fi}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 1008 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																		
441	SLU	0.25	19.01	0.00	15.21		17858.7	22550.5	0.79	0.36	-8846.4	13195.7	0.67	0.23				
CAM	SLU	2.72	9.42	0.00	10.18	1936.3	-3463.9	0.0	12742.6	0.00	0.11	-4405.7	12610.3	0.35	0.16			
450	SLU	5.20	15.11	0.00	15.21		14132.5	19191.4	0.74	0.33	-9566.4	13196.4	0.72	0.24				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 422 432 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	9370.3	12654.6	72037.5	24510.5	ø 8 2br. 7.5'
0.49	4.76	4.27	9516.6	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	10175.0	12654.6	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 432 441 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	9961.8	12654.6	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	9235.6	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	9964.5	12654.6	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 441 450 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	10230.0	12654.6	72037.5	24510.5	ø 8 2br. 7.5'
0.59	4.86	4.27	9571.7	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	9432.5	12654.6	72037.5	24510.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Travata: 107 Travata 423 433 442 451

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 123 133 142 151
- 124 134 143 152
- 126 135 144 153
- 127 136 145 154
- 128 137 146 155
- 129 138 147 156
- 130 139 148 157
- 131 140 149 158
- 223 233 242 251
- 224 234 243 252
- 226 235 244 253
- 227 236 245 254
- 228 237 246 255
- 229 238 247 256
- 230 239 248 257
- 231 240 249 258
- 323 333 342 351
- 324 334 343 352
- 326 335 344 353
- 327 336 345 354
- 328 337 346 355
- 329 338 347 356
- 330 339 348 357
- 331 340 349 358
- 424 434 443 452
- 426 435 444 453
- 427 436 445 454

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 428 437 446 455
- 429 438 447 456
- 430 439 448 457
- 431 440 449 458

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 107 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																		
423	SLU	0.15	17.88	0.00	11.40		14913.6	21430.6	0.70	0.34	-6966.3	10150.5	0.69	0.22				
CAM	SLU	2.63	9.42	0.00	12.57	3560.8	-6370.0	0.0	12825.4	0.00	0.12	-6666.7	15269.6	0.44	0.17			
433	SLU	5.10	26.50	0.00	15.21		20162.3	28657.5	0.70	0.42	-4685.5	13154.6	0.36	0.23				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 107 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																		
433	SLU	0.25	26.45	0.00	15.21		22670.6	28621.6	0.79	0.42	-1117.0	13154.6	0.08	0.23				
CAM	SLU	3.45	9.42	0.00	18.10	3560.8	-10595.7	0.0	12993.6	0.00	0.13	-10595.7	21286.4	0.50	0.22			
442	SLU	6.65	26.49	0.00	15.21		22683.2	28648.5	0.79	0.42	-1227.4	13154.6	0.09	0.23				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 107 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																		
442	SLU	0.25	26.46	0.00	15.21			20143.8	28630.6	0.70	0.42	-4689.7	13154.6	0.36	0.23			
CAM	SLU	2.72	9.42	0.00	12.57	3560.8	-6370.0	0.0	12825.4	0.00	0.12	-6767.7	15269.6	0.44	0.17			
451	SLU	5.20	17.88	0.00	11.40			14914.0	21430.5	0.70	0.34	-6946.5	10150.5	0.68	0.22			

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 423 433 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	12985.6	11497.5	72037.5	24510.5	ø 8 2br. 7.5'
0.49	4.76	4.27	12955.9	11875.5	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	14259.6	12654.6	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 433 442 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	15301.1	12654.6	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	13865.1	13410.4	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	15308.7	12654.6	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 442 451 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	14258.1	12654.6	72037.5	24510.5	ø 8 2br. 7.5'
0.62	4.83	4.21	12834.5	11875.5	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.83	5.20	0.37	12727.3	11497.5	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 1108 Travata 522 532 541 550

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 122 132 141 150

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 1108 /1 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																		
522	SLU	0.15	7.63	0.00	7.63		8957.1	12119.3	0.74	0.25	-4889.4	7163.7	0.68	0.18				
CAM	SLU	2.63	7.63	0.00	10.18	1936.3	-3463.9	0.0	10698.7	0.00	0.10	-3605.8	12610.8	0.29	0.16			
532	SLU	5.10	11.40	0.00	7.63		12009.4	15497.2	0.77	0.27	-3286.7	7186.3	0.46	0.19				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 1108 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																		
532	SLU	0.25	11.40	0.00	7.63		12983.4	15497.2	0.84	0.27	-1222.7	7186.3	0.17	0.19				
CAM	SLU	3.45	7.63	0.00	10.18	1936.3	-5761.8	0.0	10698.7	0.00	0.10	-5761.8	12610.8	0.46	0.16			
541	SLU	6.65	11.40	0.00	7.63		13010.3	15497.2	0.84	0.27	-1196.0	7186.3	0.17	0.19				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 1108 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}2161.3 [kg/m] (VALORE CARATTERISTICO)																		

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

541	SLU	0.25	11.40	0.00	7.63			12000.0	15497.2	0.77	0.27	-3334.1	7186.3	0.46	0.19				
CAM	SLU	2.72	7.63	0.00	10.18	1936.3	-3463.9	0.0	10698.7	0.00	0.10	-3617.6	12610.8	0.29	0.16				
550	SLU	5.20	7.63	0.00	7.63			9205.2	12119.3	0.76	0.25	-5114.8	7163.7	0.71	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 522 532 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.15	0.49	0.34	7150.0	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.49	4.76	4.27	7381.0	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	8039.4	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 532 541 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	8248.9	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	7528.5	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	8257.4	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 541 550 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	8035.9	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.59	4.86	4.27	7377.6	11070.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	7169.3	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 224 Travata 522 523 524 525 526 527 528 529 530 531 1551

N.B. Nella travata che segue sono incluse le verifiche delle travate:

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 222 223 224 225 226 227 228 229 230 231 1251
- 322 323 324 325 326 327 328 329 330 331 1351
- 422 423 424 425 426 427 428 429 430 431 1451

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 224 /1 Sez. 2 30x34 30x34 [cm] L_{asse}3.75 L_{netta}3.25 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
522	SLU	0.25	5.09	0.00	5.09		5634.2	6974.6	0.81	0.30	-2241.3	4567.3	0.49	0.21				
CAM	SLU	1.88	4.02	0.00	7.63	1367.0	-1201.5	0.0	5511.6	0.00	0.11	-1230.7	9208.4	0.13	0.21			
523	SLU	3.50	4.02	0.00	5.09		3923.6	6034.5	0.65	0.28	-3439.0	4571.5	0.75	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 224 /2 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
523	SLU	0.25	4.02	0.00	5.09		4915.9	6034.5	0.81	0.28	-2516.5	4571.5	0.55	0.21				
CAM	SLU	1.90	4.02	0.00	7.63	1367.0	-1233.7	0.0	5511.6	0.00	0.11	-1233.7	9208.4	0.13	0.21			
524	SLU	3.55	4.02	0.00	5.09		4496.5	6034.5	0.75	0.28	-2905.1	4571.5	0.64	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 224 /3 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1055.0 [kg/m] (VALORE CARATTERISTICO)																		

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

524	SLU	0.25	4.02	0.00	5.09			4466.4	6034.5	0.74	0.28	-3530.6	4571.5	0.77	0.21				
CAM	SLU	1.90	4.02	0.00	7.63	1055.0	-952.1	19.3	5511.6	0.00	0.11	-1222.1	9208.4	0.13	0.21				
525	SLU	3.55	5.09	0.00	5.09			5734.1	6974.6	0.82	0.30	-2456.1	4567.3	0.54	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /4 Sez. 2 30x34 30x34 [cm] L_{asse}0.59 L_{netta}0.09 q_{medio}1055.0 [kg/m] (VALORE CARATTERISTICO)																			
525	SLU	0.25	5.09	0.00	5.09			1722.8	6965.0	0.25	0.31	-760.0	4465.7	0.17	0.23				
CAM	SLU	0.30	5.09	0.00	5.09	1055.0	-23.0	1722.8	8542.3	0.20	0.17	-760.0	4465.7	0.17	0.23				
526	SLU	0.34	5.09	0.00	5.09			1722.8	6965.0	0.25	0.31	-765.8	4465.7	0.17	0.23				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
526	SLU	0.25	5.09	0.00	5.09			5641.3	6974.6	0.81	0.30	-2268.4	4567.3	0.50	0.21				
CAM	SLU	2.03	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21				
527	SLU	3.80	4.02	0.00	5.09			4391.5	6034.5	0.73	0.28	-3259.9	4571.5	0.71	0.21				

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
527	SLU	0.25	4.02	0.00	5.09			4867.3	6034.5	0.81	0.28	-2280.6	4571.5	0.50	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21				
528	SLU	3.80	4.02	0.00	5.09			4632.5	6034.5	0.77	0.28	-2515.3	4571.5	0.55	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
528	SLU	0.25	4.02	0.00	5.09			4887.1	6034.5	0.81	0.28	-2262.1	4571.5	0.49	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21				
529	SLU	3.80	4.02	0.00	5.09			4624.1	6034.5	0.77	0.28	-2489.9	4571.5	0.54	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
529	SLU	0.25	4.02	0.00	5.09			4868.1	6034.5	0.81	0.28	-2251.9	4571.5	0.49	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
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530	SLU	3.80	4.02	0.00	5.09			4611.4	6034.5	0.76	0.28	-2469.2	4571.5	0.54	0.21				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
530	SLU	0.25	4.02	0.00	5.09			4852.5	6034.5	0.80	0.28	-2220.0	4571.5	0.49	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21				
531	SLU	3.80	4.02	0.00	7.63			4461.3	6141.4	0.73	0.30	-2438.0	6631.9	0.37	0.28				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 224 /10 Sez. 2 30x34 30x34 [cm] L_{asse}4.17 L_{netta}3.82 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
531	SLU	0.25	4.02	0.00	7.63			5060.6	6141.4	0.82	0.30	-3916.0	6631.9	0.59	0.28				
CAM	SLU	2.16	4.02	0.00	7.63	1367.0	-1482.1	0.0	5511.6	0.00	0.11	-1993.1	9208.4	0.22	0.21				
1551	SLU	4.07	9.42	0.00	5.09			5663.2	10777.9	0.53	0.37	-2287.8	4561.3	0.50	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 522 523 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4702.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.16	2.57	4285.1	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	3827.7	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 523 524 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4324.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.21	2.62	3907.7	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	4087.2	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 524 525 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4060.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.21	2.62	4332.3	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	4749.5	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 525 526 Sez. 2 30x34 30x34 [cm] Lasse 0.59 Lnetta 0.09 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.34	0.09	11819.4	4994.4	30873.2	82722.8	ø 12 2br. 5.0'

- VERIFICHE A TAGLIO Trave 526 527 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4616.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4149.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	3985.7	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 527 528 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.25	0.63	0.38	4194.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	3727.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4059.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 528 529 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	4193.0	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.43	2.80	3733.2	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	4051.5	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 529 530 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4181.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	3714.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4044.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 530 531 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4177.5	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	3701.5	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4023.4	5717.2	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 531 1551 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.66	0.41	4311.3	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.66	3.66	3.00	4469.9	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.66	4.07	0.41	5028.7	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 225 Travata 550 551 552 553 554 555 556 557 558 1569

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 250 251 252 253 254 255 256 257 258 1269

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 225 /1 Sez. 2 30x34 30x34 [cm] L_{asse}3.75 L_{netta}3.25 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
550	SLU	0.25	7.63	0.00	7.63		5510.1	9281.3	0.59	0.35	-2764.3	6639.4	0.42	0.24				
CAM	SLU	1.88	4.02	0.00	7.63	1367.0	-1201.5	0.0	5511.6	0.00	0.11	-1303.3	9208.4	0.14	0.21			
551	SLU	3.50	5.09	0.00	5.09		4460.4	6974.6	0.64	0.30	-3317.3	4567.3	0.73	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 225 /2 Sez. 2 30x34 30x34 [cm] L_{asse}3.80 L_{netta}3.30 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
551	SLU	0.25	5.09	0.00	5.09		4976.0	6974.6	0.71	0.30	-2676.8	4567.3	0.59	0.21				
CAM	SLU	1.90	4.02	0.00	7.63	1367.0	-1233.7	0.0	5511.6	0.00	0.11	-1238.3	9208.4	0.13	0.21			
552	SLU	3.55	5.09	0.00	5.09		4782.2	6974.6	0.69	0.30	-2930.6	4567.3	0.64	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 225 /3 Sez. 2 30x34 30x34 [cm] L_{asse}4.39 L_{netta}3.89 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

552	SLU	0.25	5.09	0.00	5.09			5032.4	6974.6	0.72	0.30	-2112.9	4567.3	0.46	0.21				
CAM	SLU	2.19	4.02	0.00	7.63	1367.0	-1646.6	0.0	5511.6	0.00	0.11	-1646.6	9208.4	0.18	0.21				
553	SLU	4.14	5.09	0.00	5.09			4872.0	6974.6	0.70	0.30	-2274.5	4567.3	0.50	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 225 /4 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
553	SLU	0.25	5.09	0.00	5.09			4979.4	6974.6	0.71	0.30	-2460.3	4567.3	0.54	0.21				
CAM	SLU	2.03	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21				
554	SLU	3.80	5.09	0.00	5.09			4848.0	6974.6	0.70	0.30	-2555.3	4567.3	0.56	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 225 /5 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
554	SLU	0.25	5.09	0.00	5.09			4985.5	6974.6	0.71	0.30	-2442.1	4567.3	0.53	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21				
555	SLU	3.80	5.09	0.00	5.09			4828.9	6974.6	0.69	0.30	-2583.6	4567.3	0.57	0.21				

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 225 /6 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
555	SLU	0.25	5.09	0.00	5.09		4983.9	6974.6	0.71	0.30	-2443.0	4567.3	0.53	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21			
556	SLU	3.80	5.09	0.00	5.09		4828.5	6974.6	0.69	0.30	-2583.6	4567.3	0.57	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 225 /7 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
556	SLU	0.25	5.09	0.00	5.09		5110.1	6974.6	0.73	0.30	-2443.1	4567.3	0.53	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1401.4	9208.4	0.15	0.21			
557	SLU	3.80	5.09	0.00	5.09		4957.4	6974.6	0.71	0.30	-2585.1	4567.3	0.57	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 225 /8 Sez. 2 30x34 30x34 [cm] L_{asse}4.05 L_{netta}3.55 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																		
557	SLU	0.25	5.09	0.00	5.09		5370.2	6974.6	0.77	0.30	-2456.4	4567.3	0.54	0.21				
CAM	SLU	2.02	4.02	0.00	7.63	1367.0	-1401.4	0.0	5511.6	0.00	0.11	-1463.1	9208.4	0.16	0.21			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

558	SLU	3.80	5.09	0.00	5.09			5192.8	6974.6	0.74	0.30	-2873.2	4567.3	0.63	0.21				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 225 /9 Sez. 2 30x34 30x34 [cm] L_{asse}4.17 L_{netta}3.82 q_{medio}1367.0 [kg/m] (VALORE CARATTERISTICO)																			
558	SLU	0.25	5.09	0.00	5.09		4856.1	6974.6	0.70	0.30	-3318.3	4567.3	0.73	0.21					
CAM	SLU	2.16	4.02	0.00	7.63	1367.0	-1482.1	0.0	5511.6	0.00	0.11	-1910.5	9208.4	0.21	0.21				
1569	SLU	4.07	7.63	0.00	5.09		5441.5	9244.2	0.59	0.34	-2294.3	4565.4	0.50	0.21					

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 550 551 Sez. 2 30x34 30x34 [cm] Lasse 3.75 Lnetta 3.25 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4628.9	5717.2	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.16	2.57	4211.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.16	3.50	0.34	4150.5	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 551 552 Sez. 2 30x34 30x34 [cm] Lasse 3.80 Lnetta 3.30 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	4350.0	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.59	3.21	2.62	3932.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.21	3.55	0.34	4218.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 552 553 Sez. 2 30x34 30x34 [cm] Lasse 4.39 Lnetta 3.89 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4276.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.76	3.14	3763.5	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.76	4.14	0.38	4214.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 553 554 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.62	0.37	4250.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.62	3.43	2.80	3779.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.43	3.80	0.37	4236.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 554 555 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4335.8	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	3815.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4247.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 555 556 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4407.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	3887.4	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4300.4	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 556 557 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4513.7	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	3993.8	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4386.3	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 557 558 Sez. 2 30x34 30x34 [cm] Lasse 4.05 Lnetta 3.55 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	4678.5	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.63	3.42	2.79	4158.5	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.42	3.80	0.38	4507.1	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 558 1569 Sez. 2 30x34 30x34 [cm] Lasse 4.17 Lnetta 3.82 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.67	0.42	4319.6	4994.4	30873.2	24510.5	ø 8 2br. 7.5'
0.67	3.64	2.97	4314.6	5717.2	39744.8	13505.1	Tr.ø 8 2br. 25.0'
3.64	4.07	0.42	4894.1	4994.4	30873.2	24510.5	ø 8 2br. 7.5'

- Travata: 507 Travata 523 533 542 551

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 524 534 543 552
- 526 535 544 553
- 527 536 545 554
- 528 537 546 555
- 529 538 547 556
- 530 539 548 557
- 531 540 549 558

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	Mre	x/d	Mdi	Mri	Mdi	Mri	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
	[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 507 /1 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 q_{medio} 4013.8 [kg/m] (VALORE CARATTERISTICO)																				
523	SLU	0.15	9.42	0.00	7.63		11083.8	13730.8	0.81	0.26	-3260.6	7174.3	0.45	0.18						
CAM	SLU	2.63	7.63	0.00	11.37	3560.8	-6370.0	0.0	10750.8	0.00	0.11	-6407.9	13947.3	0.46	0.17					
533	SLU	5.10	22.62	0.00	11.40		14595.2	25514.9	0.57	0.38	0.0	10148.2	0.00	0.21						

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _f [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 507 /2 Sez. 1 70x34 70x34 [cm] L_{asse}6.90 L_{netta}6.40 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																		
533	SLU	0.25	22.61	0.00	11.40		17396.8	25509.7	0.68	0.38	0.0	10148.2	0.00	0.21				
CAM	SLU	3.45	7.63	0.00	18.10	3560.8	-10595.7	0.0	10987.9	0.00	0.12	-10595.7	21286.6	0.50	0.23			
542	SLU	6.65	22.62	0.00	11.40		17445.5	25514.9	0.68	0.38	0.0	10148.2	0.00	0.21				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _f [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 507 /3 Sez. 1 70x34 70x34 [cm] L_{asse}5.35 L_{netta}4.95 q_{medio}4013.8 [kg/m] (VALORE CARATTERISTICO)																		
542	SLU	0.25	22.62	0.00	11.40		14597.4	25514.9	0.57	0.38	0.0	10148.2	0.00	0.21				
CAM	SLU	2.72	7.63	0.00	11.37	3560.8	-6370.0	0.0	10750.8	0.00	0.11	-6411.1	13947.3	0.46	0.17			
551	SLU	5.20	9.42	0.00	7.63		10529.0	13730.8	0.77	0.26	-3247.8	7174.3	0.45	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 523 533 Sez. 1 70x34 70x34 [cm] L_{asse} 5.35 L_{netta} 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.15	0.49	0.34	11398.6	10057.8	72037.5	24510.5	ø 8 2br. 7.5'
0.49	4.76	4.27	11246.0	11486.9	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.76	5.10	0.34	12549.7	11497.5	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 533 542 Sez. 1 70x34 70x34 [cm] Lasse 6.90 Lnetta 6.40 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.63	0.38	13882.6	11497.5	72037.5	24510.5	ø 8 2br. 7.5'
0.63	6.27	5.65	12484.2	13345.0	92738.0	21101.8	Tr.ø 10 2br. 25.0'
6.27	6.65	0.38	13968.0	11497.5	72037.5	24510.5	ø 8 2br. 7.5'

- VERIFICHE A TAGLIO Trave 542 551 Sez. 1 70x34 70x34 [cm] Lasse 5.35 Lnetta 4.95 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.59	0.34	12559.2	11497.5	72037.5	24510.5	ø 8 2br. 7.5'
0.59	4.86	4.27	11255.4	11486.9	92738.0	21101.8	Tr.ø 10 2br. 25.0'
4.86	5.20	0.34	10894.3	10057.8	72037.5	24510.5	ø 8 2br. 7.5'

- Travata: 216 Travata 259 260

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 261 262
- 263 264
- 265 266

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{Mre} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 216 /1 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 q_{medio} 612.5 [kg/m] (VALORE CARATTERISTICO)																			
259	SLU	0.25	24.21	0.00	26.55		29796.3	41013.0	0.73	0.30	-28758.6	39321.4	0.73	0.20					
CAM	SLU	2.07	9.42	0.00	9.42	612.5	-659.3	4375.2	18629.0	0.23	0.08	-5426.9	17773.1	0.31	0.11				
260	SLU	3.90	24.21	0.00	26.55		29796.3	41013.0	0.73	0.30	-28758.6	39321.4	0.73	0.20					

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 259 260 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.75	0.50	16732.4	14632.5	77097.6	27543.7	ø 8 2br. 10.0'
0.75	3.40	2.64	16424.3	10361.1	91699.4	33119.1	Tr.ø 10 2br. 25.0'
3.40	3.90	0.50	16732.4	14632.5	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 220 Travata 269 259 261 263 265

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 268 260 262 264 266

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde _{Mre} [kgm]	x/d	Mdi [kgm]	Mri [kgm]	Mdi _{Mri} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 220 /1 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 q_{medio} 3607.6 [kg/m] (VALORE CARATTERISTICO)																		
269	SLU	0.05	18.42	0.00	18.56		236.9	32263.5	0.01	0.28	-5.8	27330.1	0.00	0.16				
CAM	SLU	0.41	21.15	0.00	22.46	3358.6	-220.5	977.8	42936.9	0.02	0.20	-210.2	34149.2	0.01	0.17			
259	SLU	0.77	18.10	0.00	18.10		1174.7	31644.6	0.04	0.28	-55.8	26511.2	0.00	0.19				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde _{Mre}	x/d	Mdi	Mri	Mdi _{Mri}	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	Mre		[kgm]	[kgm]	Mri	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	
Trave 220 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
259	SLU	0.25	18.10	0.00	18.10			25064.2	32079.5	0.78	0.27	-13792.0	27250.3	0.51	0.17				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5589.1	0.0	18667.0	0.00	0.08	-7293.8	17873.6	0.41	0.11				
261	SLU	4.91	18.10	0.00	11.40			22663.6	32077.1	0.71	0.27	-11983.5	17538.8	0.68	0.14				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
Trave 220 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
261	SLU	0.25	18.10	0.00	11.40			22463.6	32077.1	0.70	0.27	-10546.0	17538.8	0.60	0.14				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5589.1	0.0	18667.0	0.00	0.08	-5777.8	17873.6	0.32	0.11				
263	SLU	4.91	18.10	0.00	11.40			21864.6	32077.1	0.68	0.27	-11080.7	17538.8	0.63	0.14				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _t	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}	
Trave 220 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
263	SLU	0.25	18.10	0.00	11.40			23012.9	32077.1	0.72	0.27	-11656.8	17538.8	0.66	0.14				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5578.3	0.0	18667.0	0.00	0.08	-7490.3	17873.6	0.42	0.11				
265	SLU	4.90	17.88	0.00	15.21			24434.4	31743.5	0.77	0.27	-14430.0	23112.6	0.62	0.16				

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 269 259 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	2640.4	12877.8	77097.6	84352.6	ø 14 2br. 10.0'

- VERIFICHE A TAGLIO Trave 259 261 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.76	0.51	15605.2	12877.8	77097.6	27543.7	ø 8 2br. 10.0'
0.76	4.40	3.63	13880.9	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.40	4.91	0.51	15479.9	11040.9	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 261 263 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	14842.9	11040.9	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	13103.9	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	14591.7	11040.9	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 263 265 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	15688.8	11040.9	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	13951.6	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	15402.5	12152.0	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 116 Travata 365 366

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 159 160
- 161 162

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 163 164
- 165 166
- 359 360
- 361 362
- 363 364

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 116 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																		
365	SLU	0.25	22.34	0.00	22.62		26332.8	38393.8	0.69	0.29	-25323.4	33835.1	0.75	0.18				
CAM	SLU	2.07	9.42	0.00	9.42	612.5	-659.3	3783.6	18629.0	0.20	0.08	-4863.6	17773.1	0.27	0.11			
366	SLU	3.90	22.34	0.00	22.62		26332.8	38393.8	0.69	0.29	-25323.4	33835.1	0.75	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 365 366 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	14892.8	13872.2	77097.6	27543.7	ø 8 2br. 10.0'
0.77	3.38	2.60	14572.6	10361.1	91699.4	33119.1	Tr.ø 10 2br. 25.0'
3.38	3.90	0.52	14892.8	13872.2	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 120 Travata 369 359 361 363 365

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 169 159 161 163 165
- 168 160 162 164 166

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- 368 360 362 364 366

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 120 /1 Sez. 5 50x49 50x49 [cm] L_{asse}1.02 L_{netta}0.72 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
369	SLU	0.05	15.53	0.00	18.56			240.7	28133.3	0.01	0.27	-6.3	27352.0	0.00	0.16				
CAM	SLU	0.41	18.26	0.00	22.46	3358.6	-220.5	986.4	38614.2	0.03	0.20	-210.2	34164.9	0.01	0.18				
359	SLU	0.77	15.21	0.00	18.10			1184.2	27520.7	0.04	0.27	-55.8	26533.5	0.00	0.20				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 120 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
359	SLU	0.25	15.21	0.00	18.10			22695.9	27814.5	0.82	0.25	-12076.6	27273.0	0.44	0.18				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5589.1	0.0	18667.0	0.00	0.08	-6978.0	17873.6	0.39	0.11				
361	SLU	4.91	15.21	0.00	11.40			20990.3	27767.0	0.76	0.25	-10084.5	17555.9	0.57	0.14				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 120 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																			
361	SLU	0.25	15.21	0.00	11.40			20703.5	27767.0	0.75	0.25	-8971.0	17555.9	0.51	0.14				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5589.1	0.0	18667.0	0.00	0.08	-5589.1	17873.6	0.31	0.11				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

363	SLU	4.91	15.21	0.00	11.40			19990.0	27767.0	0.72	0.25	-9588.4	17555.9	0.55	0.14				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _t [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 120 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
363	SLU	0.25	15.21	0.00	11.40		21335.0	27767.0	0.77	0.25	-9844.7	17555.9	0.56	0.14				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5578.3	0.0	18667.0	0.00	0.08	-7168.6	17873.6	0.40	0.11			
365	SLU	4.90	15.11	0.00	15.21		22101.1	27635.2	0.80	0.25	-12654.6	23138.0	0.55	0.16				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 369 359 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	2653.7	12877.8	77097.6	84352.6	ø 14 2br. 10.0'

- VERIFICHE A TAGLIO Trave 359 361 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.75	0.50	14673.6	12877.8	77097.6	27543.7	ø 8 2br. 10.0'
0.75	4.41	3.65	13054.1	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.41	4.91	0.50	14747.7	11040.9	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 361 363 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.25	0.77	0.52	14116.2	11040.9	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	12377.2	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	13816.9	11040.9	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 363 365 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	14952.1	11040.9	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	13212.4	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	14487.9	12152.0	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 416 Travata 465 466

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 459 460
- 461 462
- 463 464

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]	
Trave 416 /1 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 q_{medio} 612.5 [kg/m] (VALORE CARATTERISTICO)																			
465	SLU	0.25	15.71	0.00	15.71		20529.9	28605.7	0.72	0.25	-19506.7	23981.1	0.81	0.16					
CAM	SLU	2.07	9.42	0.00	9.42	612.5	-659.3	2818.0	18667.0	0.15	0.08	-3884.2	17873.6	0.22	0.11				
466	SLU	3.90	15.71	0.00	15.71		20529.9	28605.7	0.72	0.25	-19506.8	23981.1	0.81	0.16					

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- VERIFICHE A TAGLIO Trave 465 466 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.76	0.51	11794.2	12284.5	77097.6	27543.7	ø 8 2br. 10.0'
0.76	3.39	2.62	11480.0	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
3.39	3.90	0.51	11794.2	12284.5	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 420 Travata 469 459 461 463 465

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 468 460 462 464 466

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 420 /1 Sez. 5 50x49 50x49 [cm] Lasse1.02 Lnetta0.72 qmedio3607.6 [kg/m] (VALORE CARATTERISTICO)																		
469	SLU	0.05	12.89	0.00	15.67		237.3	24262.9	0.01	0.25	-5.9	23388.9	0.00	0.15				
CAM	SLU	0.41	15.62	0.00	19.57	3358.6	-220.5	978.6	34245.5	0.03	0.18	-210.2	30218.7	0.01	0.17			
459	SLU	0.77	12.57	0.00	15.21		1175.5	23658.9	0.05	0.25	-55.8	22567.9	0.00	0.18				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 420 /2 Sez. 5 50x49 50x49 [cm] Lasse5.16 Lnetta4.66 qmedio3607.6 [kg/m] (VALORE CARATTERISTICO)																		
459	SLU	0.25	12.57	0.00	15.21		19094.8	23834.4	0.80	0.24	-7727.6	23157.8	0.33	0.17				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5589.1	0.0	18667.0	0.00	0.08	-6122.3	17873.6	0.34	0.11			
461	SLU	4.91	12.57	0.00	9.42		16468.2	23732.2	0.69	0.23	-7271.6	14690.7	0.49	0.13				

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 420 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
461	SLU	0.25	12.57	0.00	9.42		17721.1	23732.2	0.75	0.23	-6368.3	14690.7	0.43	0.13				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5589.1	0.0	18667.0	0.00	0.08	-5589.1	17873.6	0.31	0.11			
463	SLU	4.91	12.57	0.00	9.42		16936.1	23732.2	0.71	0.23	-7048.2	14690.7	0.48	0.13				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x [m]	Afe [cm ²]	Afe _I [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 420 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
463	SLU	0.25	12.57	0.00	9.42		16719.9	23732.2	0.70	0.23	-7080.6	14690.7	0.48	0.13				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5578.3	0.0	18667.0	0.00	0.08	-6319.5	17873.6	0.35	0.11			
465	SLU	4.90	12.57	0.00	11.30		18530.7	23762.5	0.78	0.23	-8242.8	17463.5	0.47	0.14				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 469 459 Sez. 5 50x49 50x49 [cm] L_{asse} 1.02 L_{netta} 0.72 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	V _{Sd} [kg]	V _{Rd,c} [kg]	V _{Rd,max} [kg]	V _{Rd,s} [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.05	0.77	0.72	2641.5	12152.0	77097.6	84352.6	ø 14 2br. 10.0'
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- VERIFICHE A TAGLIO Trave 459 461 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.76	0.51	13233.3	12152.0	77097.6	27543.7	ø 8 2br. 10.0'
0.76	4.40	3.63	11509.0	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.40	4.91	0.51	12745.1	10361.1	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 461 463 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	12874.1	10361.1	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	11135.1	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	12544.7	10361.1	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 463 465 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	12915.6	10361.1	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	11324.5	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	13061.6	11005.8	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 516 Travata 565 566

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 559 560
- 561 562
- 563 564

Nodo	x [m]	Afe [cm ²]	AfeI [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 516 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																		
565	SLU	0.25	10.18	0.00	10.18			13420.9	20063.3	0.67	0.21	-12333.8	15867.7	0.78	0.13			
CAM	SLU	2.07	9.42	0.00	9.42	612.5	-659.3	1654.5	18667.0	0.09	0.08	-2656.8	17873.6	0.15	0.11			
566	SLU	3.90	10.18	0.00	10.18			13420.9	20063.3	0.67	0.21	-12333.8	15867.7	0.78	0.13			

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 565 566 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.76	0.51	7985.7	10630.4	77097.6	27543.7	ø 8 2br. 10.0'
0.76	3.39	2.62	7671.5	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
3.39	3.90	0.51	7985.7	10630.4	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 520 Travata 569 559 561 563 565

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 568 560 562 564 566

Nodo	x [m]	A _{fe} [cm ²]	A _{feI} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fe} [kg/cm ²]	σ _{fi} [kg/cm ²]
Trave 520 /1 Sez. 5 50x49 50x49 [cm] L_{asse}1.02 L_{netta}0.72 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
569	SLU	0.05	9.75	0.00	13.03		239.5	19516.7	0.01	0.22	-6.2	19861.6	0.00	0.14				
CAM	SLU	0.41	12.48	0.00	16.93	3358.6	-220.5	983.1	28403.8	0.03	0.15	-210.2	26765.9	0.01	0.16			
559	SLU	0.77	9.42	0.00	12.57		1180.4	18914.7	0.06	0.22	-55.8	19031.1	0.00	0.17				

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bt}	σ _{fE}	σ _{fi}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 520 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
559	SLU	0.25	9.42	0.00	12.57		14351.2	18941.7	0.76	0.21	-3283.6	19333.9	0.17	0.16				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5589.1	0.0	18667.0	0.00	0.08	-5589.1	17873.6	0.31	0.11			
561	SLU	4.91	9.42	0.00	9.42		11976.4	18852.5	0.64	0.21	-3656.2	14692.7	0.25	0.13				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bt}	σ _{fE}	σ _{fi}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 520 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
561	SLU	0.25	9.42	0.00	9.42		13877.5	18852.5	0.74	0.21	-3012.6	14692.7	0.21	0.13				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5589.1	0.0	18667.0	0.00	0.08	-5589.1	17873.6	0.31	0.11			
563	SLU	4.91	9.42	0.00	9.42		13047.8	18852.5	0.69	0.21	-3731.7	14692.7	0.25	0.13				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe _I	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bt}	σ _{fE}	σ _{fi}
[m]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 520 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}3607.6 [kg/m] (VALORE CARATTERISTICO)																		
563	SLU	0.25	9.42	0.00	9.42		12187.7	18852.5	0.65	0.21	-3498.6	14692.7	0.24	0.13				
CAM	SLU	2.58	9.42	0.00	9.42	3358.6	-5578.3	0.0	18667.0	0.00	0.08	-5578.3	17873.6	0.31	0.11			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

565	SLU	4.90	8.18	0.00	11.30			13835.3	16988.0	0.81	0.20	-3753.6	17459.1	0.21	0.15				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 569 559 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	2647.4	11403.9	77097.6	61973.4	ø 12 2br. 10.0'

- VERIFICHE A TAGLIO Trave 559 561 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.78	0.53	11353.3	11403.9	77097.6	27543.7	ø 8 2br. 10.0'
0.78	4.38	3.59	9562.7	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.38	4.91	0.53	10735.4	10361.1	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 561 563 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	11263.7	10361.1	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	9524.7	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	10915.4	10361.1	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 563 565 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	10884.2	10361.1	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	9460.6	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	11197.8	11005.8	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 1804 Travata 665 666

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 663 664

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 1804 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																		
665	SLU	0.25	10.18	0.00	10.18		5466.6	20002.2	0.27	0.22	-4693.9	15641.1	0.30	0.14				
CAM	SLU	2.07	9.42	0.00	9.42	612.5	-659.3	192.1	18667.0	0.01	0.08	-1508.7	17873.6	0.08	0.11			
666	SLU	3.90	10.18	0.00	10.18		5466.6	20002.2	0.27	0.22	-4693.9	15641.1	0.30	0.14				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 665 666 Sez. 5 50x49 50x49 [cm] L_{asse} 4.15 L_{netta} 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	V _{Sd} [kg]	V _{Rd,c} [kg]	V _{Rd,max} [kg]	V _{Rd,s} [kg]	Staffe
0.25	0.74	0.49	3827.3	10630.4	77097.6	61973.4	∅ 12 2br. 10.0'
0.74	3.41	2.67	3527.2	10361.1	91699.4	21196.2	Tr.∅ 8 2br. 25.0'
3.41	3.90	0.49	3827.3	10630.4	77097.6	61973.4	∅ 12 2br. 10.0'

- Travata: 616 Travata 659 660

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 661 662

Nodo	x [m]	Afe [cm ²]	Afe ₁ [cm ²]	Afi [cm ²]	q ^{II} [kg/m]	Md _{plaf} [kgm]	Mde [kgm]	Mre [kgm]	Mde Mre	x/d	Mdi [kgm]	Mri [kgm]	Mdi Mri	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave 616 /1 Sez. 5 50x49 50x49 [cm] L_{asse}4.15 L_{netta}3.65 q_{medio}612.5 [kg/m] (VALORE CARATTERISTICO)																			
659	SLU	0.25	10.18	0.00	10.18			5998.8	20063.3	0.30	0.21	-5226.1	15867.7	0.33	0.13				
CAM	SLU	2.07	9.42	0.00	9.42	612.5	-659.3	281.2	18667.0	0.02	0.08	-1597.8	17873.6	0.09	0.11				
660	SLU	3.90	10.18	0.00	10.18			5998.8	20063.3	0.30	0.21	-5226.1	15867.7	0.33	0.13				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 659 660 Sez. 5 50x49 50x49 [cm] Lasse 4.15 Lnetta 3.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	Vsd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.75	0.50	4111.1	10630.4	77097.6	27543.7	ø 8 2br. 10.0'
0.75	3.40	2.64	3803.0	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
3.40	3.90	0.50	4111.1	10630.4	77097.6	27543.7	ø 8 2br. 10.0'

- Travata: 620 Travata 669 659 661 663 665

N.B. Nella travata che segue sono incluse le verifiche delle travate:

- 668 660 662 664 666

Nodo	x [m]	A _{fe} [cm ²]	A _{feT} [cm ²]	A _{fi} [cm ²]	q ^{II} [kg/m]	M _{dplaf} [kgm]	M _{de} [kgm]	M _{re} [kgm]	M _{de} [kgm]	x/d	M _{di} [kgm]	M _{ri} [kgm]	M _{di} [kgm]	x/d	σ _{bE} [kg/cm ²]	σ _{bI} [kg/cm ²]	σ _{fE} [kg/cm ²]	σ _{fI} [kg/cm ²]
Trave 620 /1 Sez. 5 50x49 50x49 [cm] L_{asse}1.02 L_{netta}0.72 q_{medio}2262.1 [kg/m] (VALORE CARATTERISTICO)																		
669	SLU	0.05	9.75	0.00	13.03		144.2	19516.7	0.01	0.22	-3.8	19861.6	0.00	0.14				
CAM	SLU	0.41	12.48	0.00	16.93	2013.1	-132.2	590.6	28403.8	0.02	0.15	-126.0	26765.9	0.00	0.16			
659	SLU	0.77	9.42	0.00	12.57		709.0	18914.7	0.04	0.22	-33.4	19031.1	0.00	0.17				

- Controllo Fessurazione

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 620 /2 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}2262.1 [kg/m] (VALORE CARATTERISTICO)																		
659	SLU	0.25	9.42	0.00	12.57		7027.7	18941.7	0.37	0.21	-1044.4	19333.9	0.05	0.16				
CAM	SLU	2.58	9.42	0.00	9.42	2013.1	-3350.0	0.0	18667.0	0.00	0.08	-3350.0	17873.6	0.19	0.11			
661	SLU	4.91	9.42	0.00	9.42		5573.6	18852.5	0.30	0.21	-981.8	14692.7	0.07	0.13				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 620 /3 Sez. 5 50x49 50x49 [cm] L_{asse}5.16 L_{netta}4.66 q_{medio}2262.1 [kg/m] (VALORE CARATTERISTICO)																		
661	SLU	0.25	9.42	0.00	9.42		7098.9	18852.5	0.38	0.21	-848.7	14692.7	0.06	0.13				
CAM	SLU	2.58	9.42	0.00	9.42	2013.1	-3350.0	0.0	18667.0	0.00	0.08	-3350.0	17873.6	0.19	0.11			
663	SLU	4.91	9.42	0.00	9.42		6497.9	18852.5	0.34	0.21	-1369.4	14692.7	0.09	0.13				

- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

Nodo	x	Afe	Afe ₁	Afi	q ^{II}	Md _{plaf}	Mde	Mre	Mde	x/d	Mdi	Mri	Mdi	x/d	σ _{bE}	σ _{bI}	σ _{fE}	σ _{fI}
[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[kg/m]	[kgm]	[kgm]	[kgm]	[kgm]		[kgm]	[kgm]	[kgm]		[kg/cm ²]	[kg/cm ²]	[kg/cm ²]	[kg/cm ²]
Trave 620 /4 Sez. 5 50x49 50x49 [cm] L_{asse}5.15 L_{netta}4.65 q_{medio}2262.1 [kg/m] (VALORE CARATTERISTICO)																		
663	SLU	0.25	9.42	0.00	9.42		5600.8	18852.5	0.30	0.21	-988.0	14692.7	0.07	0.13				
CAM	SLU	2.58	9.42	0.00	9.42	2013.1	-3343.6	0.0	18667.0	0.00	0.08	-3467.1	17873.6	0.19	0.11			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

665	SLU	4.90	9.42	0.00	9.42			6622.6	18852.5	0.35	0.21	-1419.3	14692.7	0.10	0.13				
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- Controllo Fessurazione

Non ci sono combinazioni di carico SLE

- VERIFICHE A TAGLIO Trave 669 659 Sez. 5 50x49 50x49 [cm] Lasse 1.02 Lnetta 0.72 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.05	0.77	0.72	1588.7	11403.9	77097.6	61973.4	ø 12 2br. 10.0'

- VERIFICHE A TAGLIO Trave 659 661 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

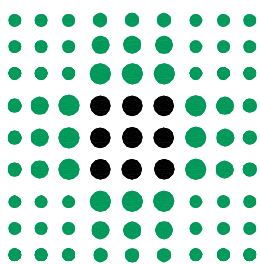
Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.75	0.50	6178.9	11403.9	77097.6	27543.7	ø 8 2br. 10.0'
0.75	4.41	3.65	5165.3	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.41	4.91	0.50	5865.9	10361.1	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 661 663 Sez. 5 50x49 50x49 [cm] Lasse 5.16 Lnetta 4.66 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	6282.1	10361.1	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	5239.7	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.91	0.52	6029.8	10361.1	77097.6	27543.7	ø 8 2br. 10.0'

- VERIFICHE A TAGLIO Trave 663 665 Sez. 5 50x49 50x49 [cm] Lasse 5.15 Lnetta 4.65 [m] cotg(θ) = 1.50

Da [m]	A [m]	Dx [m]	VSd [kg]	VRd,c [kg]	VRd,max [kg]	VRd,s [kg]	Staffe
0.25	0.77	0.52	5953.1	10361.1	77097.6	27543.7	ø 8 2br. 10.0'
0.77	4.39	3.62	5044.8	10361.1	91699.4	21196.2	Tr.ø 8 2br. 25.0'
4.39	4.90	0.52	6086.1	10361.1	77097.6	27543.7	ø 8 2br. 10.0'



GRUPPO DI LAVORO:

geom. Giuliano Bastasini
geom. Lara Biavardi
per. ind. Giuseppe Carlassare
ing. Federica Ceresa
per. ind. Paolo Crovini
ing. Elisa Degiovanni
ing. jr. Roberto Degiovanni
geom. Laura Del Bono
ing. Vincenzo Facchino
geom. Roberto Gallarotti
arch. Andrea Mambriani
per. ind. Paolo Mazzina
geom. Roberto Mellini
per. ind. Paolo Robuschi
ing. Renato Maria Saviano
geom. Pier Paolo Taddei
geom. Michele Tagliavini
geom. Roberta Tagliavini

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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 8 - VERIFICA ELEMENTI IN TERMINI DI
RESISTENZA (§7.3.7.1) - PILASTRI PREFABBRICATI IN C.A.**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
Via Aristotele n. 5
Tel. 3356030441 - 0522 865441
42122 - Reggio Emilia

ELABORATO

RS. 09

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

- Verifiche pilastri

- Modalità di verifica

I pilastri vengono verificati (a discrezione dell'operatore) secondo le seguenti modalità:

- Presso-tenso flessione deviata.
- Presso-tenso flessione retta. In tale caso viene svolta prima la verifica a presso-tenso flessione considerando come azioni agenti lo sforzo normale ed il momento M_x agente sulla sezione poi, disgiuntamente, considerando come azioni agenti lo sforzo normale e l'altro momento M_y . A discrezione dell'operatore tali momenti (a favore della sicurezza) possono essere incrementati di un fattore di amplificazione anch'esso a discrezione dell'utente.

Per ogni pilastro le verifiche vengono svolte sia nella sezione di sommità che in quella di base in tutte le combinazioni di carico.

Nelle stampe vengono quindi riportate per le due sezioni di verifica succitate:

La combinazione di carico, le sollecitazioni (sforzo normale e momenti) che inducono le massime tensioni nel calcestruzzo, nel ferro teso e nel ferro compresso.

Il programma, per ogni sezione, una volta posizionati i ferri d'angolo sulla sezione, introduce lungo i bordi eventuali ferri di completamento così da rispettare l'interasse massimo fra i ferri imposto dall'operatore.

La verifica procede considerando (quanto a diametri) fissi i ferri di bordo, eventualmente introdotti, ed incrementando negli angoli il numero di ferri presenti ovvero il diametro degli stessi.

Tutti gli angoli della sezione vengono armati nella stesso modo sia quanto a diametro dei ferri presenti che quanto a numero di ferri.

Si noti che in ottemperanza a quanto prescritto nel punto **3.1.3** del *D.M. 14 febbraio 1992*, il programma, qualora la tensione media dell'intera sezione superi la tensione ammissibile per compressione semplice, considera tale situazione non verificata benchè possa risultare soddisfatta la verifica a pressoflessione utilizzando la sigma massima del calcestruzzo impiegato.

- Sezioni Impiegate:

Sezione Numero	Dimensioni	Cl	f_{cd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro [cm]	cotg(θ)
2	B 50 [cm] H 30 [cm]	C35/45	211.7	224.1	168.1	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
4	B 50 [cm] H 30 [cm]	C35/45	211.7	224.1	168.1	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
11	B 50 [cm] H 30 [cm]	C28/35	164.6	174.3	130.7	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
1	B 50 [cm] H 50 [cm]	C35/45	211.7	224.1	168.1	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
3	B 50 [cm] H 50 [cm]	C35/45	211.7	224.1	168.1	B 450 C	3913.0	3600.0	4500.0	2.50	2.0

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

12	B 50 [cm] H 50 [cm]	C28/35	164.6	174.3	130.7	B 450 C	3913.0	3600.0	4500.0	2.50	2.0
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- Verifiche Pilastr:

- Pilastro: 1/101 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
1	24	-95447.1	3291.2	7015.3	1.00	1.00	0.25
101	24	-94228.3	-5007.1	-1193.1	1.00	1.00	0.23

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2552.3	31879.9	2472.3	56308.9	$\phi 12/15.0'$
0.51	2.57	2552.3	14168.8	2472.3	25026.2	$\phi 8/15.0'$
2.57	3.08	2552.3	31879.9	2472.3	56308.9	$\phi 12/15.0'$

- Pilastro: 101/201 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/20.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
101	24	-73217.5	5712.5	8374.8	1.00	1.00	0.32
201	24	-71691.3	-4656.0	-5561.4	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2546.9	31879.9	3404.6	56308.9	$\phi 12/15.0'$
0.79	3.28	2546.9	10626.6	3404.6	18769.6	$\phi 8/20.0'$
3.28	3.90	2546.9	31879.9	3404.6	56308.9	$\phi 12/15.0'$

- Pilastro: 201/301 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
201	24	-55625.2	4107.7	9162.5	1.00	1.00	0.26
301	24	-54106.4	-4207.1	-8159.5	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2091.7	31879.9	4248.5	56308.9	$\phi 12/15.0'$
0.79	3.26	2091.7	10626.6	4248.5	18769.6	$\phi 8/20.0'$
3.26	3.88	2091.7	31879.9	4248.5	56308.9	$\phi 12/15.0'$

- Pilastro: 301/401 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
301	24	-38015.7	4290.0	8318.6	1.00	1.00	0.27
401	24	-36497.0	-4307.4	-8750.9	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2153.2	31879.9	4199.0	56308.9	$\phi 12/15.0'$
0.79	3.26	2153.2	10626.6	4199.0	18769.6	$\phi 8/20.0'$
3.26	3.88	2153.2	31879.9	4199.0	56308.9	$\phi 12/15.0'$

- Pilastro: 401/501 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
401	1	-17763.7	3508.3	-6881.7	1.00	1.00	0.25
501	1	-16244.9	-3564.6	8217.9	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2054.8	31879.9	3771.1	56308.9	Ø 12/15.0'
0.79	3.26	2054.8	10626.6	3771.1	18769.6	Ø 8/20.0'
3.26	3.88	2054.8	31879.9	3771.1	56308.9	Ø 12/15.0'

- Pilastro: 501/601 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
501	25	-3287.4	3716.1	220.4	1.00	1.00	0.24
601	20	-2362.8	-851.2	-4886.6	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3764.5	10626.6	7083.8	18769.6	Ø 8/20.0'

- Pilastro: 2/102 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 53.0 + \phi 8/12.5' \times 202.0 + \phi 12/15.0' \times 53.0$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
2	24	-94805.0	4011.4	7136.4	1.00	1.00	0.26
102	24	-93586.3	-5506.9	-1331.2	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.00	0.53	2927.1	31879.9	2534.4	56308.9	∅ 12/15.0'
0.53	2.55	2927.1	17002.6	2534.4	30031.4	∅ 8/12.5'
2.55	3.08	2927.1	31879.9	2534.4	56308.9	∅ 12/15.0'

- Pilastro: 102/202 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ∅ 20 Af=18.85 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 0∅20 x 2 H >

Staffe: ∅ 12/15.0' x 62.2+∅ 8/20.0' x 248.7+∅ 12/15.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
102	24	-72909.3	6657.2	8702.5	1.00	1.00	0.36
202	24	-71383.1	-5502.1	-5901.6	1.00	1.00	0.27

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2986.5	31879.9	3585.7	56308.9	∅ 12/15.0'
0.79	3.28	2986.5	10626.6	3585.7	18769.6	∅ 8/20.0'
3.28	3.90	2986.5	31879.9	3585.7	56308.9	∅ 12/15.0'

- Pilastro: 202/302 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/20.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
202	20	-49115.8	4843.9	9486.6	1.00	1.00	0.30
302	24	-54028.2	-5145.5	-8511.3	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2562.5	31879.9	4490.5	56308.9	∅ 12/15.0'
0.79	3.26	2562.5	10626.6	4490.5	18769.6	∅ 8/20.0'
3.26	3.88	2562.5	31879.9	4490.5	56308.9	∅ 12/15.0'

- Pilastro: 302/402 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
302	24	-33766.5	5207.1	8543.6	1.00	1.00	0.31
402	24	-32247.8	-5249.1	-8864.6	1.00	1.00	0.32

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2611.8	31879.9	4383.7	56308.9	$\varnothing 12/15.0'$
0.79	3.26	2611.8	10626.6	4383.7	18769.6	$\varnothing 8/20.0'$
3.26	3.88	2611.8	31879.9	4383.7	56308.9	$\varnothing 12/15.0'$

- Pilastro: 402/502 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
402	1	-19986.5	3959.8	-7801.0	1.00	1.00	0.28
502	1	-18467.8	-4048.0	9689.7	1.00	1.00	0.34

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2465.0	31879.9	4312.5	56308.9	$\varnothing 12/15.0'$
0.79	3.26	2465.0	10626.6	4312.5	18769.6	$\varnothing 8/20.0'$
3.26	3.88	2465.0	31879.9	4312.5	56308.9	$\varnothing 12/15.0'$

- Pilastro: 502/602 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
502	3	-3403.8	3810.9	-2316.7	1.00	1.00	0.25
602	1	-2761.1	-1097.6	4135.5	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3969.7	10626.6	5400.1	18769.6	\varnothing 8/20.0'

- Pilastro: 3/103 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 55.0 + \varnothing 8/12.5' \times 198.0 + \varnothing 12/15.0' \times 55.0$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
3	24	-97481.5	4610.5	7086.0	1.00	1.00	0.28
103	24	-96262.7	-5759.2	-1235.0	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.55	3188.4	31879.9	2567.5	56308.9	$\varnothing 12/15.0'$
0.55	2.53	3188.4	17002.6	2567.5	30031.4	$\varnothing 8/12.5'$
2.53	3.08	3188.4	31879.9	2567.5	56308.9	$\varnothing 12/15.0'$

- Pilastro: 103/203 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/20.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
103	24	-75279.0	7395.6	8628.1	1.00	1.00	0.38
203	24	-73752.8	-6236.0	-5883.7	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	3347.9	31879.9	3604.3	56308.9	∅ 12/15.0'
0.79	3.28	3347.9	10626.6	3604.3	18769.6	∅ 8/20.0'
3.28	3.90	3347.9	31879.9	3604.3	56308.9	∅ 12/15.0'

- Pilastro: 203/303 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/20.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
203	20	-48223.9	5659.0	9513.2	1.00	1.00	0.33
303	24	-55794.8	-6002.0	-8522.9	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3004.6	31879.9	4502.6	56308.9	∅ 12/15.0'
0.79	3.26	3004.6	10626.6	4502.6	18769.6	∅ 8/20.0'
3.26	3.88	3004.6	31879.9	4502.6	56308.9	∅ 12/15.0'

- Pilastro: 303/403 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/20.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
303	24	-33063.8	6019.4	8519.3	1.00	1.00	0.34
403	24	-31545.1	-6092.7	-8817.5	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3026.5	31879.9	4372.4	56308.9	∅ 12/15.0'
0.79	3.26	3026.5	10626.6	4372.4	18769.6	∅ 8/20.0'
3.26	3.88	3026.5	31879.9	4372.4	56308.9	∅ 12/15.0'

- Pilastro: 403/503 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
403	3	-21226.6	5483.7	-6543.7	1.00	1.00	0.31
503	1	-18779.5	-4429.3	10274.7	1.00	1.00	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2820.9	31879.9	4512.9	56308.9	$\phi 12/15.0'$
0.79	3.26	2820.9	10626.6	4512.9	18769.6	$\phi 8/20.0'$
3.26	3.88	2820.9	31879.9	4512.9	56308.9	$\phi 12/15.0'$

- Pilastro: 503/603 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
503	25	-3547.0	4226.3	214.9	1.00	1.00	0.27
603	1	-2826.7	-1166.6	3817.6	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4312.8	10626.6	4487.2	18769.6	$\phi 8/20.0'$

- Pilastro: 4/104 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
4	24	-95869.9	3467.3	7853.2	1.00	1.00	0.26

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

104	24	-94651.2	-2462.2	-2682.4	1.00	1.00	0.19
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	1822.3	31879.9	3180.5	56308.9	∅ 12/15.0'
0.51	2.57	1822.3	14168.8	3180.5	25026.2	∅ 8/15.0'
2.57	3.08	1822.3	31879.9	3180.5	56308.9	∅ 12/15.0'

- Pilastro: 104/204 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/20.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
104	24	-76564.6	5460.9	9775.3	1.00	1.00	0.34
204	24	-75038.4	-5935.7	-6168.1	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2798.8	31879.9	3890.5	56308.9	∅ 12/15.0'
0.79	3.28	2798.8	10626.6	3890.5	18769.6	∅ 8/20.0'
3.28	3.90	2798.8	31879.9	3890.5	56308.9	∅ 12/15.0'

- Pilastro: 204/304 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
204	24	-58161.9	7184.4	9111.6	1.00	1.00	0.36
304	24	-56643.1	-6948.0	-8265.0	1.00	1.00	0.33

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	3555.2	31879.9	4689.2	56308.9	∅ 12/15.0'
0.79	3.26	3555.2	10626.6	4689.2	18769.6	∅ 8/20.0'
3.26	3.88	3555.2	31879.9	4689.2	56308.9	∅ 12/15.0'

- Pilastro: 304/404 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
304	20	-32045.4	6376.3	8325.9	1.00	1.00	0.36
404	20	-30526.7	-6512.0	-8524.7	1.00	1.00	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3397.9	31879.9	4508.1	56308.9	∅ 12/15.0'
0.79	3.26	3397.9	10626.6	4508.1	18769.6	∅ 8/20.0'
3.26	3.88	3397.9	31879.9	4508.1	56308.9	∅ 12/15.0'

- Pilastro: 404/504 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
404	3	-21225.0	6123.2	-6944.8	1.00	1.00	0.35
504	3	-19706.2	-6312.9	8908.6	1.00	1.00	0.41

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3159.0	31879.9	4744.7	56308.9	∅ 12/15.0'
0.79	3.26	3159.0	10626.6	4744.7	18769.6	∅ 8/20.0'
3.26	3.88	3159.0	31879.9	4744.7	56308.9	∅ 12/15.0'

- Pilastro: 504/604 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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Af: $6 \phi 24 Af=27.14 [cm^2] < 1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H >$

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
504	25	-3518.1	4605.2	-16.7	1.00	1.00	0.30
604	1	-2734.6	-1217.4	3781.8	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4702.7	10626.6	3970.7	18769.6	$\phi 8/20.0'$

- Pilastro: 5/105 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20 Af=18.85 [cm^2] < 1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
5	1	-53409.4	-4018.8	-7924.5	1.00	1.00	0.27
105	1	-52190.6	2726.0	3198.9	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2072.4	31879.9	3199.6	56308.9	$\phi 12/15.0'$
0.51	2.57	2072.4	14168.8	3199.6	25026.2	$\phi 8/15.0'$
2.57	3.08	2072.4	31879.9	3199.6	56308.9	$\phi 12/15.0'$

- Pilastro: 105/205 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20 Af=18.85 [cm^2] < 1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
105	1	-44333.3	-4341.3	-8904.1	1.00	1.00	0.32

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

205	24	-33104.7	-5753.5	-2129.0	1.00	1.00	0.25
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2815.3	31879.9	3225.6	56308.9	∅ 12/15.0'
0.79	3.28	2815.3	14168.8	3225.6	25026.2	∅ 8/15.0'
3.28	3.90	2815.3	31879.9	3225.6	56308.9	∅ 12/15.0'

- Pilastro: 205/305 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
205	24	-26347.7	6811.2	5132.2	1.00	1.00	0.32
305	24	-24828.9	-6612.1	-3989.7	1.00	1.00	0.30

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3368.0	31879.9	3013.3	56308.9	∅ 12/15.0'
0.79	3.26	3368.0	14168.8	3013.3	25026.2	∅ 8/15.0'
3.26	3.88	3368.0	31879.9	3013.3	56308.9	∅ 12/15.0'

- Pilastro: 305/405 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
305	24	-18337.9	6411.9	3712.0	1.00	1.00	0.32
405	24	-16819.2	-6579.4	-3934.0	1.00	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	3225.5	31879.9	2895.6	56308.9	∅ 12/15.0'
0.79	3.26	3225.5	14168.8	2895.6	25026.2	∅ 8/15.0'
3.26	3.88	3225.5	31879.9	2895.6	56308.9	∅ 12/15.0'

- Pilastro: 405/505 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/20.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
405	4	-14453.0	5743.8	-4677.9	1.00	1.00	0.32
505	24	-8761.4	-6010.0	-6048.7	1.00	1.00	0.38

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2958.4	31879.9	3588.2	56308.9	∅ 12/15.0'
0.79	3.26	2958.4	10626.6	3588.2	18769.6	∅ 8/20.0'
3.26	3.88	2958.4	31879.9	3588.2	56308.9	∅ 12/15.0'

- Pilastro: 505/605 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 8/20.0' x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
505	24	-1739.5	3507.6	-2897.0	1.00	1.00	0.25
605	24	-1252.0	-1186.6	-1209.9	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3608.5	10626.6	1418.4	18769.6	∅ 8/20.0'

- Pilastro: 6/106 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\emptyset 12/10.0' \times 51.3 + \emptyset 12/20.0' \times 205.3 + \emptyset 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
6	1	-149015.6	-4665.2	-6954.5	1.00	1.00	0.19
106	5	-146858.7	2229.8	-3939.1	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2086.8	84463.4	1343.1	84463.4	$\emptyset 12/10.0'$
0.51	2.57	2086.8	42231.7	1343.1	42231.7	$\emptyset 12/20.0'$
2.57	3.08	2086.8	84463.4	1343.1	84463.4	$\emptyset 12/10.0'$

- Pilastro: 106/206 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \emptyset 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/10.0' \times 62.2 + \emptyset 12/20.0' \times 248.7 + \emptyset 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
106	1	-115152.2	-3417.3	-6113.9	1.00	1.00	0.15
206	24	-110162.8	-4186.3	-2385.3	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1908.6	84463.4	1558.1	84463.4	$\emptyset 12/10.0'$
0.79	3.28	1908.6	42231.7	1558.1	42231.7	$\emptyset 12/20.0'$
3.28	3.90	1908.6	84463.4	1558.1	84463.4	$\emptyset 12/10.0'$

- Pilastro: 206/306 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \emptyset 24$ Af=36.19 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 1\phi 24 \times 2 H$ >

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
206	4	-86868.4	5916.5	-5266.9	1.00	1.00	0.13

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

306	24	-82924.0	-5436.8	-3325.5	1.00	1.00	0.11
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2908.3	84463.4	1954.4	84463.4	∅ 12/10.0'
0.79	3.26	2908.3	42231.7	1954.4	42231.7	∅ 12/20.0'
3.26	3.88	2908.3	84463.4	1954.4	84463.4	∅ 12/10.0'

- Pilastro: 306/406 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
306	23	-59171.3	4879.4	2739.0	1.00	1.00	0.09
406	24	-56635.3	-4984.9	-3987.1	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2476.8	84463.4	1734.2	84463.4	∅ 12/10.0'
0.79	3.26	2476.8	42231.7	1734.2	42231.7	∅ 12/20.0'
3.26	3.88	2476.8	84463.4	1734.2	84463.4	∅ 12/10.0'

- Pilastro: 406/506 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
406	30	-30865.0	5225.1	-1622.8	1.00	1.00	0.07
506	3	-28382.4	-6879.5	2321.7	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	3087.1	84463.4	1185.4	84463.4	∅ 12/10.0'
0.79	3.26	3087.1	42231.7	1185.4	42231.7	∅ 12/20.0'
3.26	3.88	3087.1	84463.4	1185.4	84463.4	∅ 12/10.0'

- Pilastro: 506/606 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ∅ 18 Af=20.36 [cm²] < 1∅18 x 4 V + 1∅18 x 2 B + 1∅18 x 2 H >

Staffe: ∅ 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
506	17	-3905.6	2086.7	2690.1	1.00	1.00	0.12
606	25	-1870.4	-895.8	-1.9	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1132.0	29327.6	995.9	29327.6	∅ 10/20.0'

- Pilastro: 7/107 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 51.3+∅ 12/20.0' x 205.3+∅ 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
7	1	-149197.8	-7092.1	-6957.3	1.00	1.00	0.20
107	5	-146980.5	2895.6	-3915.0	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	3011.2	84463.4	1343.3	84463.4	∅ 12/10.0'
0.51	2.57	3011.2	42231.7	1343.3	42231.7	∅ 12/20.0'
2.57	3.08	3011.2	84463.4	1343.3	84463.4	∅ 12/10.0'

- Pilastro: 107/207 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
107	1	-115435.9	-5566.7	-6145.4	1.00	1.00	0.16
207	24	-109324.6	-5841.7	-2314.9	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2833.7	84463.4	1521.5	84463.4	$\varnothing 12/10.0'$
0.79	3.28	2833.7	42231.7	1521.5	42231.7	$\varnothing 12/20.0'$
3.28	3.90	2833.7	84463.4	1521.5	84463.4	$\varnothing 12/10.0'$

- Pilastro: 207/307 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
207	4	-86956.1	7926.2	-5346.2	1.00	1.00	0.15
307	24	-82296.4	-7368.3	-3179.0	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3905.5	84463.4	1920.8	84463.4	$\varnothing 12/10.0'$
0.79	3.26	3905.5	42231.7	1920.8	42231.7	$\varnothing 12/20.0'$
3.26	3.88	3905.5	84463.4	1920.8	84463.4	$\varnothing 12/10.0'$

- Pilastro: 307/407 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
307	23	-59266.5	6602.8	2583.2	1.00	1.00	0.10

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

407	24	-56722.1	-6785.4	-3820.6	1.00	1.00	0.11
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3335.6	84463.4	1689.9	84463.4	∅ 12/10.0'
0.79	3.26	3335.6	42231.7	1689.9	42231.7	∅ 12/20.0'
3.26	3.88	3335.6	84463.4	1689.9	84463.4	∅ 12/10.0'

- Pilastro: 407/507 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
407	30	-30614.6	6926.3	-1819.9	1.00	1.00	0.10
507	4	-28084.8	-9619.3	2555.5	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4194.5	84463.4	1206.4	84463.4	∅ 12/10.0'
0.79	3.26	4194.5	42231.7	1206.4	42231.7	∅ 12/20.0'
3.26	3.88	4194.5	84463.4	1206.4	84463.4	∅ 12/10.0'

- Pilastro: 507/607 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
507	17	-3947.7	2508.9	2636.5	1.00	1.00	0.13
607	29	-1733.2	-974.1	-2.2	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	2.58	1160.3	29327.6	975.8	29327.6	∅ 10/20.0'
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- Pilastro: 8/108 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
8	1	-149865.5	-9468.9	-6958.1	1.00	1.00	0.22
108	5	-147581.9	3451.5	-3912.0	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	3885.9	84463.4	1346.1	84463.4	∅ 12/10.0'
0.51	2.57	3885.9	42231.7	1346.1	42231.7	∅ 12/20.0'
2.57	3.08	3885.9	84463.4	1346.1	84463.4	∅ 12/10.0'

- Pilastro: 108/208 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
108	1	-116055.2	-7628.8	-6146.8	1.00	1.00	0.18
208	24	-108657.5	-7506.7	-2312.0	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3779.0	84463.4	1521.9	84463.4	∅ 12/10.0'
0.79	3.28	3779.0	42231.7	1521.9	42231.7	∅ 12/20.0'
3.28	3.90	3779.0	84463.4	1521.9	84463.4	∅ 12/10.0'

- Pilastro: 208/308 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
208	4	-87192.4	9911.6	-5350.5	1.00	1.00	0.16
308	24	-81754.7	-9296.1	-3178.6	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4904.3	84463.4	1924.5	84463.4	$\varnothing 12/10.0'$
0.79	3.26	4904.3	42231.7	1924.5	42231.7	$\varnothing 12/20.0'$
3.26	3.88	4904.3	84463.4	1924.5	84463.4	$\varnothing 12/10.0'$

- Pilastro: 308/408 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
308	24	-59423.9	8461.2	2427.3	1.00	1.00	0.12
408	24	-56892.7	-8603.0	-3801.9	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4215.3	84463.4	1684.3	84463.4	$\varnothing 12/10.0'$
0.79	3.26	4215.3	42231.7	1684.3	42231.7	$\varnothing 12/20.0'$
3.26	3.88	4215.3	84463.4	1684.3	84463.4	$\varnothing 12/10.0'$

- Pilastro: 408/508 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
408	29	-30356.9	8815.9	-1845.0	1.00	1.00	0.13

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508	4	-27843.8	-12214.0	2621.7	1.00	1.00	0.22
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5287.5	84463.4	1231.9	84463.4	∅ 12/10.0'
0.79	3.26	5287.5	42231.7	1231.9	42231.7	∅ 12/20.0'
3.26	3.88	5287.5	84463.4	1231.9	84463.4	∅ 12/10.0'

- Pilastro: 508/608 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
508	21	-4068.4	3221.4	2362.4	1.00	1.00	0.14
608	29	-1635.6	-1111.3	-2.5	1.00	1.00	0.04

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1245.6	29327.6	972.3	29327.6	∅ 10/20.0'

- Pilastro: 9/109 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
9	24	-132698.1	14962.0	8374.6	1.00	1.00	0.27
109	24	-130666.9	-9875.5	15.9	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	7589.5	84463.4	2688.7	84463.4	∅ 12/10.0'
0.51	2.57	7589.5	42231.7	2688.7	42231.7	∅ 12/20.0'

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

2.57	3.08	7589.5	84463.4	2688.7	84463.4	Ø 12/10.0'
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- Pilastro: 109/209 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
109	24	-109863.6	16234.4	8390.1	1.00	1.00	0.28
209	24	-107319.8	-11022.2	-2563.9	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6659.3	84463.4	2250.4	84463.4	Ø 12/10.0'
0.79	3.28	6659.3	42231.7	2250.4	42231.7	Ø 12/20.0'
3.28	3.90	6659.3	84463.4	2250.4	84463.4	Ø 12/10.0'

- Pilastro: 209/309 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
209	4	-86621.6	10679.7	-5416.6	1.00	1.00	0.17
309	24	-80589.9	-10841.4	-2949.2	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5517.5	84463.4	1951.3	84463.4	Ø 12/10.0'
0.79	3.26	5517.5	42231.7	1951.3	42231.7	Ø 12/20.0'
3.26	3.88	5517.5	84463.4	1951.3	84463.4	Ø 12/10.0'

- Pilastro: 309/409 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
309	24	-59052.7	10496.1	2434.1	1.00	1.00	0.14
409	24	-56521.5	-10509.4	-3756.8	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5183.4	84463.4	1732.4	84463.4	$\varnothing 12/10.0'$
0.79	3.26	5183.4	42231.7	1732.4	42231.7	$\varnothing 12/20.0'$
3.26	3.88	5183.4	84463.4	1732.4	84463.4	$\varnothing 12/10.0'$

- Pilastro: 409/509 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
409	30	-29895.9	10305.7	-2003.0	1.00	1.00	0.16
509	29	-27335.7	-15314.3	-163.8	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6378.0	84463.4	1337.8	84463.4	$\varnothing 12/10.0'$
0.79	3.26	6378.0	42231.7	1337.8	42231.7	$\varnothing 12/20.0'$
3.26	3.88	6378.0	84463.4	1337.8	84463.4	$\varnothing 12/10.0'$

- Pilastro: 509/609 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
509	21	-4157.4	3823.8	2348.5	1.00	1.00	0.17

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

609	29	-1525.8	-1262.9	-2.6	1.00	1.00	0.05
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1421.3	29327.6	963.9	29327.6	∅ 10/20.0'

- Pilastro: 10/110 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
10	24	-69637.7	16254.9	6924.4	1.00	1.00	0.29
110	24	-67606.5	-8139.9	3109.4	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	7433.9	84463.4	3062.0	84463.4	∅ 12/10.0'
0.51	2.57	7433.9	42231.7	3062.0	42231.7	∅ 12/20.0'
2.57	3.08	7433.9	84463.4	3062.0	84463.4	∅ 12/10.0'

- Pilastro: 110/210 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
110	24	-59725.1	16377.0	5732.5	1.00	1.00	0.30
210	24	-57181.3	-11487.0	-1943.1	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6800.0	84463.4	2212.6	84463.4	∅ 12/10.0'
0.79	3.28	6800.0	42231.7	2212.6	42231.7	∅ 12/20.0'

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3.28	3.90	6800.0	84463.4	2212.6	84463.4	Ø 12/10.0'
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- Pilastro: 210/310 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
210	29	-49804.7	12878.7	-3079.7	1.00	1.00	0.18
310	24	-42780.9	-12043.6	-2129.7	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6173.4	84463.4	1240.9	84463.4	Ø 12/10.0'
0.79	3.26	6173.4	42231.7	1240.9	42231.7	Ø 12/20.0'
3.26	3.88	6173.4	84463.4	1240.9	84463.4	Ø 12/10.0'

- Pilastro: 310/410 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
310	24	-31103.7	11425.2	-3042.1	1.00	1.00	0.19
410	24	-28572.5	-11528.8	-2636.8	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5624.1	84463.4	1241.8	84463.4	Ø 12/10.0'
0.79	3.26	5624.1	42231.7	1241.8	42231.7	Ø 12/20.0'
3.26	3.88	5624.1	84463.4	1241.8	84463.4	Ø 12/10.0'

- Pilastro: 410/510 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

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Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
410	29	-18341.2	11507.6	-1027.2	1.00	1.00	0.23
510	29	-15810.0	-17249.6	291.4	1.00	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7092.6	84463.4	815.7	84463.4	$\varnothing 12/10.0'$
0.79	3.26	7092.6	42231.7	815.7	42231.7	$\varnothing 12/20.0'$
3.26	3.88	7092.6	84463.4	815.7	84463.4	$\varnothing 12/10.0'$

- Pilastro: 510/610 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
510	12	-3008.4	4341.2	1123.8	1.00	1.00	0.19
610	32	-476.3	-1059.8	-1.3	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1454.0	29327.6	539.0	29327.6	$\varnothing 10/20.0'$

- Pilastro: 11/111 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
11	5	-141715.3	-4698.3	-3350.5	1.00	1.00	0.17
111	8	-140470.2	2402.6	-3963.6	1.00	1.00	0.16

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2312.2	84463.4	948.4	84463.4	∅ 12/10.0'
0.51	2.57	2312.2	42231.7	948.4	42231.7	∅ 12/20.0'
2.57	3.08	2312.2	84463.4	948.4	84463.4	∅ 12/10.0'

- Pilastro: 111/211 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 62.2 + \emptyset 12/20.0' \times 248.7 + \emptyset 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
111	2	-114670.5	-5354.4	-3831.6	1.00	1.00	0.15
211	1	-112119.4	4716.2	-1219.3	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2467.2	84463.4	990.3	84463.4	∅ 12/10.0'
0.79	3.28	2467.2	42231.7	990.3	42231.7	∅ 12/20.0'
3.28	3.90	2467.2	84463.4	990.3	84463.4	∅ 12/10.0'

- Pilastro: 211/311 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
211	21	-85514.2	-5173.3	5111.7	1.00	1.00	0.12
311	1	-84376.0	5077.8	2351.4	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2628.2	84463.4	1853.0	84463.4	∅ 12/10.0'
0.79	3.26	2628.2	42231.7	1853.0	42231.7	∅ 12/20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	2628.2	84463.4	1853.0	84463.4	Ø 12/10.0'
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- Pilastro: 311/411 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
311	2	-59225.5	-4666.7	-1961.8	1.00	1.00	0.08
411	2	-56694.3	4758.9	2148.4	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2368.3	84463.4	1498.0	84463.4	Ø 12/10.0'
0.79	3.26	2368.3	42231.7	1498.0	42231.7	Ø 12/20.0'
3.26	3.88	2368.3	84463.4	1498.0	84463.4	Ø 12/10.0'

- Pilastro: 411/511 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
411	12	-30852.8	-4852.0	1848.2	1.00	1.00	0.07
511	12	-28321.6	6601.7	-2762.0	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2825.0	84463.4	1156.5	84463.4	Ø 12/10.0'
0.79	3.26	2825.0	42231.7	1156.5	42231.7	Ø 12/20.0'
3.26	3.88	2825.0	84463.4	1156.5	84463.4	Ø 12/10.0'

- Pilastro: 511/611 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\varnothing 18 \times 4 \text{ V} + 1\varnothing 18 \times 2 \text{ B} + 1\varnothing 18 \times 2 \text{ H} >$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
511	31	-3902.3	-2233.3	2824.9	1.00	1.00	0.13
611	16	-1884.7	871.5	-0.4	1.00	1.00	0.02

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1185.3	29327.6	1045.9	29327.6	$\varnothing 10/20.0'$

- Pilastro: 12/112 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
12	1	-138832.6	-7294.6	-3518.9	1.00	1.00	0.18
112	8	-137975.0	2820.2	-3921.0	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	3204.2	84463.4	941.6	84463.4	$\varnothing 12/10.0'$
0.51	2.57	3204.2	42231.7	941.6	42231.7	$\varnothing 12/20.0'$
2.57	3.08	3204.2	84463.4	941.6	84463.4	$\varnothing 12/10.0'$

- Pilastro: 112/212 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
112	2	-112181.4	-7389.7	-3877.5	1.00	1.00	0.16
212	1	-109619.7	6317.3	-1160.9	1.00	1.00	0.14

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3359.6	84463.4	967.2	84463.4	∅ 12/10.0'
0.79	3.28	3359.6	42231.7	967.2	42231.7	∅ 12/20.0'
3.28	3.90	3359.6	84463.4	967.2	84463.4	∅ 12/10.0'

- Pilastro: 212/312 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
212	21	-87076.5	-7076.9	4935.3	1.00	1.00	0.14
312	1	-82445.4	6915.9	2455.2	1.00	1.00	0.12

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3585.0	84463.4	1819.6	84463.4	∅ 12/10.0'
0.79	3.26	3585.0	42231.7	1819.6	42231.7	∅ 12/20.0'
3.26	3.88	3585.0	84463.4	1819.6	84463.4	∅ 12/10.0'

- Pilastro: 312/412 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
312	1	-59353.0	-6382.2	-1956.7	1.00	1.00	0.10
412	2	-56834.9	6448.0	2226.6	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3193.3	84463.4	1451.4	84463.4	∅ 12/10.0'
0.79	3.26	3193.3	42231.7	1451.4	42231.7	∅ 12/20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	3193.3	84463.4	1451.4	84463.4	Ø 12/10.0'
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- Pilastro: 412/512 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 Ø 24 Af=36.19 [cm²] < 1Ø24 x 4 V + 1Ø24 x 2 B + 1Ø24 x 2 H >

Staffe: Ø 12/10.0' x 61.8+Ø 12/20.0' x 247.3+Ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
412	12	-30662.6	-6508.5	1595.7	1.00	1.00	0.09
512	12	-28131.3	9188.6	-2418.5	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3871.7	84463.4	1166.7	84463.4	Ø 12/10.0'
0.79	3.26	3871.7	42231.7	1166.7	42231.7	Ø 12/20.0'
3.26	3.88	3871.7	84463.4	1166.7	84463.4	Ø 12/10.0'

- Pilastro: 512/612 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 Ø 18 Af=20.36 [cm²] < 1Ø18 x 4 V + 1Ø18 x 2 B + 1Ø18 x 2 H >

Staffe: Ø 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
512	31	-3896.2	-2390.9	2809.2	1.00	1.00	0.13
612	12	-1758.6	946.6	-0.6	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1236.3	29327.6	1039.9	29327.6	Ø 10/20.0'

- Pilastro: 13/113 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 Ø 20 Af=25.13 [cm²] < 1Ø20 x 4 V + 1Ø20 x 2 B + 1Ø20 x 2 H >

Staffe: Ø 12/10.0' x 51.3+Ø 12/20.0' x 205.3+Ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
13	1	-138081.3	-9708.8	-3518.9	1.00	1.00	0.19
113	8	-137623.2	3274.2	-3920.9	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	4114.7	84463.4	942.4	84463.4	Ø 12/10.0'
0.51	2.57	4114.7	42231.7	942.4	42231.7	Ø 12/20.0'
2.57	3.08	4114.7	84463.4	942.4	84463.4	Ø 12/10.0'

- Pilastro: 113/213 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
113	2	-111532.9	-9469.8	-3877.4	1.00	1.00	0.17
213	1	-108968.6	7955.1	-1161.7	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4271.3	84463.4	967.1	84463.4	Ø 12/10.0'
0.79	3.28	4271.3	42231.7	967.1	42231.7	Ø 12/20.0'
3.28	3.90	4271.3	84463.4	967.1	84463.4	Ø 12/10.0'

- Pilastro: 213/313 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
213	21	-87351.9	-9013.8	4939.4	1.00	1.00	0.15
313	1	-81933.8	8789.6	2458.2	1.00	1.00	0.13

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4558.1	84463.4	1821.6	84463.4	∅ 12/10.0'
0.79	3.26	4558.1	42231.7	1821.6	42231.7	∅ 12/20.0'
3.26	3.88	4558.1	84463.4	1821.6	84463.4	∅ 12/10.0'

- Pilastro: 313/413 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
313	1	-59549.0	-8091.1	-1953.6	1.00	1.00	0.11
413	1	-57017.8	8271.5	2107.8	1.00	1.00	0.12

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4042.7	84463.4	1444.4	84463.4	∅ 12/10.0'
0.79	3.26	4042.7	42231.7	1444.4	42231.7	∅ 12/20.0'
3.26	3.88	4042.7	84463.4	1444.4	84463.4	∅ 12/10.0'

- Pilastro: 413/513 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
413	12	-30435.4	-8186.8	1605.9	1.00	1.00	0.12
513	12	-27904.2	11755.4	-2446.4	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4918.5	84463.4	1187.5	84463.4	∅ 12/10.0'
0.79	3.26	4918.5	42231.7	1187.5	42231.7	∅ 12/20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	4918.5	84463.4	1187.5	84463.4	∅ 12/10.0'
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- Pilastro: 513/613 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ∅ 18 Af=20.36 [cm²] < 1∅18 x 4 V + 1∅18 x 2 B + 1∅18 x 2 H >

Staffe: ∅ 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
513	29	-4109.0	-3545.9	1768.8	1.00	1.00	0.14
613	12	-1664.5	1079.6	-0.8	1.00	1.00	0.04

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1331.9	29327.6	1036.6	29327.6	∅ 10/20.0'

- Pilastro: 14/114 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 51.3+∅ 12/20.0' x 205.3+∅ 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
14	1	-136287.6	-12233.5	-3543.4	1.00	1.00	0.21
114	8	-136239.8	3989.3	-3880.7	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	5130.5	84463.4	946.5	84463.4	∅ 12/10.0'
0.51	2.57	5130.5	42231.7	946.5	42231.7	∅ 12/20.0'
2.57	3.08	5130.5	84463.4	946.5	84463.4	∅ 12/10.0'

- Pilastro: 114/214 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 62.2+∅ 12/20.0' x 248.7+∅ 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
114	1	-109778.4	-11822.8	-3740.1	1.00	1.00	0.19
214	1	-107234.6	9596.5	-1099.7	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5219.5	84463.4	999.6	84463.4	Ø 12/10.0'
0.79	3.28	5219.5	42231.7	999.6	42231.7	Ø 12/20.0'
3.28	3.90	5219.5	84463.4	999.6	84463.4	Ø 12/10.0'

- Pilastro: 214/314 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
214	12	-84244.5	-11533.7	4108.0	1.00	1.00	0.17
314	1	-80625.2	10648.2	2563.5	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5508.2	84463.4	1871.7	84463.4	Ø 12/10.0'
0.79	3.26	5508.2	42231.7	1871.7	42231.7	Ø 12/20.0'
3.26	3.88	5508.2	84463.4	1871.7	84463.4	Ø 12/10.0'

- Pilastro: 314/414 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
314	1	-56578.9	-9827.1	-2051.0	1.00	1.00	0.13
414	1	-54047.7	10043.7	2193.1	1.00	1.00	0.13

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4902.1	84463.4	1491.1	84463.4	∅ 12/10.0'
0.79	3.26	4902.1	42231.7	1491.1	42231.7	∅ 12/20.0'
3.26	3.88	4902.1	84463.4	1491.1	84463.4	∅ 12/10.0'

- Pilastro: 414/514 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
414	12	-30435.8	-9867.4	1472.8	1.00	1.00	0.15
514	12	-27904.6	14334.5	-2242.7	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5968.8	84463.4	1292.2	84463.4	∅ 12/10.0'
0.79	3.26	5968.8	42231.7	1292.2	42231.7	∅ 12/20.0'
3.26	3.88	5968.8	84463.4	1292.2	84463.4	∅ 12/10.0'

- Pilastro: 514/614 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
514	29	-4209.2	-4149.3	1742.5	1.00	1.00	0.17
614	12	-1550.8	1224.7	-0.8	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1508.8	29327.6	1022.5	29327.6	∅ 10/20.0'

- Pilastro: 15/115 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
15	1	-84018.7	-14200.9	-3568.9	1.00	1.00	0.21
115	8	-84852.6	3550.2	-3809.7	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	5630.3	84463.4	1052.9	84463.4	$\varnothing 12/10.0'$
0.51	2.57	5630.3	42231.7	1052.9	42231.7	$\varnothing 12/20.0'$
2.57	3.08	5630.3	84463.4	1052.9	84463.4	$\varnothing 12/10.0'$

- Pilastro: 115/215 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
115	1	-68373.0	-12919.8	-3628.0	1.00	1.00	0.20
215	1	-65829.3	10288.4	-1327.4	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5650.2	84463.4	837.2	84463.4	$\varnothing 12/10.0'$
0.79	3.28	5650.2	42231.7	837.2	42231.7	$\varnothing 12/20.0'$
3.28	3.90	5650.2	84463.4	837.2	84463.4	$\varnothing 12/10.0'$

- Pilastro: 215/315 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
215	12	-46863.0	-12760.2	3318.3	1.00	1.00	0.19
315	9	-45623.2	11948.4	1750.5	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6061.7	84463.4	1425.4	84463.4	Ø 12/10.0'
0.79	3.26	6061.7	42231.7	1425.4	42231.7	Ø 12/20.0'
3.26	3.88	6061.7	84463.4	1425.4	84463.4	Ø 12/10.0'

- Pilastro: 315/415 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
315	9	-32949.0	-10755.9	1683.1	1.00	1.00	0.16
415	9	-30417.7	10929.2	1728.1	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5323.7	84463.4	1020.8	84463.4	Ø 12/10.0'
0.79	3.26	5323.7	42231.7	1020.8	42231.7	Ø 12/20.0'
3.26	3.88	5323.7	84463.4	1020.8	84463.4	Ø 12/10.0'

- Pilastro: 415/515 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
415	12	-17160.1	-10756.8	169.7	1.00	1.00	0.21
515	12	-14628.8	16158.7	-862.8	1.00	1.00	0.38

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6637.7	84463.4	804.7	84463.4	∅ 12/10.0'
0.79	3.26	6637.7	42231.7	804.7	42231.7	∅ 12/20.0'
3.26	3.88	6637.7	84463.4	804.7	84463.4	∅ 12/10.0'

- Pilastro: 515/615 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: **8 ∅ 18 Af=20.36 [cm²] < 1∅18 x 4 V + 1∅18 x 2 B + 1∅18 x 2 H >**

Staffe: **∅ 10/20.0' x 240.6**

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
515	24	-2534.5	-4608.0	1546.0	1.00	1.00	0.21
615	12	-500.0	1021.3	-0.6	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1562.3	29327.6	593.3	29327.6	∅ 10/20.0'

- Pilastro: 16/116 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: **6 ∅ 20 Af=18.85 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 0∅20 x 2 H >**

Staffe: **∅ 12/15.0' x 51.3+∅ 8/15.0' x 205.3+∅ 12/15.0' x 51.3**

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
16	1	-86561.7	-2366.8	-617.8	1.00	1.00	0.17
116	1	-85342.9	3190.5	-934.1	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	1708.9	31879.9	436.3	56308.9	∅ 12/15.0'
0.51	2.57	1708.9	14168.8	436.3	25026.2	∅ 8/15.0'
2.57	3.08	1708.9	31879.9	436.3	56308.9	∅ 12/15.0'

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- Pilastro: 116/216 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/20.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
116	8	-61279.8	-3578.4	-4824.3	1.00	1.00	0.20
216	9	-67478.1	4016.3	-664.6	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2056.3	31879.9	1565.0	56308.9	$\varnothing 12/15.0'$
0.79	3.28	2056.3	10626.6	1565.0	18769.6	$\varnothing 8/20.0'$
3.28	3.90	2056.3	31879.9	1565.0	56308.9	$\varnothing 12/15.0'$

- Pilastro: 216/316 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
216	8	-46571.3	-3357.6	-7516.9	1.00	1.00	0.22
316	11	-52517.6	3653.8	-5124.3	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2102.3	31879.9	3295.8	56308.9	$\varnothing 12/15.0'$
0.79	3.26	2102.3	14168.8	3295.8	25026.2	$\varnothing 8/15.0'$
3.26	3.88	2102.3	31879.9	3295.8	56308.9	$\varnothing 12/15.0'$

- Pilastro: 316/416 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
316	8	-32108.0	-3362.4	-6446.2	1.00	1.00	0.21
416	8	-30589.3	3385.9	6263.5	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2074.9	31879.9	3252.8	56308.9	Ø 12/15.0'
0.79	3.26	2074.9	10626.6	3252.8	18769.6	Ø 8/20.0'
3.26	3.88	2074.9	31879.9	3252.8	56308.9	Ø 12/15.0'

- Pilastro: 416/516 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/20.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
416	17	-18340.1	-3800.8	6034.9	1.00	1.00	0.24
516	17	-16821.4	3869.5	-6701.2	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1976.9	31879.9	3139.8	56308.9	Ø 12/15.0'
0.79	3.26	1976.9	10626.6	3139.8	18769.6	Ø 8/20.0'
3.26	3.88	1976.9	31879.9	3139.8	56308.9	Ø 12/15.0'

- Pilastro: 516/616 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
516	11	-2975.6	-3591.3	4230.3	1.00	1.00	0.26
616	17	-2087.5	1095.7	-4519.3	1.00	1.00	0.18

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3711.1	10626.6	6866.2	18769.6	ø 8/20.0'

- Pilastro: 17/117 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
17	1	-88935.5	-3058.6	-612.7	1.00	1.00	0.18
117	1	-87716.8	3640.6	-942.3	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2059.7	31879.9	385.6	56308.9	ø 12/15.0'
0.51	2.57	2059.7	14168.8	385.6	25026.2	ø 8/15.0'
2.57	3.08	2059.7	31879.9	385.6	56308.9	ø 12/15.0'

- Pilastro: 117/217 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/20.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
117	2	-72435.9	-5134.5	-2957.0	1.00	1.00	0.22
217	1	-70975.5	4907.3	945.5	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2472.5	31879.9	1581.4	56308.9	ø 12/15.0'
0.79	3.28	2472.5	10626.6	1581.4	18769.6	ø 8/20.0'
3.28	3.90	2472.5	31879.9	1581.4	56308.9	ø 12/15.0'

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 217/317 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
217	8	-52597.1	-3764.4	-7659.9	1.00	1.00	0.23
317	8	-51078.4	3792.0	5878.1	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2555.2	31879.9	3334.3	56308.9	$\varnothing 12/15.0'$
0.79	3.26	2555.2	14168.8	3334.3	25026.2	$\varnothing 8/15.0'$
3.26	3.88	2555.2	31879.9	3334.3	56308.9	$\varnothing 12/15.0'$

- Pilastro: 317/417 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
317	8	-36267.2	-3753.9	-6781.9	1.00	1.00	0.22
417	8	-34748.4	3788.2	6533.4	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2510.7	31879.9	3277.0	56308.9	$\varnothing 12/15.0'$
0.79	3.26	2510.7	14168.8	3277.0	25026.2	$\varnothing 8/15.0'$
3.26	3.88	2510.7	31879.9	3277.0	56308.9	$\varnothing 12/15.0'$

- Pilastro: 417/517 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
417	17	-18548.6	-4462.2	5947.1	1.00	1.00	0.26
517	17	-17029.8	4575.8	-7104.2	1.00	1.00	0.30

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2363.6	31879.9	3537.6	56308.9	Ø 12/15.0'
0.79	3.26	2363.6	14168.8	3537.6	25026.2	Ø 8/15.0'
3.26	3.88	2363.6	31879.9	3537.6	56308.9	Ø 12/15.0'

- Pilastro: 517/617 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
517	16	-3242.2	-3829.3	2398.5	1.00	1.00	0.25
617	17	-2442.9	1197.6	-3359.7	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3896.3	10626.6	4812.4	18769.6	Ø 8/20.0'

- Pilastro: 18/118 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
18	1	-91586.7	-3719.4	-614.8	1.00	1.00	0.20
118	1	-90368.0	4026.7	-937.9	1.00	1.00	0.20

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2381.0	31879.9	387.9	56308.9	∅ 12/15.0'
0.51	2.57	2381.0	14168.8	387.9	25026.2	∅ 8/15.0'
2.57	3.08	2381.0	31879.9	387.9	56308.9	∅ 12/15.0'

- Pilastro: 118/218 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ∅ 20 Af=18.85 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 0∅20 x 2 H >

Staffe: ∅ 12/15.0' x 62.2+∅ 8/20.0' x 248.7+∅ 12/15.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
118	2	-74656.0	-5931.4	-2962.4	1.00	1.00	0.24
218	1	-73215.7	5647.0	950.7	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2852.6	31879.9	1585.2	56308.9	∅ 12/15.0'
0.79	3.28	2852.6	10626.6	1585.2	18769.6	∅ 8/20.0'
3.28	3.90	2852.6	31879.9	1585.2	56308.9	∅ 12/15.0'

- Pilastro: 218/318 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
218	8	-53235.0	-4111.1	-7675.4	1.00	1.00	0.24
318	2	-55365.6	5855.9	3466.1	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2973.9	31879.9	3342.8	56308.9	∅ 12/15.0'
0.79	3.26	2973.9	14168.8	3342.8	25026.2	∅ 8/15.0'
3.26	3.88	2973.9	31879.9	3342.8	56308.9	∅ 12/15.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 318/418 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
318	8	-31030.3	-4090.0	-6760.2	1.00	1.00	0.24
418	6	-31458.6	5558.2	4082.3	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2913.3	31879.9	3254.3	56308.9	$\varnothing 12/15.0'$
0.79	3.26	2913.3	14168.8	3254.3	25026.2	$\varnothing 8/15.0'$
3.26	3.88	2913.3	31879.9	3254.3	56308.9	$\varnothing 12/15.0'$

- Pilastro: 418/518 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
418	21	-18171.4	-5290.9	5662.2	1.00	1.00	0.29
518	21	-16652.6	5445.2	-6929.2	1.00	1.00	0.34

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2703.6	31879.9	3711.4	56308.9	$\varnothing 12/15.0'$
0.79	3.26	2703.6	14168.8	3711.4	25026.2	$\varnothing 8/15.0'$
3.26	3.88	2703.6	31879.9	3711.4	56308.9	$\varnothing 12/15.0'$

- Pilastro: 518/618 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
518	22	-2848.3	-4104.2	1764.6	1.00	1.00	0.27
618	17	-3007.5	1306.1	-3141.0	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4228.0	10626.6	3872.3	18769.6	\emptyset 8/20.0'

- Pilastro: 19/119 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \emptyset 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/15.0' \times 51.3 + \emptyset 8/15.0' \times 205.3 + \emptyset 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
19	1	-92540.1	-4352.7	-641.0	1.00	1.00	0.21
119	1	-91321.4	4356.2	-882.8	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2676.6	31879.9	422.6	56308.9	$\emptyset 12/15.0'$
0.51	2.57	2676.6	14168.8	422.6	25026.2	$\emptyset 8/15.0'$
2.57	3.08	2676.6	31879.9	422.6	56308.9	$\emptyset 12/15.0'$

- Pilastro: 119/219 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \emptyset 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/15.0' \times 62.2 + \emptyset 8/20.0' \times 248.7 + \emptyset 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
119	2	-75344.8	-6671.0	-3080.9	1.00	1.00	0.27
219	1	-73922.1	6339.0	1123.3	1.00	1.00	0.24

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3206.9	31879.9	1658.8	56308.9	∅ 12/15.0'
0.79	3.28	3206.9	10626.6	1658.8	18769.6	∅ 8/20.0'
3.28	3.90	3206.9	31879.9	1658.8	56308.9	∅ 12/15.0'

- Pilastro: 219/319 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
219	6	-45727.0	-6318.0	-5129.1	1.00	1.00	0.26
319	6	-44208.2	6267.8	4081.3	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3372.8	31879.9	3476.3	56308.9	∅ 12/15.0'
0.79	3.26	3372.8	14168.8	3476.3	25026.2	∅ 8/15.0'
3.26	3.88	3372.8	31879.9	3476.3	56308.9	∅ 12/15.0'

- Pilastro: 319/419 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
319	6	-31625.1	-6126.4	-4482.0	1.00	1.00	0.27
419	6	-30106.4	6248.2	4381.3	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3296.0	31879.9	3401.4	56308.9	∅ 12/15.0'
0.79	3.26	3296.0	14168.8	3401.4	25026.2	∅ 8/15.0'
3.26	3.88	3296.0	31879.9	3401.4	56308.9	∅ 12/15.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 419/519 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/20.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
419	21	-17350.5	-5903.1	5382.6	1.00	1.00	0.32
519	21	-15831.7	6088.4	-6690.7	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3024.1	31879.9	3942.7	56308.9	$\varnothing 12/15.0'$
0.79	3.26	3024.1	10626.6	3942.7	18769.6	$\varnothing 8/20.0'$
3.26	3.88	3024.1	31879.9	3942.7	56308.9	$\varnothing 12/15.0'$

- Pilastro: 519/619 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
519	16	-3218.1	-4536.7	1144.6	1.00	1.00	0.30
619	17	-2187.8	1416.7	-2684.7	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4626.6	10626.6	3537.7	18769.6	$\varnothing 8/20.0'$

- Pilastro: 20/120 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 53.0 + \varnothing 8/12.5' \times 202.0 + \varnothing 12/15.0' \times 53.0$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
20	1	-68982.5	-4466.6	-799.5	1.00	1.00	0.18
120	1	-67763.8	3638.9	-546.6	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.53	2490.5	31879.9	859.1	56308.9	Ø 12/15.0'
0.53	2.55	2490.5	17002.6	859.1	30031.4	Ø 8/12.5'
2.55	3.08	2490.5	31879.9	859.1	56308.9	Ø 12/15.0'

- Pilastro: 120/220 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
120	1	-57472.4	-6228.2	-2962.8	1.00	1.00	0.25
220	1	-55946.2	5798.6	1220.1	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2952.9	31879.9	1301.8	56308.9	Ø 12/15.0'
0.79	3.28	2952.9	14168.8	1301.8	25026.2	Ø 8/15.0'
3.28	3.90	2952.9	31879.9	1301.8	56308.9	Ø 12/15.0'

- Pilastro: 220/320 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
220	2	-43514.5	-6261.7	-3789.3	1.00	1.00	0.24
320	2	-41995.8	6170.6	2793.3	1.00	1.00	0.22

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3194.6	31879.9	2496.5	56308.9	∅ 12/15.0'
0.79	3.26	3194.6	14168.8	2496.5	25026.2	∅ 8/15.0'
3.26	3.88	3194.6	31879.9	2496.5	56308.9	∅ 12/15.0'

- Pilastro: 320/420 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
320	9	-26523.5	-6211.9	762.1	1.00	1.00	0.24
420	9	-25004.8	6352.5	-441.8	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3101.2	31879.9	2170.7	56308.9	∅ 12/15.0'
0.79	3.26	3101.2	14168.8	2170.7	25026.2	∅ 8/15.0'
3.26	3.88	3101.2	31879.9	2170.7	56308.9	∅ 12/15.0'

- Pilastro: 420/520 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
420	21	-8256.0	-5338.0	2195.6	1.00	1.00	0.31
520	21	-6737.2	5622.7	-3959.3	1.00	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2807.8	31879.9	3060.4	56308.9	∅ 12/15.0'
0.79	3.26	2807.8	14168.8	3060.4	25026.2	∅ 8/15.0'
3.26	3.88	2807.8	31879.9	3060.4	56308.9	∅ 12/15.0'

- Pilastro: 520/620 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
520	12	-2079.3	-3393.3	-2156.1	1.00	1.00	0.23
620	21	-839.4	1085.8	-843.8	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3491.0	10626.6	1430.9	18769.6	$\phi 8/20.0'$

- Pilastro: 21/121 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0'$ x 51.3 + $\phi 12/20.0'$ x 205.3 + $\phi 12/10.0'$ x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
21	1	-33447.4	-16732.7	-10540.9	1.00	1.00	0.50
121	24	-41408.1	-12642.2	-8733.4	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	9376.5	84463.4	6962.9	84463.4	$\phi 12/10.0'$
0.51	2.57	9376.5	42231.7	6962.9	42231.7	$\phi 12/20.0'$
2.57	3.08	9376.5	84463.4	6962.9	84463.4	$\phi 12/10.0'$

- Pilastro: 22/122 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0'$ x 55.0 + $\phi 8/12.5'$ x 198.0 + $\phi 12/15.0'$ x 55.0

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
22	3	-40816.4	4565.6	-2970.4	1.00	1.00	0.19
122	25	-58440.3	-3367.5	-83.3	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.55	2578.6	31879.9	1393.7	56308.9	Ø 12/15.0'
0.55	2.53	2578.6	17002.6	1393.7	30031.4	Ø 8/12.5'
2.53	3.08	2578.6	31879.9	1393.7	56308.9	Ø 12/15.0'

- Pilastro: 122/222 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
122	19	-52631.4	6353.1	2533.5	1.00	1.00	0.25
222	27	-54327.2	-6229.8	-485.7	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3264.3	31879.9	1281.7	56308.9	Ø 12/15.0'
0.79	3.28	3264.3	14168.8	1281.7	25026.2	Ø 8/15.0'
3.28	3.90	3264.3	31879.9	1281.7	56308.9	Ø 12/15.0'

- Pilastro: 222/322 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
222	27	-42833.6	8563.2	528.0	1.00	1.00	0.30
322	27	-41314.9	-8308.3	-649.8	1.00	1.00	0.30

- Verifiche a Taglio

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4162.9	31879.9	1521.5	56308.9	∅ 12/15.0'
0.79	3.26	4162.9	14168.8	1521.5	25026.2	∅ 8/15.0'
3.26	3.88	4162.9	31879.9	1521.5	56308.9	∅ 12/15.0'

- Pilastro: 322/422 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
322	27	-28848.7	7529.9	642.4	1.00	1.00	0.31
422	27	-27329.9	-7828.2	-635.4	1.00	1.00	0.34

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3789.4	31879.9	1456.5	56308.9	∅ 12/15.0'
0.79	3.26	3789.4	14168.8	1456.5	25026.2	∅ 8/15.0'
3.26	3.88	3789.4	31879.9	1456.5	56308.9	∅ 12/15.0'

- Pilastro: 422/522 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
422	27	-14986.9	6315.2	762.5	1.00	1.00	0.32
522	27	-13468.2	-6742.1	-769.1	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3222.7	31879.9	2208.3	56308.9	∅ 12/15.0'
0.79	3.26	3222.7	14168.8	2208.3	25026.2	∅ 8/15.0'
3.26	3.88	3222.7	31879.9	2208.3	56308.9	∅ 12/15.0'

- Pilastro: 522/622 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0'$ x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
522	25	-2430.7	3443.6	1727.7	1.00	1.00	0.23
622	27	-2236.6	-1203.4	-287.4	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3616.1	10626.6	1418.5	18769.6	$\varnothing 8/20.0'$

- Pilastro: 23/123 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $10 \varnothing 20$ Af=31.42 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0'$ x 51.3+ $\varnothing 8/12.5'$ x 205.3+ $\varnothing 12/15.0'$ x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
23	25	-87853.5	4374.5	-2548.4	1.00	1.00	0.20
123	25	-86634.7	-4204.4	848.0	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2862.5	31879.9	1508.3	56308.9	$\varnothing 12/15.0'$
0.51	2.57	2862.5	17002.6	1508.3	30031.4	$\varnothing 8/12.5'$
2.57	3.08	2862.5	31879.9	1508.3	56308.9	$\varnothing 12/15.0'$

- Pilastro: 123/223 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0'$ x 62.2+ $\varnothing 8/15.0'$ x 248.7+ $\varnothing 12/15.0'$ x 62.2

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
123	27	-76915.0	7752.6	-344.4	1.00	1.00	0.28
223	27	-75388.7	-6958.6	237.4	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3610.7	31879.9	1604.5	56308.9	Ø 12/15.0'
0.79	3.28	3610.7	14168.8	1604.5	25026.2	Ø 8/15.0'
3.28	3.90	3610.7	31879.9	1604.5	56308.9	Ø 12/15.0'

- Pilastro: 223/323 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
223	27	-58402.4	9038.7	-304.9	1.00	1.00	0.28
323	27	-56883.6	-8812.7	180.4	1.00	1.00	0.27

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4405.1	31879.9	2056.9	56308.9	Ø 12/15.0'
0.79	3.26	4405.1	14168.8	2056.9	25026.2	Ø 8/15.0'
3.26	3.88	4405.1	31879.9	2056.9	56308.9	Ø 12/15.0'

- Pilastro: 323/423 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
323	27	-39476.6	8120.9	-227.9	1.00	1.00	0.29
423	27	-37957.9	-8398.8	205.8	1.00	1.00	0.32

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4076.5	31879.9	2128.4	56308.9	∅ 12/15.0'
0.79	3.26	4076.5	14168.8	2128.4	25026.2	∅ 8/15.0'
3.26	3.88	4076.5	31879.9	2128.4	56308.9	∅ 12/15.0'

- Pilastro: 423/523 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
423	27	-21024.1	6989.3	-109.8	1.00	1.00	0.33
523	27	-19505.3	-7320.1	91.1	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3531.7	31879.9	2684.5	56308.9	∅ 12/15.0'
0.79	3.26	3531.7	14168.8	2684.5	25026.2	∅ 8/15.0'
3.26	3.88	3531.7	31879.9	2684.5	56308.9	∅ 12/15.0'

- Pilastro: 523/623 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 8/20.0' x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
523	27	-3508.5	4829.4	33.2	1.00	1.00	0.31
623	19	-2908.3	-1487.1	-1309.0	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4939.9	10626.6	1366.6	18769.6	∅ 8/20.0'

- Pilastro: 24/124 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

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Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
24	3	-74972.0	4390.3	-3701.4	1.00	1.00	0.21
124	25	-87841.0	-4131.0	998.0	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2729.4	31879.9	1472.9	56308.9	$\phi 12/15.0'$
0.51	2.57	2729.4	17002.6	1472.9	30031.4	$\phi 8/12.5'$
2.57	3.08	2729.4	31879.9	1472.9	56308.9	$\phi 12/15.0'$

- Pilastro: 124/224 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
124	27	-76953.5	7340.7	-607.0	1.00	1.00	0.27
224	27	-75427.3	-6611.8	602.8	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3424.4	31879.9	1563.4	56308.9	$\phi 12/15.0'$
0.79	3.28	3424.4	14168.8	1563.4	25026.2	$\phi 8/15.0'$
3.28	3.90	3424.4	31879.9	1563.4	56308.9	$\phi 12/15.0'$

- Pilastro: 224/324 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
224	27	-58336.1	8433.8	-795.1	1.00	1.00	0.26
324	27	-56817.3	-8238.3	732.0	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4114.0	31879.9	2005.7	56308.9	Ø 12/15.0'
0.79	3.26	4114.0	14168.8	2005.7	25026.2	Ø 8/15.0'
3.26	3.88	4114.0	31879.9	2005.7	56308.9	Ø 12/15.0'

- Pilastro: 324/424 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
324	27	-39369.6	7628.8	-853.8	1.00	1.00	0.27
424	27	-37850.8	-7883.8	872.3	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3827.9	31879.9	2094.5	56308.9	Ø 12/15.0'
0.79	3.26	3827.9	14168.8	2094.5	25026.2	Ø 8/15.0'
3.26	3.88	3827.9	31879.9	2094.5	56308.9	Ø 12/15.0'

- Pilastro: 424/524 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
424	27	-20823.3	6633.8	-844.9	1.00	1.00	0.31
524	27	-19304.5	-6934.4	883.2	1.00	1.00	0.34

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3348.6	31879.9	2436.6	56308.9	Ø 12/15.0'
0.79	3.26	3348.6	14168.8	2436.6	25026.2	Ø 8/15.0'
3.26	3.88	3348.6	31879.9	2436.6	56308.9	Ø 12/15.0'

- Pilastro: 524/624 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: 6 Ø 24 Af=27.14 [cm²] < 1Ø24 x 4 V + 1Ø24 x 2 B + 0Ø12 x 2 H >

Staffe: Ø 8/20.0' x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
524	27	-3435.3	4844.8	-1322.5	1.00	1.00	0.32
624	19	-2303.2	-1511.6	-844.0	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4959.7	10626.6	2516.6	18769.6	Ø 8/20.0'

- Pilastro: 25/125 / L 3.15[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 Ø 20 Af=18.85 [cm²] < 1Ø20 x 4 V + 1Ø20 x 2 B + 0Ø20 x 2 H >

Staffe: Ø 12/15.0' x 52.6+Ø 8/15.0' x 210.3+Ø 12/15.0' x 52.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
25	22	-60038.6	-1728.7	3680.3	1.00	1.00	0.14
125	22	-58819.9	-12.0	-834.9	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.53	1074.0	31879.9	1506.1	56308.9	Ø 12/15.0'
0.53	2.63	1074.0	14168.8	1506.1	25026.2	Ø 8/15.0'
2.63	3.15	1074.0	31879.9	1506.1	56308.9	Ø 12/15.0'

- Pilastro: 125/225 / L 3.81[m] / Sezione 2 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 63.4 + \phi 8/15.0' \times 253.7 + \phi 12/15.0' \times 63.4$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
125	19	-48727.9	2159.1	2226.9	1.00	1.00	0.12
225	25	-42053.5	-1528.4	1509.4	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.10	0.73	933.5	31879.9	1381.8	56308.9	$\phi 12/15.0'$
0.73	3.27	933.5	14168.8	1381.8	25026.2	$\phi 8/15.0'$
3.27	3.90	933.5	31879.9	1381.8	56308.9	$\phi 12/15.0'$

- Pilastro: 225/325 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
225	19	-36541.1	2130.5	2341.1	1.00	1.00	0.10
325	19	-35022.4	-2004.0	-1879.5	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1149.8	31879.9	1531.0	56308.9	$\phi 12/15.0'$
0.79	3.26	1149.8	14168.8	1531.0	25026.2	$\phi 8/15.0'$
3.26	3.88	1149.8	31879.9	1531.0	56308.9	$\phi 12/15.0'$

- Pilastro: 325/425 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
325	21	-21856.8	1043.8	3260.0	1.00	1.00	0.08
425	19	-22559.5	-1847.9	-2077.4	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	943.6	31879.9	1554.2	56308.9	Ø 12/15.0'
0.79	3.26	943.6	14168.8	1554.2	25026.2	Ø 8/15.0'
3.26	3.88	943.6	31879.9	1554.2	56308.9	Ø 12/15.0'

- Pilastro: 425/525 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
425	21	-7652.3	1233.7	3332.5	1.00	1.00	0.11
525	21	-6133.5	-1507.9	-4122.3	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1009.9	31879.9	1840.3	56308.9	Ø 12/15.0'
0.79	3.26	1009.9	14168.8	1840.3	25026.2	Ø 8/15.0'
3.26	3.88	1009.9	31879.9	1840.3	56308.9	Ø 12/15.0'

- Pilastro: 26/126 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $10 \text{ } \phi 20 \text{ Af}=31.42 \text{ [cm}^2\text{]} < 2\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
26	3	-70024.6	3767.1	-3234.0	1.00	1.00	0.17
126	3	-68805.9	-3835.0	176.3	1.00	1.00	0.16

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2330.9	31879.9	1819.1	56308.9	∅ 12/15.0'
0.51	2.57	2330.9	17002.6	1819.1	30031.4	∅ 8/12.5'
2.57	3.08	2330.9	31879.9	1819.1	56308.9	∅ 12/15.0'

- Pilastro: 126/226 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ∅ 20 Af=18.85 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 0∅20 x 2 H >

Staffe: ∅ 12/15.0' x 62.2+∅ 8/20.0' x 248.7+∅ 12/15.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
126	19	-33275.6	5774.9	3430.2	1.00	1.00	0.27
226	19	-31749.3	-5335.3	-2540.7	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2903.7	31879.9	1866.9	56308.9	∅ 12/15.0'
0.79	3.28	2903.7	10626.6	1866.9	18769.6	∅ 8/20.0'
3.28	3.90	2903.7	31879.9	1866.9	56308.9	∅ 12/15.0'

- Pilastro: 226/326 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
226	19	-26756.4	6271.1	3604.9	1.00	1.00	0.27
326	19	-25237.6	-6198.8	-3178.2	1.00	1.00	0.27

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3476.3	31879.9	2132.0	56308.9	∅ 12/15.0'
0.79	3.26	3476.3	14168.8	2132.0	25026.2	∅ 8/15.0'
3.26	3.88	3476.3	31879.9	2132.0	56308.9	∅ 12/15.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 326/426 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
326	27	-22628.4	6509.0	928.1	1.00	1.00	0.29
426	27	-21109.6	-6760.0	-998.7	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3273.4	31879.9	2173.7	56308.9	$\varnothing 12/15.0'$
0.79	3.26	3273.4	14168.8	2173.7	25026.2	$\varnothing 8/15.0'$
3.26	3.88	3273.4	31879.9	2173.7	56308.9	$\varnothing 12/15.0'$

- Pilastro: 426/526 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
426	27	-11649.0	5776.4	1069.9	1.00	1.00	0.31
526	27	-10130.2	-6089.2	-1093.0	1.00	1.00	0.34

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2928.1	31879.9	2656.4	56308.9	$\varnothing 12/15.0'$
0.79	3.26	2928.1	14168.8	2656.4	25026.2	$\varnothing 8/15.0'$
3.26	3.88	2928.1	31879.9	2656.4	56308.9	$\varnothing 12/15.0'$

- Pilastro: 526/626 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
526	27	-4186.8	4753.4	1672.3	1.00	1.00	0.31
626	27	-3699.3	-1709.0	302.4	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4965.8	10626.6	1379.2	18769.6	\emptyset 8/20.0'

- Pilastro: 27/127 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \emptyset 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/15.0' \times 51.3 + \emptyset 8/12.5' \times 205.3 + \emptyset 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
27	25	-88390.1	3404.6	-2540.9	1.00	1.00	0.20
127	25	-87171.4	-3786.7	831.0	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2354.5	31879.9	1454.5	56308.9	$\emptyset 12/15.0'$
0.51	2.57	2354.5	17002.6	1454.5	30031.4	$\emptyset 8/12.5'$
2.57	3.08	2354.5	31879.9	1454.5	56308.9	$\emptyset 12/15.0'$

- Pilastro: 127/227 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \emptyset 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/15.0' \times 62.2 + \emptyset 8/15.0' \times 248.7 + \emptyset 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
127	19	-73657.9	5847.8	2597.5	1.00	1.00	0.24
227	19	-72131.6	-5480.3	-1818.5	1.00	1.00	0.22

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2942.2	31879.9	1533.6	56308.9	∅ 12/15.0'
0.79	3.28	2942.2	14168.8	1533.6	25026.2	∅ 8/15.0'
3.28	3.90	2942.2	31879.9	1533.6	56308.9	∅ 12/15.0'

- Pilastro: 227/327 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
227	19	-55950.7	6228.5	3051.3	1.00	1.00	0.22
327	19	-54431.9	-6155.9	-2671.7	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3430.5	31879.9	1985.3	56308.9	∅ 12/15.0'
0.79	3.26	3430.5	14168.8	1985.3	25026.2	∅ 8/15.0'
3.26	3.88	3430.5	31879.9	1985.3	56308.9	∅ 12/15.0'

- Pilastro: 327/427 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
327	19	-38177.4	5741.9	3065.9	1.00	1.00	0.22
427	19	-36658.7	-5899.3	-2889.8	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3220.1	31879.9	2061.4	56308.9	∅ 12/15.0'
0.79	3.26	3220.1	14168.8	2061.4	25026.2	∅ 8/15.0'
3.26	3.88	3220.1	31879.9	2061.4	56308.9	∅ 12/15.0'

- Pilastro: 427/527 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
427	27	-20999.2	5693.5	-258.9	1.00	1.00	0.24
527	27	-19480.5	-5912.0	300.6	1.00	1.00	0.27

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2864.3	31879.9	2564.2	56308.9	$\phi 12/15.0'$
0.79	3.26	2864.3	14168.8	2564.2	25026.2	$\phi 8/15.0'$
3.26	3.88	2864.3	31879.9	2564.2	56308.9	$\phi 12/15.0'$

- Pilastro: 527/627 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
527	27	-3424.8	4282.6	296.4	1.00	1.00	0.28
627	21	-2620.9	-1064.9	-1977.6	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4370.2	10626.6	1781.2	18769.6	$\phi 8/20.0'$

- Pilastro: 28/128 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
28	3	-79395.1	3230.8	-3612.2	1.00	1.00	0.19
128	25	-87005.7	-3602.4	858.9	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2166.3	31879.9	1429.5	56308.9	Ø 12/15.0'
0.51	2.57	2166.3	17002.6	1429.5	30031.4	Ø 8/12.5'
2.57	3.08	2166.3	31879.9	1429.5	56308.9	Ø 12/15.0'

- Pilastro: 128/228 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
128	19	-73185.6	5379.8	2488.4	1.00	1.00	0.22
228	19	-71659.4	-5066.7	-1656.6	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2694.8	31879.9	1457.0	56308.9	Ø 12/15.0'
0.79	3.28	2694.8	14168.8	1457.0	25026.2	Ø 8/15.0'
3.28	3.90	2694.8	31879.9	1457.0	56308.9	Ø 12/15.0'

- Pilastro: 228/328 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
228	19	-55765.2	5652.8	2811.5	1.00	1.00	0.21
328	19	-54246.5	-5597.0	-2401.1	1.00	1.00	0.20

- Verifiche a Taglio

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3081.2	31879.9	1839.9	56308.9	∅ 12/15.0'
0.79	3.26	3081.2	14168.8	1839.9	25026.2	∅ 8/15.0'
3.26	3.88	3081.2	31879.9	1839.9	56308.9	∅ 12/15.0'

- Pilastro: 328/428 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
328	19	-38206.3	5246.8	2760.7	1.00	1.00	0.19
428	19	-36687.5	-5376.7	-2577.4	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2905.5	31879.9	1888.6	56308.9	∅ 12/15.0'
0.79	3.26	2905.5	14168.8	1888.6	25026.2	∅ 8/15.0'
3.26	3.88	2905.5	31879.9	1888.6	56308.9	∅ 12/15.0'

- Pilastro: 428/528 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
428	27	-21126.8	5199.5	-488.6	1.00	1.00	0.21
528	19	-19292.5	-4908.0	-3697.9	1.00	1.00	0.23

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2612.5	31879.9	2330.9	56308.9	∅ 12/15.0'
0.79	3.26	2612.5	14168.8	2330.9	25026.2	∅ 8/15.0'
3.26	3.88	2612.5	31879.9	2330.9	56308.9	∅ 12/15.0'

- Pilastro: 528/628 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
528	27	-3513.4	4057.4	-357.7	1.00	1.00	0.26
628	21	-2732.7	-1039.2	-1748.6	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4139.0	10626.6	1842.8	18769.6	$\phi 8/20.0'$

- Pilastro: 29/129 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0'$ x 51.3+ $\phi 8/12.5'$ x 205.3+ $\phi 12/15.0'$ x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
29	3	-79865.0	2842.0	-3612.4	1.00	1.00	0.19
129	25	-85638.9	-3406.4	859.8	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	1971.8	31879.9	1428.7	56308.9	$\phi 12/15.0'$
0.51	2.57	1971.8	17002.6	1428.7	30031.4	$\phi 8/12.5'$
2.57	3.08	1971.8	31879.9	1428.7	56308.9	$\phi 12/15.0'$

- Pilastro: 129/229 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0'$ x 62.2+ $\phi 8/15.0'$ x 248.7+ $\phi 12/15.0'$ x 62.2

- Verifiche a Presso-Flessione S.L.U.

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Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
129	19	-71747.6	4898.6	2487.4	1.00	1.00	0.21
229	19	-70221.3	-4640.2	-1656.6	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2441.4	31879.9	1456.8	56308.9	Ø 12/15.0'
0.79	3.28	2441.4	14168.8	1456.8	25026.2	Ø 8/15.0'
3.28	3.90	2441.4	31879.9	1456.8	56308.9	Ø 12/15.0'

- Pilastro: 229/329 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
229	19	-54684.1	5069.6	2809.1	1.00	1.00	0.19
329	19	-53165.3	-5031.8	-2395.1	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2727.9	31879.9	1837.3	56308.9	Ø 12/15.0'
0.79	3.26	2727.9	14168.8	1837.3	25026.2	Ø 8/15.0'
3.26	3.88	2727.9	31879.9	1837.3	56308.9	Ø 12/15.0'

- Pilastro: 329/429 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
329	19	-37526.4	4751.4	2768.9	1.00	1.00	0.18
429	19	-36007.7	-4855.7	-2604.2	1.00	1.00	0.18

- Verifiche a Taglio

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2590.9	31879.9	1899.9	56308.9	∅ 12/15.0'
0.79	3.26	2590.9	14168.8	1899.9	25026.2	∅ 8/15.0'
3.26	3.88	2590.9	31879.9	1899.9	56308.9	∅ 12/15.0'

- Pilastro: 429/529 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
429	19	-20503.8	4370.8	2860.3	1.00	1.00	0.19
529	19	-18985.1	-4488.0	-3513.2	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2360.9	31879.9	2249.4	56308.9	∅ 12/15.0'
0.79	3.26	2360.9	14168.8	2249.4	25026.2	∅ 8/15.0'
3.26	3.88	2360.9	31879.9	2249.4	56308.9	∅ 12/15.0'

- Pilastro: 529/629 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 8/20.0' x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
529	27	-3448.5	3927.0	-257.3	1.00	1.00	0.25
629	21	-2704.7	-1011.7	-1897.2	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3988.0	10626.6	2099.0	18769.6	∅ 8/20.0'

- Pilastro: 30/130 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/12.5' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
30	3	-80391.5	2452.6	-3612.4	1.00	1.00	0.18
130	25	-84377.3	-3209.0	861.0	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	1777.8	31879.9	1425.7	56308.9	$\phi 12/15.0'$
0.51	2.57	1777.8	17002.6	1425.7	30031.4	$\phi 8/12.5'$
2.57	3.08	1777.8	31879.9	1425.7	56308.9	$\phi 12/15.0'$

- Pilastro: 130/230 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
130	19	-70404.7	4416.2	2484.0	1.00	1.00	0.20
230	19	-68878.4	-4212.0	-1656.5	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2187.5	31879.9	1455.2	56308.9	$\phi 12/15.0'$
0.79	3.28	2187.5	14168.8	1455.2	25026.2	$\phi 8/15.0'$
3.28	3.90	2187.5	31879.9	1455.2	56308.9	$\phi 12/15.0'$

- Pilastro: 230/330 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
230	19	-53680.2	4486.4	2809.2	1.00	1.00	0.18
330	19	-52161.4	-4466.2	-2392.1	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2374.6	31879.9	1834.9	56308.9	Ø 12/15.0'
0.79	3.26	2374.6	14168.8	1834.9	25026.2	Ø 8/15.0'
3.26	3.88	2374.6	31879.9	1834.9	56308.9	Ø 12/15.0'

- Pilastro: 330/430 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
330	19	-36900.0	4257.0	2788.2	1.00	1.00	0.16
430	19	-35381.2	-4335.8	-2650.4	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2277.3	31879.9	1920.0	56308.9	Ø 12/15.0'
0.79	3.26	2277.3	14168.8	1920.0	25026.2	Ø 8/15.0'
3.26	3.88	2277.3	31879.9	1920.0	56308.9	Ø 12/15.0'

- Pilastro: 430/530 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
430	19	-20221.5	3974.5	2781.7	1.00	1.00	0.17
530	21	-18032.9	-3317.9	-4692.3	1.00	1.00	0.19

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2110.5	31879.9	2141.5	56308.9	∅ 12/15.0'
0.79	3.26	2110.5	14168.8	2141.5	25026.2	∅ 8/15.0'
3.26	3.88	2110.5	31879.9	2141.5	56308.9	∅ 12/15.0'

- Pilastro: 530/630 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 8/20.0' x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
530	26	-3318.4	3874.0	-913.0	1.00	1.00	0.25
630	21	-2677.2	-973.8	-2136.6	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3908.5	10626.6	2750.9	18769.6	∅ 8/20.0'

- Pilastro: 31/131 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ∅ 20 Af=18.85 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 0∅20 x 2 H >

Staffe: ∅ 12/15.0' x 51.3+∅ 8/12.5' x 205.3+∅ 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
31	3	-80984.6	2042.4	-3668.4	1.00	1.00	0.17
131	25	-83603.1	-2967.1	885.2	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	1565.2	31879.9	1513.4	56308.9	∅ 12/15.0'
0.51	2.57	1565.2	17002.6	1513.4	30031.4	∅ 8/12.5'
2.57	3.08	1565.2	31879.9	1513.4	56308.9	∅ 12/15.0'

- Pilastro: 131/231 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
131	19	-68834.2	3885.8	2630.8	1.00	1.00	0.18
231	3	-63865.2	-3686.3	2678.8	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1910.1	31879.9	1566.7	56308.9	$\phi 12/15.0'$
0.79	3.28	1910.1	14168.8	1566.7	25026.2	$\phi 8/15.0'$
3.28	3.90	1910.1	31879.9	1566.7	56308.9	$\phi 12/15.0'$

- Pilastro: 231/331 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
231	21	-50777.6	3207.5	4226.5	1.00	1.00	0.16
331	19	-50913.1	-3861.0	-2420.2	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2000.6	31879.9	2045.8	56308.9	$\phi 12/15.0'$
0.79	3.26	2000.6	14168.8	2045.8	25026.2	$\phi 8/15.0'$
3.26	3.88	2000.6	31879.9	2045.8	56308.9	$\phi 12/15.0'$

- Pilastro: 331/431 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
331	21	-34981.3	3155.0	4176.5	1.00	1.00	0.15
431	21	-33462.6	-3181.7	-4010.5	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1946.6	31879.9	2228.8	56308.9	Ø 12/15.0'
0.79	3.26	1946.6	14168.8	2228.8	25026.2	Ø 8/15.0'
3.26	3.88	1946.6	31879.9	2228.8	56308.9	Ø 12/15.0'

- Pilastro: 431/531 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
431	21	-19273.8	3105.8	3909.9	1.00	1.00	0.16
531	21	-17755.0	-3141.3	-4267.6	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1832.0	31879.9	2206.3	56308.9	Ø 12/15.0'
0.79	3.26	1832.0	14168.8	2206.3	25026.2	Ø 8/15.0'
3.26	3.88	1832.0	31879.9	2206.3	56308.9	Ø 12/15.0'

- Pilastro: 531/631 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
531	26	-3095.1	3833.3	-2386.6	1.00	1.00	0.25
631	8	-2174.8	-1079.2	3240.1	1.00	1.00	0.13

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3865.3	10626.6	5217.9	18769.6	ø 8/20.0'

- Pilastro: 32/132 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 51.3+ø 12/20.0' x 205.3+ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
32	3	-73959.2	14837.1	-3238.8	1.00	1.00	0.22
132	3	-71927.9	-6452.2	-1143.7	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	6268.4	84463.4	818.5	84463.4	ø 12/10.0'
0.51	2.57	6268.4	42231.7	818.5	42231.7	ø 12/20.0'
2.57	3.08	6268.4	84463.4	818.5	84463.4	ø 12/10.0'

- Pilastro: 132/232 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ø 20 Af=25.13 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 1ø20 x 2 H >

Staffe: ø 12/10.0' x 62.2+ø 12/20.0' x 248.7+ø 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
132	27	-61895.9	16000.7	2253.5	1.00	1.00	0.26
232	27	-59352.1	-10282.3	816.0	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6345.8	84463.4	488.2	84463.4	ø 12/10.0'
0.79	3.28	6345.8	42231.7	488.2	42231.7	ø 12/20.0'
3.28	3.90	6345.8	84463.4	488.2	84463.4	ø 12/10.0'

- Pilastro: 232/332 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \varnothing 24 Af=36.19 [cm^2] < 1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
232	27	-47065.1	18383.8	1982.2	1.00	1.00	0.29
332	27	-44533.8	-17050.7	-823.1	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8689.5	84463.4	681.2	84463.4	$\varnothing 12/10.0'$
0.79	3.26	8689.5	42231.7	681.2	42231.7	$\varnothing 12/20.0'$
3.26	3.88	8689.5	84463.4	681.2	84463.4	$\varnothing 12/10.0'$

- Pilastro: 332/432 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24 Af=36.19 [cm^2] < 1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
332	27	-32283.7	13542.2	-41.0	1.00	1.00	0.22
432	27	-29752.5	-14782.1	-889.0	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6917.1	84463.4	632.7	84463.4	$\varnothing 12/10.0'$
0.79	3.26	6917.1	42231.7	632.7	42231.7	$\varnothing 12/20.0'$
3.26	3.88	6917.1	84463.4	632.7	84463.4	$\varnothing 12/10.0'$

- Pilastro: 432/532 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24 Af=36.19 [cm^2] < 1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
432	27	-17345.7	12630.2	287.7	1.00	1.00	0.26
532	27	-14814.4	-19595.7	-331.9	1.00	1.00	0.48

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7933.3	84463.4	744.2	84463.4	Ø 12/10.0'
0.79	3.26	7933.3	42231.7	744.2	42231.7	Ø 12/20.0'
3.26	3.88	7933.3	84463.4	744.2	84463.4	Ø 12/10.0'

- Pilastro: 532/632 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
532	14	-3297.0	5392.9	392.1	1.00	1.00	0.23
632	27	-378.4	-1135.7	2.5	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1795.4	29327.6	856.2	29327.6	Ø 10/20.0'

- Pilastro: 33/133 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
33	3	-133679.9	13848.9	-3406.6	1.00	1.00	0.22
133	4	-131810.5	-6627.6	-880.2	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.00	0.51	6055.0	84463.4	849.5	84463.4	∅ 12/10.0'
0.51	2.57	6055.0	42231.7	849.5	42231.7	∅ 12/20.0'
2.57	3.08	6055.0	84463.4	849.5	84463.4	∅ 12/10.0'

- Pilastro: 133/233 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 62.2+∅ 12/20.0' x 248.7+∅ 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
133	27	-102767.9	15439.2	2341.7	1.00	1.00	0.22
233	27	-100224.1	-10256.6	696.7	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6213.0	84463.4	623.7	84463.4	∅ 12/10.0'
0.79	3.28	6213.0	42231.7	623.7	42231.7	∅ 12/20.0'
3.28	3.90	6213.0	84463.4	623.7	84463.4	∅ 12/10.0'

- Pilastro: 233/333 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
233	27	-77803.8	17534.1	2297.0	1.00	1.00	0.23
333	27	-75272.6	-16347.6	-1022.7	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8311.8	84463.4	912.2	84463.4	∅ 12/10.0'
0.79	3.26	8311.8	42231.7	912.2	42231.7	∅ 12/20.0'
3.26	3.88	8311.8	84463.4	912.2	84463.4	∅ 12/10.0'

- Pilastro: 333/433 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
333	27	-53003.2	13176.7	-279.6	1.00	1.00	0.17
433	27	-50472.0	-14288.4	-1324.2	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6712.6	84463.4	936.4	84463.4	$\varnothing 12/10.0'$
0.79	3.26	6712.6	42231.7	936.4	42231.7	$\varnothing 12/20.0'$
3.26	3.88	6712.6	84463.4	936.4	84463.4	$\varnothing 12/10.0'$

- Pilastro: 433/533 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
433	27	-28034.7	12343.5	-13.2	1.00	1.00	0.20
533	27	-25503.5	-18634.7	211.0	1.00	1.00	0.39

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7626.7	84463.4	1042.9	84463.4	$\varnothing 12/10.0'$
0.79	3.26	7626.7	42231.7	1042.9	42231.7	$\varnothing 12/20.0'$
3.26	3.88	7626.7	84463.4	1042.9	84463.4	$\varnothing 12/10.0'$

- Pilastro: 533/633 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
533	14	-4202.3	5067.5	764.8	1.00	1.00	0.21
633	27	-1286.8	-1394.4	2.7	1.00	1.00	0.06

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1789.0	29327.6	1453.0	29327.6	Ø 10/20.0'

- Pilastro: 34/134 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
34	3	-142817.6	12570.6	-3392.2	1.00	1.00	0.22
134	4	-140940.5	-6249.0	-902.1	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	5574.8	84463.4	840.9	84463.4	Ø 12/10.0'
0.51	2.57	5574.8	42231.7	840.9	42231.7	Ø 12/20.0'
2.57	3.08	5574.8	84463.4	840.9	84463.4	Ø 12/10.0'

- Pilastro: 134/234 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
134	27	-110399.1	14174.5	2300.1	1.00	1.00	0.21
234	27	-107855.3	-9571.2	758.8	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	5745.6	84463.4	590.1	84463.4	∅ 12/10.0'
0.79	3.28	5745.6	42231.7	590.1	42231.7	∅ 12/20.0'
3.28	3.90	5745.6	84463.4	590.1	84463.4	∅ 12/10.0'

- Pilastro: 234/334 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
234	27	-83571.8	16023.0	2177.4	1.00	1.00	0.21
334	27	-81040.6	-14986.9	-899.2	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7608.8	84463.4	843.3	84463.4	∅ 12/10.0'
0.79	3.26	7608.8	42231.7	843.3	42231.7	∅ 12/20.0'
3.26	3.88	7608.8	84463.4	843.3	84463.4	∅ 12/10.0'

- Pilastro: 334/434 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
334	27	-56906.3	12151.5	-345.1	1.00	1.00	0.15
434	27	-54375.1	-13140.6	-1228.3	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6184.0	84463.4	880.6	84463.4	∅ 12/10.0'
0.79	3.26	6184.0	42231.7	880.6	42231.7	∅ 12/20.0'
3.26	3.88	6184.0	84463.4	880.6	84463.4	∅ 12/10.0'

- Pilastro: 434/534 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \phi 24$ Af=36.19 [cm²] < $1\phi 24 \times 4$ V + $1\phi 24 \times 2$ B + $1\phi 24 \times 2$ H >

Staffe: $\phi 12/10.0'$ x 61.8 + $\phi 12/20.0'$ x 247.3 + $\phi 12/10.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
434	27	-30093.5	11418.7	-114.5	1.00	1.00	0.17
534	27	-27562.3	-17063.0	423.8	1.00	1.00	0.33

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7012.4	84463.4	998.0	84463.4	$\phi 12/10.0'$
0.79	3.26	7012.4	42231.7	998.0	42231.7	$\phi 12/20.0'$
3.26	3.88	7012.4	84463.4	998.0	84463.4	$\phi 12/10.0'$

- Pilastro: 534/634 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4$ V + $1\phi 18 \times 2$ B + $1\phi 18 \times 2$ H >

Staffe: $\phi 10/20.0'$ x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
534	5	-4173.2	3811.6	-4233.3	1.00	1.00	0.21
634	27	-1488.3	-1369.9	2.9	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1656.2	29327.6	1607.0	29327.6	$\phi 10/20.0'$

- Pilastro: 35/135 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4$ V + $1\phi 20 \times 2$ B + $1\phi 20 \times 2$ H >

Staffe: $\phi 12/10.0'$ x 51.3 + $\phi 12/20.0'$ x 205.3 + $\phi 12/10.0'$ x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
35	3	-144860.0	11108.3	-3391.0	1.00	1.00	0.21

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

135	4	-142973.9	-5824.7	-902.9	1.00	1.00	0.17
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	5032.0	84463.4	834.8	84463.4	∅ 12/10.0'
0.51	2.57	5032.0	42231.7	834.8	42231.7	∅ 12/20.0'
2.57	3.08	5032.0	84463.4	834.8	84463.4	∅ 12/10.0'

- Pilastro: 135/235 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 62.2 + \emptyset 12/20.0' \times 248.7 + \emptyset 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
135	27	-112057.0	12843.5	2279.7	1.00	1.00	0.20
235	27	-109513.3	-8943.6	764.5	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5280.6	84463.4	570.3	84463.4	∅ 12/10.0'
0.79	3.28	5280.6	42231.7	570.3	42231.7	∅ 12/20.0'
3.28	3.90	5280.6	84463.4	570.3	84463.4	∅ 12/10.0'

- Pilastro: 235/335 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
235	27	-84758.6	14573.1	2149.7	1.00	1.00	0.19
335	27	-82227.4	-13734.9	-879.5	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	6949.5	84463.4	809.0	84463.4	∅ 12/10.0'
0.79	3.26	6949.5	42231.7	809.0	42231.7	∅ 12/20.0'
3.26	3.88	6949.5	84463.4	809.0	84463.4	∅ 12/10.0'

- Pilastro: 335/435 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
335	27	-57660.8	11320.1	-326.3	1.00	1.00	0.14
435	27	-55129.5	-12148.9	-1222.1	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5743.8	84463.4	858.5	84463.4	∅ 12/10.0'
0.79	3.26	5743.8	42231.7	858.5	42231.7	∅ 12/20.0'
3.26	3.88	5743.8	84463.4	858.5	84463.4	∅ 12/10.0'

- Pilastro: 435/535 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
435	27	-30478.2	10871.7	-77.6	1.00	1.00	0.16
535	27	-27946.9	-15959.4	403.6	1.00	1.00	0.30

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6607.8	84463.4	1024.3	84463.4	∅ 12/10.0'
0.79	3.26	6607.8	42231.7	1024.3	42231.7	∅ 12/20.0'
3.26	3.88	6607.8	84463.4	1024.3	84463.4	∅ 12/10.0'

- Pilastro: 535/635 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $8 \phi 18$ Af=20.36 [cm²] < $1\phi 18 \times 4 V + 1\phi 18 \times 2 B + 1\phi 18 \times 2 H$ >

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
535	1	-3993.6	3227.5	-4532.1	1.00	1.00	0.21
635	27	-1498.8	-1365.0	2.9	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1517.3	29327.6	1677.5	29327.6	$\phi 10/20.0'$

- Pilastro: 36/136 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
36	3	-141628.9	9539.2	-3407.5	1.00	1.00	0.20
136	4	-139699.2	-5010.3	-868.9	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	4324.8	84463.4	823.4	84463.4	$\phi 12/10.0'$
0.51	2.57	4324.8	42231.7	823.4	42231.7	$\phi 12/20.0'$
2.57	3.08	4324.8	84463.4	823.4	84463.4	$\phi 12/10.0'$

- Pilastro: 136/236 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \phi 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
136	27	-110960.2	10882.9	2264.2	1.00	1.00	0.18

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

236	27	-108416.4	-7546.4	786.1	1.00	1.00	0.15
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4464.5	84463.4	571.5	84463.4	∅ 12/10.0'
0.79	3.28	4464.5	42231.7	571.5	42231.7	∅ 12/20.0'
3.28	3.90	4464.5	84463.4	571.5	84463.4	∅ 12/10.0'

- Pilastro: 236/336 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
236	27	-84060.9	12139.3	2152.3	1.00	1.00	0.16
336	27	-81529.6	-11420.6	-871.4	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5782.3	84463.4	827.6	84463.4	∅ 12/10.0'
0.79	3.26	5782.3	42231.7	827.6	42231.7	∅ 12/20.0'
3.26	3.88	5782.3	84463.4	827.6	84463.4	∅ 12/10.0'

- Pilastro: 336/436 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
336	27	-57248.2	9325.9	-374.5	1.00	1.00	0.12
436	27	-54716.9	-10041.1	-1210.1	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	4737.4	84463.4	867.1	84463.4	∅ 12/10.0'
0.79	3.26	4737.4	42231.7	867.1	42231.7	∅ 12/20.0'
3.26	3.88	4737.4	84463.4	867.1	84463.4	∅ 12/10.0'

- Pilastro: 436/536 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
436	27	-30319.8	8809.8	-153.8	1.00	1.00	0.12
536	27	-27788.6	-13002.9	475.7	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5370.6	84463.4	966.1	84463.4	∅ 12/10.0'
0.79	3.26	5370.6	42231.7	966.1	42231.7	∅ 12/20.0'
3.26	3.88	5370.6	84463.4	966.1	84463.4	∅ 12/10.0'

- Pilastro: 536/636 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ∅ 18 Af=20.36 [cm²] < 1∅18 x 4 V + 1∅18 x 2 B + 1∅18 x 2 H >

Staffe: ∅ 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
536	5	-4040.8	3128.7	-4200.2	1.00	1.00	0.20
636	27	-1622.5	-1138.3	2.7	1.00	1.00	0.04

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1387.0	29327.6	1589.6	29327.6	∅ 10/20.0'

- Pilastro: 37/137 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
37	3	-141532.0	8094.3	-3406.9	1.00	1.00	0.19
137	4	-139582.3	-4436.0	-870.1	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	3734.2	84463.4	823.4	84463.4	$\varnothing 12/10.0'$
0.51	2.57	3734.2	42231.7	823.4	42231.7	$\varnothing 12/20.0'$
2.57	3.08	3734.2	84463.4	823.4	84463.4	$\varnothing 12/10.0'$

- Pilastro: 137/237 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
137	27	-111493.5	9325.2	2260.4	1.00	1.00	0.17
237	3	-111792.8	-6306.9	-282.6	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3860.8	84463.4	568.6	84463.4	$\varnothing 12/10.0'$
0.79	3.28	3860.8	42231.7	568.6	42231.7	$\varnothing 12/20.0'$
3.28	3.90	3860.8	84463.4	568.6	84463.4	$\varnothing 12/10.0'$

- Pilastro: 237/337 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
237	27	-84480.4	10298.1	2140.4	1.00	1.00	0.15

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

337	27	-81949.2	-9731.9	-858.9	1.00	1.00	0.14
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4916.9	84463.4	820.0	84463.4	∅ 12/10.0'
0.79	3.26	4916.9	42231.7	820.0	42231.7	∅ 12/20.0'
3.26	3.88	4916.9	84463.4	820.0	84463.4	∅ 12/10.0'

- Pilastro: 337/437 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
337	27	-57533.6	7994.3	-380.0	1.00	1.00	0.11
437	27	-55002.4	-8580.0	-1202.0	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4055.8	84463.4	861.9	84463.4	∅ 12/10.0'
0.79	3.26	4055.8	42231.7	861.9	42231.7	∅ 12/20.0'
3.26	3.88	4055.8	84463.4	861.9	84463.4	∅ 12/10.0'

- Pilastro: 437/537 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
437	27	-30491.6	7575.1	-162.9	1.00	1.00	0.10
537	27	-27960.4	-11063.5	494.8	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	4589.1	84463.4	951.6	84463.4	∅ 12/10.0'
0.79	3.26	4589.1	42231.7	951.6	42231.7	∅ 12/20.0'
3.26	3.88	4589.1	84463.4	951.6	84463.4	∅ 12/10.0'

- Pilastro: 537/637 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ∅ 18 Af=20.36 [cm²] < 1∅18 x 4 V + 1∅18 x 2 B + 1∅18 x 2 H >

Staffe: ∅ 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
537	1	-3957.4	2625.8	-4288.5	1.00	1.00	0.19
637	27	-1689.2	-1043.2	2.6	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1296.8	29327.6	1587.3	29327.6	∅ 10/20.0'

- Pilastro: 38/138 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 51.3+∅ 12/20.0' x 205.3+∅ 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
38	3	-141396.5	6652.8	-3406.8	1.00	1.00	0.18
138	4	-139429.2	-3867.9	-870.1	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	3146.6	84463.4	823.2	84463.4	∅ 12/10.0'
0.51	2.57	3146.6	42231.7	823.2	42231.7	∅ 12/20.0'
2.57	3.08	3146.6	84463.4	823.2	84463.4	∅ 12/10.0'

- Pilastro: 138/238 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
138	27	-111957.4	7780.3	2260.5	1.00	1.00	0.16
238	7	-111844.5	-5598.6	-321.3	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3263.4	84463.4	568.8	84463.4	$\varnothing 12/10.0'$
0.79	3.28	3263.4	42231.7	568.8	42231.7	$\varnothing 12/20.0'$
3.28	3.90	3263.4	84463.4	568.8	84463.4	$\varnothing 12/10.0'$

- Pilastro: 238/338 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
238	27	-84839.3	8478.0	2139.7	1.00	1.00	0.13
338	27	-82308.0	-8064.4	-856.9	1.00	1.00	0.12

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4062.0	84463.4	819.0	84463.4	$\varnothing 12/10.0'$
0.79	3.26	4062.0	42231.7	819.0	42231.7	$\varnothing 12/20.0'$
3.26	3.88	4062.0	84463.4	819.0	84463.4	$\varnothing 12/10.0'$

- Pilastro: 338/438 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
338	27	-57770.8	6687.9	-379.7	1.00	1.00	0.09

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

438	27	-55239.5	-7141.7	-1210.7	1.00	1.00	0.10
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3386.1	84463.4	865.5	84463.4	∅ 12/10.0'
0.79	3.26	3386.1	42231.7	865.5	42231.7	∅ 12/20.0'
3.26	3.88	3386.1	84463.4	865.5	84463.4	∅ 12/10.0'

- Pilastro: 438/538 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
438	27	-30628.5	6373.4	-163.8	1.00	1.00	0.08
538	27	-28097.3	-9166.8	502.2	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3826.1	84463.4	945.4	84463.4	∅ 12/10.0'
0.79	3.26	3826.1	42231.7	945.4	42231.7	∅ 12/20.0'
3.26	3.88	3826.1	84463.4	945.4	84463.4	∅ 12/10.0'

- Pilastro: 538/638 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 18 \text{ Af} = 20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\emptyset 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
538	1	-3909.2	2348.0	-4289.7	1.00	1.00	0.19
638	27	-1748.6	-966.7	2.5	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	2.58	1244.0	29327.6	1587.8	29327.6	∅ 10/20.0'
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- Pilastro: 39/139 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\varnothing 20 \times 4 \text{ V} + 1\varnothing 20 \times 2 \text{ B} + 1\varnothing 20 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
39	3	-141265.0	5212.7	-3406.6	1.00	1.00	0.17
139	4	-139283.0	-3302.0	-870.5	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2560.0	84463.4	823.0	84463.4	∅ 12/10.0'
0.51	2.57	2560.0	42231.7	823.0	42231.7	∅ 12/20.0'
2.57	3.08	2560.0	84463.4	823.0	84463.4	∅ 12/10.0'

- Pilastro: 139/239 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\varnothing 20 \times 4 \text{ V} + 1\varnothing 20 \times 2 \text{ B} + 1\varnothing 20 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
139	27	-112400.9	6240.6	2261.4	1.00	1.00	0.15
239	7	-111694.0	-4686.4	-322.6	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2667.9	84463.4	569.5	84463.4	∅ 12/10.0'
0.79	3.28	2667.9	42231.7	569.5	42231.7	∅ 12/20.0'
3.28	3.90	2667.9	84463.4	569.5	84463.4	∅ 12/10.0'

- Pilastro: 239/339 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
239	27	-85176.6	6664.8	2140.7	1.00	1.00	0.12
339	27	-82645.4	-6401.5	-856.8	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3210.0	84463.4	818.5	84463.4	$\varnothing 12/10.0'$
0.79	3.26	3210.0	42231.7	818.5	42231.7	$\varnothing 12/20.0'$
3.26	3.88	3210.0	84463.4	818.5	84463.4	$\varnothing 12/10.0'$

- Pilastro: 339/439 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
339	27	-57985.8	5391.1	-377.3	1.00	1.00	0.08
439	27	-55454.5	-5711.2	-1224.1	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2720.7	84463.4	871.5	84463.4	$\varnothing 12/10.0'$
0.79	3.26	2720.7	42231.7	871.5	42231.7	$\varnothing 12/20.0'$
3.26	3.88	2720.7	84463.4	871.5	84463.4	$\varnothing 12/10.0'$

- Pilastro: 439/539 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
439	27	-30743.8	5180.9	-159.5	1.00	1.00	0.07

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

539	27	-28212.5	-7279.8	498.3	1.00	1.00	0.10
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3067.5	84463.4	941.7	84463.4	ø 12/10.0'
0.79	3.26	3067.5	42231.7	941.7	42231.7	ø 12/20.0'
3.26	3.88	3067.5	84463.4	941.7	84463.4	ø 12/10.0'

- Pilastro: 539/639 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: ø 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
539	1	-3862.7	2095.0	-4296.5	1.00	1.00	0.18
639	27	-1795.2	-910.4	2.3	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1241.7	29327.6	1590.4	29327.6	ø 10/20.0'

- Pilastro: 40/140 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: ø 12/10.0' x 51.3+ø 12/20.0' x 205.3+ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
40	4	-140377.2	3744.6	-3492.8	1.00	1.00	0.16
140	2	-138986.6	-2457.3	-1508.3	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	1992.6	84463.4	836.9	84463.4	ø 12/10.0'
0.51	2.57	1992.6	42231.7	836.9	42231.7	ø 12/20.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

2.57	3.08	1992.6	84463.4	836.9	84463.4	Ø 12/10.0'
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- Pilastro: 140/240 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\varnothing 20 \times 4 \text{ V} + 1\varnothing 20 \times 2 \text{ B} + 1\varnothing 20 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
140	19	-115095.5	4413.8	2655.1	1.00	1.00	0.14
240	25	-110615.8	-3819.3	834.5	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2098.6	84463.4	626.5	84463.4	Ø 12/10.0'
0.79	3.28	2098.6	42231.7	626.5	42231.7	Ø 12/20.0'
3.28	3.90	2098.6	84463.4	626.5	84463.4	Ø 12/10.0'

- Pilastro: 240/340 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
240	27	-86131.6	4915.3	2102.0	1.00	1.00	0.11
340	27	-83600.4	-4797.3	-785.6	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2388.2	84463.4	919.9	84463.4	Ø 12/10.0'
0.79	3.26	2388.2	42231.7	919.9	42231.7	Ø 12/20.0'
3.26	3.88	2388.2	84463.4	919.9	84463.4	Ø 12/10.0'

- Pilastro: 340/440 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
340	27	-58605.8	4169.4	-542.5	1.00	1.00	0.08
440	27	-56074.6	-4354.7	-1207.7	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2092.2	84463.4	1005.0	84463.4	$\varnothing 12/10.0'$
0.79	3.26	2092.2	42231.7	1005.0	42231.7	$\varnothing 12/20.0'$
3.26	3.88	2092.2	84463.4	1005.0	84463.4	$\varnothing 12/10.0'$

- Pilastro: 440/540 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
440	27	-31091.9	4053.6	-414.0	1.00	1.00	0.06
540	25	-28384.7	-4489.3	2335.2	1.00	1.00	0.07

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2335.4	84463.4	1071.1	84463.4	$\varnothing 12/10.0'$
0.79	3.26	2335.4	42231.7	1071.1	42231.7	$\varnothing 12/20.0'$
3.26	3.88	2335.4	84463.4	1071.1	84463.4	$\varnothing 12/10.0'$

- Pilastro: 540/640 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
540	3	-3785.4	1971.8	-4316.2	1.00	1.00	0.18

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

640	26	-1880.2	-884.1	1.1	1.00	1.00	0.03
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1247.8	29327.6	1617.5	29327.6	∅ 10/20.0'

- Pilastro: 41/141 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 51.3 + \emptyset 12/20.0' \times 205.3 + \emptyset 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
41	22	-80741.5	-14902.8	1359.1	1.00	1.00	0.21
141	21	-78953.9	6416.5	1128.6	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	6288.4	84463.4	630.7	84463.4	∅ 12/10.0'
0.51	2.57	6288.4	42231.7	630.7	42231.7	∅ 12/20.0'
2.57	3.08	6288.4	84463.4	630.7	84463.4	∅ 12/10.0'

- Pilastro: 141/241 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 62.2 + \emptyset 12/20.0' \times 248.7 + \emptyset 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
141	14	-57269.9	-16059.8	-2838.3	1.00	1.00	0.27
241	14	-54726.2	10344.0	-1726.6	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6377.4	84463.4	582.5	84463.4	∅ 12/10.0'
0.79	3.28	6377.4	42231.7	582.5	42231.7	∅ 12/20.0'

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.28	3.90	6377.4	84463.4	582.5	84463.4	Ø 12/10.0'
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- Pilastro: 241/341 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
241	14	-43384.7	-18442.8	-2415.7	1.00	1.00	0.31
341	14	-40853.5	17115.3	1151.5	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8720.6	84463.4	1022.0	84463.4	Ø 12/10.0'
0.79	3.26	8720.6	42231.7	1022.0	42231.7	Ø 12/20.0'
3.26	3.88	8720.6	84463.4	1022.0	84463.4	Ø 12/10.0'

- Pilastro: 341/441 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
341	14	-29792.3	-13653.3	937.6	1.00	1.00	0.23
441	14	-27261.1	14885.0	1098.1	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6970.4	84463.4	682.8	84463.4	Ø 12/10.0'
0.79	3.26	6970.4	42231.7	682.8	42231.7	Ø 12/20.0'
3.26	3.88	6970.4	84463.4	682.8	84463.4	Ø 12/10.0'

- Pilastro: 441/541 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

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Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
441	14	-15982.8	-12752.1	698.4	1.00	1.00	0.27
541	14	-13451.5	19760.8	730.8	1.00	1.00	0.49

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8004.3	84463.4	769.3	84463.4	$\varnothing 12/10.0'$
0.79	3.26	8004.3	42231.7	769.3	42231.7	$\varnothing 12/20.0'$
3.26	3.88	8004.3	84463.4	769.3	84463.4	$\varnothing 12/10.0'$

- Pilastro: 541/641 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
541	27	-3363.7	-5301.6	-522.8	1.00	1.00	0.23
641	14	-311.9	1166.9	0.9	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1745.6	29327.6	771.1	29327.6	$\varnothing 10/20.0'$

- Pilastro: 42/142 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
42	22	-133717.5	-13922.1	1340.2	1.00	1.00	0.22
142	21	-131845.5	6656.0	1171.4	1.00	1.00	0.16

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	6086.1	84463.4	535.4	84463.4	∅ 12/10.0'
0.51	2.57	6086.1	42231.7	535.4	42231.7	∅ 12/20.0'
2.57	3.08	6086.1	84463.4	535.4	84463.4	∅ 12/10.0'

- Pilastro: 142/242 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
142	14	-102852.3	-15467.9	-3289.5	1.00	1.00	0.23
242	16	-101629.2	10189.4	1106.2	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6230.4	84463.4	702.1	84463.4	∅ 12/10.0'
0.79	3.28	6230.4	42231.7	702.1	42231.7	∅ 12/20.0'
3.28	3.90	6230.4	84463.4	702.1	84463.4	∅ 12/10.0'

- Pilastro: 242/342 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
242	14	-77872.5	-17522.4	-3173.6	1.00	1.00	0.23
342	14	-75341.3	16342.3	1758.7	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	8307.6	84463.4	1293.9	84463.4	∅ 12/10.0'
0.79	3.26	8307.6	42231.7	1293.9	42231.7	∅ 12/20.0'

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3.26	3.88	8307.6	84463.4	1293.9	84463.4	∅ 12/10.0'
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- Pilastro: 342/442 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
342	14	-53048.2	-13199.9	1059.8	1.00	1.00	0.17
442	14	-50516.9	14309.9	1796.3	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6723.7	84463.4	1005.3	84463.4	∅ 12/10.0'
0.79	3.26	6723.7	42231.7	1005.3	42231.7	∅ 12/20.0'
3.26	3.88	6723.7	84463.4	1005.3	84463.4	∅ 12/10.0'

- Pilastro: 442/542 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
442	14	-28056.5	-12340.7	739.2	1.00	1.00	0.20
542	14	-25525.2	18642.3	1695.5	1.00	1.00	0.39

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7627.9	84463.4	1012.7	84463.4	∅ 12/10.0'
0.79	3.26	7627.9	42231.7	1012.7	42231.7	∅ 12/20.0'
3.26	3.88	7627.9	84463.4	1012.7	84463.4	∅ 12/10.0'

- Pilastro: 542/642 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: \varnothing 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
542	27	-4199.3	-5064.6	-860.7	1.00	1.00	0.21
642	14	-1289.3	1394.7	1.0	1.00	1.00	0.06

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1788.3	29327.6	1224.7	29327.6	\varnothing 10/20.0'

- Pilastro: 43/143 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: \varnothing 12/10.0' x 51.3+ \varnothing 12/20.0' x 205.3+ \varnothing 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
43	22	-143325.1	-12621.1	1344.1	1.00	1.00	0.21
143	21	-141413.0	6240.9	1162.5	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	5586.7	84463.4	548.5	84463.4	\varnothing 12/10.0'
0.51	2.57	5586.7	42231.7	548.5	42231.7	\varnothing 12/20.0'
2.57	3.08	5586.7	84463.4	548.5	84463.4	\varnothing 12/10.0'

- Pilastro: 143/243 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: \varnothing 12/10.0' x 62.2+ \varnothing 12/20.0' x 248.7+ \varnothing 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
143	14	-111348.6	-14145.8	-3240.3	1.00	1.00	0.21
243	16	-109980.7	9446.3	1165.3	1.00	1.00	0.16

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5731.2	84463.4	675.6	84463.4	∅ 12/10.0'
0.79	3.28	5731.2	42231.7	675.6	42231.7	∅ 12/20.0'
3.28	3.90	5731.2	84463.4	675.6	84463.4	∅ 12/10.0'

- Pilastro: 243/343 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
243	14	-84341.2	-15929.8	-3120.2	1.00	1.00	0.21
343	14	-81810.0	14890.9	1730.8	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	7561.8	84463.4	1227.6	84463.4	∅ 12/10.0'
0.79	3.26	7561.8	42231.7	1227.6	42231.7	∅ 12/20.0'
3.26	3.88	7561.8	84463.4	1227.6	84463.4	∅ 12/10.0'

- Pilastro: 343/443 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
343	14	-57422.3	-12082.4	977.8	1.00	1.00	0.15
443	14	-54891.1	13070.6	1775.1	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6149.3	84463.4	945.7	84463.4	∅ 12/10.0'
0.79	3.26	6149.3	42231.7	945.7	42231.7	∅ 12/20.0'

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3.26	3.88	6149.3	84463.4	945.7	84463.4	Ø 12/10.0'
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- Pilastro: 443/543 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 Ø 24 Af=36.19 [cm²] < 1Ø24 x 4 V + 1Ø24 x 2 B + 1Ø24 x 2 H >

Staffe: Ø 12/10.0' x 61.8+Ø 12/20.0' x 247.3+Ø 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
443	14	-30343.3	-11297.4	597.4	1.00	1.00	0.17
543	14	-27812.0	16910.7	1795.4	1.00	1.00	0.33

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6944.7	84463.4	920.5	84463.4	Ø 12/10.0'
0.79	3.26	6944.7	42231.7	920.5	42231.7	Ø 12/20.0'
3.26	3.88	6944.7	84463.4	920.5	84463.4	Ø 12/10.0'

- Pilastro: 543/643 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 Ø 18 Af=20.36 [cm²] < 1Ø18 x 4 V + 1Ø18 x 2 B + 1Ø18 x 2 H >

Staffe: Ø 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
543	27	-4274.2	-4654.7	-924.5	1.00	1.00	0.19
643	14	-1499.9	1359.1	1.1	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1682.5	29327.6	1341.9	29327.6	Ø 10/20.0'

- Pilastro: 44/144 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 Ø 20 Af=25.13 [cm²] < 1Ø20 x 4 V + 1Ø20 x 2 B + 1Ø20 x 2 H >

Staffe: Ø 12/10.0' x 51.3+Ø 12/20.0' x 205.3+Ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
44	18	-146919.8	-11057.6	1245.7	1.00	1.00	0.21
144	21	-144669.3	5665.3	1244.8	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	4968.2	84463.4	519.0	84463.4	Ø 12/10.0'
0.51	2.57	4968.2	42231.7	519.0	42231.7	Ø 12/20.0'
2.57	3.08	4968.2	84463.4	519.0	84463.4	Ø 12/10.0'

- Pilastro: 144/244 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 62.2 + \phi 12/20.0' \times 248.7 + \phi 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
144	14	-114094.0	-12535.2	-3314.0	1.00	1.00	0.20
244	22	-115864.1	8170.1	1274.3	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5114.6	84463.4	625.0	84463.4	Ø 12/10.0'
0.79	3.28	5114.6	42231.7	625.0	42231.7	Ø 12/20.0'
3.28	3.90	5114.6	84463.4	625.0	84463.4	Ø 12/10.0'

- Pilastro: 244/344 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
244	14	-86381.3	-14034.4	-3177.4	1.00	1.00	0.19
344	14	-83850.0	13158.9	1802.0	1.00	1.00	0.17

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6673.1	84463.4	1160.5	84463.4	∅ 12/10.0'
0.79	3.26	6673.1	42231.7	1160.5	42231.7	∅ 12/20.0'
3.26	3.88	6673.1	84463.4	1160.5	84463.4	∅ 12/10.0'

- Pilastro: 344/444 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
344	14	-58789.3	-10752.2	870.9	1.00	1.00	0.14
444	14	-56258.1	11606.0	1830.6	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5468.0	84463.4	888.5	84463.4	∅ 12/10.0'
0.79	3.26	5468.0	42231.7	888.5	42231.7	∅ 12/20.0'
3.26	3.88	5468.0	84463.4	888.5	84463.4	∅ 12/10.0'

- Pilastro: 444/544 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
444	14	-31057.6	-10053.3	447.5	1.00	1.00	0.14
544	14	-28526.3	14857.8	1974.0	1.00	1.00	0.27

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	6133.3	84463.4	832.3	84463.4	∅ 12/10.0'
0.79	3.26	6133.3	42231.7	832.3	42231.7	∅ 12/20.0'

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3.26	3.88	6133.3	84463.4	832.3	84463.4	∅ 12/10.0'
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- Pilastro: 544/644 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: 8 ∅ 18 Af=20.36 [cm²] < 1∅18 x 4 V + 1∅18 x 2 B + 1∅18 x 2 H >

Staffe: ∅ 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
544	27	-4207.7	-4532.9	-954.2	1.00	1.00	0.18
644	14	-1559.5	1319.7	1.0	1.00	1.00	0.05

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1695.9	29327.6	1391.7	29327.6	∅ 10/20.0'

- Pilastro: 45/145 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 51.3+∅ 12/20.0' x 205.3+∅ 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
45	18	-141952.8	-9589.3	1260.6	1.00	1.00	0.19
145	21	-139753.2	5025.6	1213.8	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	4346.6	84463.4	524.7	84463.4	∅ 12/10.0'
0.51	2.57	4346.6	42231.7	524.7	42231.7	∅ 12/20.0'
2.57	3.08	4346.6	84463.4	524.7	84463.4	∅ 12/10.0'

- Pilastro: 145/245 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 62.2+∅ 12/20.0' x 248.7+∅ 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
145	14	-111028.6	-10899.7	-3306.6	1.00	1.00	0.18
245	22	-111924.5	7211.2	1223.5	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4473.2	84463.4	646.6	84463.4	Ø 12/10.0'
0.79	3.28	4473.2	42231.7	646.6	42231.7	Ø 12/20.0'
3.28	3.90	4473.2	84463.4	646.6	84463.4	Ø 12/10.0'

- Pilastro: 245/345 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
245	14	-84116.8	-12131.5	-3197.0	1.00	1.00	0.17
345	14	-81585.5	11407.7	1812.1	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5777.1	84463.4	1194.3	84463.4	Ø 12/10.0'
0.79	3.26	5777.1	42231.7	1194.3	42231.7	Ø 12/20.0'
3.26	3.88	5777.1	84463.4	1194.3	84463.4	Ø 12/10.0'

- Pilastro: 345/445 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
345	14	-57287.4	-9346.9	908.8	1.00	1.00	0.12
445	14	-54756.2	10053.7	1845.2	1.00	1.00	0.13

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4745.7	84463.4	917.3	84463.4	∅ 12/10.0'
0.79	3.26	4745.7	42231.7	917.3	42231.7	∅ 12/20.0'
3.26	3.88	4745.7	84463.4	917.3	84463.4	∅ 12/10.0'

- Pilastro: 445/545 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 24 \text{ Af}=36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 61.8 + \emptyset 12/20.0' \times 247.3 + \emptyset 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
445	14	-30339.6	-8812.0	497.9	1.00	1.00	0.12
545	14	-27808.4	13006.2	1943.6	1.00	1.00	0.23

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	5371.9	84463.4	853.7	84463.4	∅ 12/10.0'
0.79	3.26	5371.9	42231.7	853.7	42231.7	∅ 12/20.0'
3.26	3.88	5371.9	84463.4	853.7	84463.4	∅ 12/10.0'

- Pilastro: 545/645 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\emptyset 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
545	21	-3829.5	-1933.4	3589.5	1.00	1.00	0.15
645	14	-1622.4	1140.0	0.9	1.00	1.00	0.04

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1394.0	29327.6	1328.8	29327.6	∅ 10/20.0'

- Pilastro: 46/146 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
46	18	-141738.8	-8154.8	1261.2	1.00	1.00	0.18
146	21	-139563.8	4454.9	1212.4	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	3756.7	84463.4	525.4	84463.4	$\varnothing 12/10.0'$
0.51	2.57	3756.7	42231.7	525.4	42231.7	$\varnothing 12/20.0'$
2.57	3.08	3756.7	84463.4	525.4	84463.4	$\varnothing 12/10.0'$

- Pilastro: 146/246 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
146	14	-111475.8	-9352.1	-3304.0	1.00	1.00	0.17
246	22	-111777.3	6334.2	1218.7	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3874.2	84463.4	648.5	84463.4	$\varnothing 12/10.0'$
0.79	3.28	3874.2	42231.7	648.5	42231.7	$\varnothing 12/20.0'$
3.28	3.90	3874.2	84463.4	648.5	84463.4	$\varnothing 12/10.0'$

- Pilastro: 246/346 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
246	14	-84464.8	-10315.3	-3190.9	1.00	1.00	0.15
346	14	-81933.5	9742.3	1805.0	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4923.7	84463.4	1196.7	84463.4	Ø 12/10.0'
0.79	3.26	4923.7	42231.7	1196.7	42231.7	Ø 12/20.0'
3.26	3.88	4923.7	84463.4	1196.7	84463.4	Ø 12/10.0'

- Pilastro: 346/446 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
346	14	-57521.2	-8040.9	917.2	1.00	1.00	0.11
446	14	-54990.0	8612.5	1844.7	1.00	1.00	0.12

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4075.4	84463.4	924.3	84463.4	Ø 12/10.0'
0.79	3.26	4075.4	42231.7	924.3	42231.7	Ø 12/20.0'
3.26	3.88	4075.4	84463.4	924.3	84463.4	Ø 12/10.0'

- Pilastro: 446/546 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 1\phi 24 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 61.8 + \phi 12/20.0' \times 247.3 + \phi 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
446	14	-30482.9	-7622.4	505.1	1.00	1.00	0.10
546	14	-27951.7	11131.4	1918.8	1.00	1.00	0.19

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4617.5	84463.4	851.6	84463.4	ø 12/10.0'
0.79	3.26	4617.5	42231.7	851.6	42231.7	ø 12/20.0'
3.26	3.88	4617.5	84463.4	851.6	84463.4	ø 12/10.0'

- Pilastro: 546/646 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: $\phi 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
546	21	-3806.5	-1764.6	3588.5	1.00	1.00	0.15
646	14	-1686.5	1046.5	0.8	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1290.2	29327.6	1328.4	29327.6	ø 10/20.0'

- Pilastro: 47/147 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 51.3 + \phi 12/20.0' \times 205.3 + \phi 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
47	18	-141557.7	-6720.5	1261.2	1.00	1.00	0.17
147	21	-139408.4	3884.4	1212.6	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	3167.0	84463.4	525.5	84463.4	ø 12/10.0'
0.51	2.57	3167.0	42231.7	525.5	42231.7	ø 12/20.0'
2.57	3.08	3167.0	84463.4	525.5	84463.4	ø 12/10.0'

- Pilastro: 147/247 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
147	14	-111936.5	-7806.3	-3304.2	1.00	1.00	0.16
247	18	-111828.0	5621.7	1259.2	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3275.7	84463.4	648.8	84463.4	$\varnothing 12/10.0'$
0.79	3.28	3275.7	42231.7	648.8	42231.7	$\varnothing 12/20.0'$
3.28	3.90	3275.7	84463.4	648.8	84463.4	$\varnothing 12/10.0'$

- Pilastro: 247/347 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
247	14	-84820.6	-8501.6	-3190.2	1.00	1.00	0.14
347	14	-82289.4	8077.9	1803.5	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4071.2	84463.4	1195.5	84463.4	$\varnothing 12/10.0'$
0.79	3.26	4071.2	42231.7	1195.5	42231.7	$\varnothing 12/20.0'$
3.26	3.88	4071.2	84463.4	1195.5	84463.4	$\varnothing 12/10.0'$

- Pilastro: 347/447 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
347	14	-57755.9	-6739.3	919.1	1.00	1.00	0.10
447	14	-55224.7	7176.0	1854.8	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3407.3	84463.4	929.2	84463.4	Ø 12/10.0'
0.79	3.26	3407.3	42231.7	929.2	42231.7	Ø 12/20.0'
3.26	3.88	3407.3	84463.4	929.2	84463.4	Ø 12/10.0'

- Pilastro: 447/547 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1\varnothing 24 \times 4 \text{ V} + 1\varnothing 24 \times 2 \text{ B} + 1\varnothing 24 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
447	14	-30618.2	-6432.1	500.7	1.00	1.00	0.08
547	14	-28086.9	9248.9	1900.9	1.00	1.00	0.14

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3860.9	84463.4	841.9	84463.4	Ø 12/10.0'
0.79	3.26	3860.9	42231.7	841.9	42231.7	Ø 12/20.0'
3.26	3.88	3860.9	84463.4	841.9	84463.4	Ø 12/10.0'

- Pilastro: 547/647 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 18 \text{ Af} = 20.36 \text{ [cm}^2\text{]} < 1\varnothing 18 \times 4 \text{ V} + 1\varnothing 18 \times 2 \text{ B} + 1\varnothing 18 \times 2 \text{ H} >$

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
547	21	-3783.4	-1607.2	3593.5	1.00	1.00	0.15
647	14	-1745.0	970.3	0.7	1.00	1.00	0.03

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1235.6	29327.6	1330.3	29327.6	∅ 10/20.0'

- Pilastro: 48/148 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\varnothing 20 \times 4 \text{ V} + 1\varnothing 20 \times 2 \text{ B} + 1\varnothing 20 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 51.3 + \varnothing 12/20.0' \times 205.3 + \varnothing 12/10.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
48	18	-141383.0	-5287.7	1261.2	1.00	1.00	0.16
148	23	-140014.0	2815.5	2350.2	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2578.3	84463.4	525.4	84463.4	∅ 12/10.0'
0.51	2.57	2578.3	42231.7	525.4	42231.7	∅ 12/20.0'
2.57	3.08	2578.3	84463.4	525.4	84463.4	∅ 12/10.0'

- Pilastro: 148/248 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\varnothing 20 \times 4 \text{ V} + 1\varnothing 20 \times 2 \text{ B} + 1\varnothing 20 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 62.2 + \varnothing 12/20.0' \times 248.7 + \varnothing 12/10.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
148	14	-112376.6	-6265.6	-3303.6	1.00	1.00	0.15
248	18	-111676.6	4705.3	1257.1	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2678.9	84463.4	649.4	84463.4	∅ 12/10.0'
0.79	3.28	2678.9	42231.7	649.4	42231.7	∅ 12/20.0'
3.28	3.90	2678.9	84463.4	649.4	84463.4	∅ 12/10.0'

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 248/348 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0'$ x 61.8+ $\varnothing 12/20.0'$ x 247.3+ $\varnothing 12/10.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
248	14	-85154.1	-6694.4	-3185.5	1.00	1.00	0.12
348	14	-82622.9	6417.8	1798.4	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3221.4	84463.4	1194.8	84463.4	$\varnothing 12/10.0'$
0.79	3.26	3221.4	42231.7	1194.8	42231.7	$\varnothing 12/20.0'$
3.26	3.88	3221.4	84463.4	1194.8	84463.4	$\varnothing 12/10.0'$

- Pilastro: 348/448 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0'$ x 61.8+ $\varnothing 12/20.0'$ x 247.3+ $\varnothing 12/10.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
348	14	-57967.8	-5447.3	923.8	1.00	1.00	0.09
448	14	-55436.6	5747.2	1869.2	1.00	1.00	0.09

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2743.5	84463.4	937.2	84463.4	$\varnothing 12/10.0'$
0.79	3.26	2743.5	42231.7	937.2	42231.7	$\varnothing 12/20.0'$
3.26	3.88	2743.5	84463.4	937.2	84463.4	$\varnothing 12/10.0'$

- Pilastro: 448/548 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0'$ x 61.8+ $\varnothing 12/20.0'$ x 247.3+ $\varnothing 12/10.0'$ x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
448	14	-30730.6	-5250.5	498.1	1.00	1.00	0.07
548	14	-28199.3	7375.1	1864.4	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3108.3	84463.4	831.6	84463.4	Ø 12/10.0'
0.79	3.26	3108.3	42231.7	831.6	42231.7	Ø 12/20.0'
3.26	3.88	3108.3	84463.4	831.6	84463.4	Ø 12/10.0'

- Pilastro: 548/648 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 18 \text{ Af}=20.36 \text{ [cm}^2\text{]} < 1\phi 18 \times 4 \text{ V} + 1\phi 18 \times 2 \text{ B} + 1\phi 18 \times 2 \text{ H} >$

Staffe: Ø 10/20.0' x 240.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
548	21	-3756.3	-1428.0	3603.7	1.00	1.00	0.15
648	14	-1791.1	914.6	0.5	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1232.3	29327.6	1334.0	29327.6	Ø 10/20.0'

- Pilastro: 49/149 / L 3.08[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: Ø 12/10.0' x 51.3+Ø 12/20.0' x 205.3+Ø 12/10.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
49	18	-142112.0	-3875.0	1248.4	1.00	1.00	0.16
149	19	-140755.6	2427.4	2415.2	1.00	1.00	0.15

- Verifiche a Taglio

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2008.2	84463.4	518.7	84463.4	∅ 12/10.0'
0.51	2.57	2008.2	42231.7	518.7	42231.7	∅ 12/20.0'
2.57	3.08	2008.2	84463.4	518.7	84463.4	∅ 12/10.0'

- Pilastro: 149/249 / L 3.73[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 62.2+∅ 12/20.0' x 248.7+∅ 12/10.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
149	14	-113271.5	-4774.5	-3378.5	1.00	1.00	0.14
249	18	-112182.8	3830.8	1303.1	1.00	1.00	0.13

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2103.8	84463.4	671.5	84463.4	∅ 12/10.0'
0.79	3.28	2103.8	42231.7	671.5	42231.7	∅ 12/20.0'
3.28	3.90	2103.8	84463.4	671.5	84463.4	∅ 12/10.0'

- Pilastro: 249/349 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: 8 ∅ 24 Af=36.19 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 1∅24 x 2 H >

Staffe: ∅ 12/10.0' x 61.8+∅ 12/20.0' x 247.3+∅ 12/10.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
249	14	-85792.1	-4935.0	-3356.7	1.00	1.00	0.11
349	14	-83260.9	4800.8	1970.3	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2393.9	84463.4	1235.5	84463.4	∅ 12/10.0'
0.79	3.26	2393.9	42231.7	1235.5	42231.7	∅ 12/20.0'
3.26	3.88	2393.9	84463.4	1235.5	84463.4	∅ 12/10.0'

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 349/449 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
349	14	-58375.6	-4213.9	805.9	1.00	1.00	0.08
449	14	-55844.3	4376.4	2066.0	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2108.4	84463.4	995.6	84463.4	$\varnothing 12/10.0'$
0.79	3.26	2108.4	42231.7	995.6	42231.7	$\varnothing 12/20.0'$
3.26	3.88	2108.4	84463.4	995.6	84463.4	$\varnothing 12/10.0'$

- Pilastro: 449/549 / L 3.71[m] / Sezione 3 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 24$ Af=36.19 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 1\varnothing 24 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 61.8 + \varnothing 12/20.0' \times 247.3 + \varnothing 12/10.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
449	14	-30955.8	-4112.5	302.2	1.00	1.00	0.06
549	14	-28424.6	5514.3	2213.5	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2369.1	84463.4	885.7	84463.4	$\varnothing 12/10.0'$
0.79	3.26	2369.1	42231.7	885.7	42231.7	$\varnothing 12/20.0'$
3.26	3.88	2369.1	84463.4	885.7	84463.4	$\varnothing 12/10.0'$

- Pilastro: 549/649 / L 2.41[m] / Sezione 12 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 18$ Af=20.36 [cm²] < $1\varnothing 18 \times 4 V + 1\varnothing 18 \times 2 B + 1\varnothing 18 \times 2 H$ >

Staffe: $\varnothing 10/20.0' \times 240.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
549	21	-3780.9	-1875.4	3682.5	1.00	1.00	0.15
649	14	-1883.1	886.0	0.6	1.00	1.00	0.03

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	2.58	1240.2	29327.6	1364.0	29327.6	\emptyset 10/20.0'

- Pilastro: 50/150 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \emptyset 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/15.0' \times 53.0 + \emptyset 8/12.5' \times 202.0 + \emptyset 12/15.0' \times 53.0$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
50	18	-59708.3	-4584.6	868.0	1.00	1.00	0.18
150	22	-58422.1	3833.8	69.3	1.00	1.00	0.16

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.53	2579.1	31879.9	683.8	56308.9	\emptyset 12/15.0'
0.53	2.55	2579.1	17002.6	683.8	30031.4	\emptyset 8/12.5'
2.55	3.08	2579.1	31879.9	683.8	56308.9	\emptyset 12/15.0'

- Pilastro: 150/250 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \emptyset 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/15.0' \times 62.2 + \emptyset 8/15.0' \times 248.7 + \emptyset 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
150	6	-30763.0	-6364.0	-2224.9	1.00	1.00	0.31
250	6	-29236.8	5813.1	142.7	1.00	1.00	0.26

- Verifiche a Taglio

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3282.3	31879.9	1471.9	56308.9	∅ 12/15.0'
0.79	3.28	3282.3	14168.8	1471.9	25026.2	∅ 8/15.0'
3.28	3.90	3282.3	31879.9	1471.9	56308.9	∅ 12/15.0'

- Pilastro: 250/350 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
250	14	-32589.2	-8618.9	-3361.2	1.00	1.00	0.38
350	14	-31070.4	8367.2	2358.2	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4191.3	31879.9	2324.3	56308.9	∅ 12/15.0'
0.79	3.26	4191.3	14168.8	2324.3	25026.2	∅ 8/15.0'
3.26	3.88	4191.3	31879.9	2324.3	56308.9	∅ 12/15.0'

- Pilastro: 350/450 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
350	14	-22262.5	-7616.6	-1931.8	1.00	1.00	0.37
450	14	-20743.8	7921.1	1924.9	1.00	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3833.8	31879.9	1880.2	56308.9	∅ 12/15.0'
0.79	3.26	3833.8	14168.8	1880.2	25026.2	∅ 8/15.0'
3.26	3.88	3833.8	31879.9	1880.2	56308.9	∅ 12/15.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 450/550 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 61.8 + \varnothing 8/15.0' \times 247.3 + \varnothing 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
450	14	-12043.6	-6394.6	-2029.9	1.00	1.00	0.35
550	14	-10524.9	6796.0	3841.6	1.00	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3255.6	31879.9	2799.5	56308.9	$\varnothing 12/15.0'$
0.79	3.26	3255.6	14168.8	2799.5	25026.2	$\varnothing 8/15.0'$
3.26	3.88	3255.6	31879.9	2799.5	56308.9	$\varnothing 12/15.0'$

- Pilastro: 550/650 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 24$ Af=27.14 [cm²] < $1\varnothing 24 \times 4 V + 1\varnothing 24 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
550	14	-2159.2	-3680.3	2722.2	1.00	1.00	0.25
650	14	-1671.7	1250.0	459.4	1.00	1.00	0.08

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3790.1	10626.6	1750.7	18769.6	$\varnothing 8/20.0'$

- Pilastro: 51/151 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $10 \varnothing 20$ Af=31.42 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 12 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/12.5' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
51	16	-88184.4	-4395.7	-983.7	1.00	1.00	0.19
151	16	-86965.7	4221.0	976.2	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2874.3	31879.9	479.6	56308.9	Ø 12/15.0'
0.51	2.57	2874.3	17002.6	479.6	30031.4	Ø 8/12.5'
2.57	3.08	2874.3	31879.9	479.6	56308.9	Ø 12/15.0'

- Pilastro: 151/251 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
151	14	-77259.7	-7770.2	-4483.7	1.00	1.00	0.32
251	14	-75733.4	6978.0	2188.4	1.00	1.00	0.27

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3619.8	31879.9	1842.8	56308.9	Ø 12/15.0'
0.79	3.28	3619.8	14168.8	1842.8	25026.2	Ø 8/15.0'
3.28	3.90	3619.8	31879.9	1842.8	56308.9	Ø 12/15.0'

- Pilastro: 251/351 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
251	14	-58651.8	-9044.9	-6102.1	1.00	1.00	0.36
351	14	-57133.0	8819.5	5156.9	1.00	1.00	0.34

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4408.3	31879.9	3153.8	56308.9	∅ 12/15.0'
0.79	3.26	4408.3	14168.8	3153.8	25026.2	∅ 8/15.0'
3.26	3.88	4408.3	31879.9	3153.8	56308.9	∅ 12/15.0'

- Pilastro: 351/451 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
351	14	-39608.7	-8134.0	-4860.7	1.00	1.00	0.34
451	14	-38089.9	8412.0	4901.9	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4083.0	31879.9	2843.8	56308.9	∅ 12/15.0'
0.79	3.26	4083.0	14168.8	2843.8	25026.2	∅ 8/15.0'
3.26	3.88	4083.0	31879.9	2843.8	56308.9	∅ 12/15.0'

- Pilastro: 451/551 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
451	14	-21033.0	-6995.4	-4673.7	1.00	1.00	0.35
551	14	-19514.3	7325.9	6079.7	1.00	1.00	0.40

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3534.6	31879.9	3474.4	56308.9	∅ 12/15.0'
0.79	3.26	3534.6	14168.8	3474.4	25026.2	∅ 8/15.0'
3.26	3.88	3534.6	31879.9	3474.4	56308.9	∅ 12/15.0'

- Pilastro: 551/651 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0'$ x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
551	14	-3512.4	-4829.4	330.3	1.00	1.00	0.31
651	14	-3024.9	1592.8	1598.8	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4937.2	10626.6	1557.4	18769.6	$\phi 8/20.0'$

- Pilastro: 52/152 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0'$ x 51.3+ $\phi 8/15.0'$ x 205.3+ $\phi 12/15.0'$ x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
52	16	-94652.9	-4168.1	-901.8	1.00	1.00	0.21
152	16	-93434.1	4243.5	883.5	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2787.1	31879.9	515.7	56308.9	$\phi 12/15.0'$
0.51	2.57	2787.1	14168.8	515.7	25026.2	$\phi 8/15.0'$
2.57	3.08	2787.1	31879.9	515.7	56308.9	$\phi 12/15.0'$

- Pilastro: 152/252 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0'$ x 62.2+ $\phi 8/15.0'$ x 248.7+ $\phi 12/15.0'$ x 62.2

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
152	14	-82482.7	-7480.1	-4245.1	1.00	1.00	0.31
252	14	-80956.4	6760.3	1940.3	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3495.4	31879.9	1802.1	56308.9	Ø 12/15.0'
0.79	3.28	3495.4	14168.8	1802.1	25026.2	Ø 8/15.0'
3.28	3.90	3495.4	31879.9	1802.1	56308.9	Ø 12/15.0'

- Pilastro: 252/352 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
252	14	-62830.0	-8574.7	-5860.2	1.00	1.00	0.34
352	14	-61311.2	8375.6	4935.3	1.00	1.00	0.32

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	4182.9	31879.9	3015.7	56308.9	Ø 12/15.0'
0.79	3.26	4182.9	14168.8	3015.7	25026.2	Ø 8/15.0'
3.26	3.88	4182.9	31879.9	3015.7	56308.9	Ø 12/15.0'

- Pilastro: 352/452 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
352	14	-42628.7	-7761.0	-4680.0	1.00	1.00	0.32
452	14	-41109.9	8009.1	4734.3	1.00	1.00	0.33

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3891.7	31879.9	2675.9	56308.9	∅ 12/15.0'
0.79	3.26	3891.7	14168.8	2675.9	25026.2	∅ 8/15.0'
3.26	3.88	3891.7	31879.9	2675.9	56308.9	∅ 12/15.0'

- Pilastro: 452/552 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
452	14	-22801.3	-6732.3	-4612.5	1.00	1.00	0.33
552	14	-21282.5	7017.0	6125.0	1.00	1.00	0.37

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3393.4	31879.9	3326.4	56308.9	∅ 12/15.0'
0.79	3.26	3393.4	14168.8	3326.4	25026.2	∅ 8/15.0'
3.26	3.88	3393.4	31879.9	3326.4	56308.9	∅ 12/15.0'

- Pilastro: 552/652 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 8/20.0' x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
552	14	-3848.6	-4850.3	369.2	1.00	1.00	0.31
652	14	-3361.1	1584.9	1760.9	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4946.7	10626.6	1335.2	18769.6	∅ 8/20.0'

- Pilastro: 53/153 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
53	16	-93138.9	-3823.8	-1044.2	1.00	1.00	0.20
153	16	-91920.1	4101.1	1224.2	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2607.2	31879.9	436.3	56308.9	$\phi 12/15.0'$
0.51	2.57	2607.2	14168.8	436.3	25026.2	$\phi 8/15.0'$
2.57	3.08	2607.2	31879.9	436.3	56308.9	$\phi 12/15.0'$

- Pilastro: 153/253 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
153	14	-79865.8	-6962.0	-4570.7	1.00	1.00	0.30
253	14	-78339.5	6334.9	2247.0	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3264.2	31879.9	1655.4	56308.9	$\phi 12/15.0'$
0.79	3.28	3264.2	14168.8	1655.4	25026.2	$\phi 8/15.0'$
3.28	3.90	3264.2	31879.9	1655.4	56308.9	$\phi 12/15.0'$

- Pilastro: 253/353 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
253	14	-60826.5	-7878.0	-6145.0	1.00	1.00	0.32
353	14	-59307.7	7711.0	5225.5	1.00	1.00	0.30

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3847.1	31879.9	2796.3	56308.9	Ø 12/15.0'
0.79	3.26	3847.1	14168.8	2796.3	25026.2	Ø 8/15.0'
3.26	3.88	3847.1	31879.9	2796.3	56308.9	Ø 12/15.0'

- Pilastro: 353/453 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
353	14	-41479.6	-7190.1	-4977.9	1.00	1.00	0.30
453	14	-39960.8	7408.5	5034.8	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3602.7	31879.9	2457.7	56308.9	Ø 12/15.0'
0.79	3.26	3602.7	14168.8	2457.7	25026.2	Ø 8/15.0'
3.26	3.88	3602.7	31879.9	2457.7	56308.9	Ø 12/15.0'

- Pilastro: 453/553 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
453	14	-22440.3	-6281.2	-4939.2	1.00	1.00	0.31
553	14	-20921.5	6492.7	6475.1	1.00	1.00	0.36

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3152.7	31879.9	3040.4	56308.9	∅ 12/15.0'
0.79	3.26	3152.7	14168.8	3040.4	25026.2	∅ 8/15.0'
3.26	3.88	3152.7	31879.9	3040.4	56308.9	∅ 12/15.0'

- Pilastro: 553/653 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 8/20.0' x 100.6

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
553	14	-3794.6	-4869.4	-61.5	1.00	1.00	0.31
653	14	-3307.1	1587.0	1902.8	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4963.6	10626.6	1695.0	18769.6	∅ 8/20.0'

- Pilastro: 54/154 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ∅ 20 Af=18.85 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 0∅20 x 2 H >

Staffe: ∅ 12/15.0' x 51.3+∅ 8/15.0' x 205.3+∅ 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
54	16	-89666.2	-3428.2	-999.3	1.00	1.00	0.19
154	16	-88447.4	3812.8	1084.3	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2370.6	31879.9	426.1	56308.9	∅ 12/15.0'
0.51	2.57	2370.6	14168.8	426.1	25026.2	∅ 8/15.0'
2.57	3.08	2370.6	31879.9	426.1	56308.9	∅ 12/15.0'

- Pilastro: 154/254 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
154	14	-76588.8	-6291.3	-4501.9	1.00	1.00	0.27
254	14	-75062.6	5752.4	2207.8	1.00	1.00	0.23

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2956.7	31879.9	1685.8	56308.9	$\phi 12/15.0'$
0.79	3.28	2956.7	14168.8	1685.8	25026.2	$\phi 8/15.0'$
3.28	3.90	2956.7	31879.9	1685.8	56308.9	$\phi 12/15.0'$

- Pilastro: 254/354 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
254	14	-58341.2	-7039.5	-6146.2	1.00	1.00	0.30
354	14	-56822.4	6901.4	5230.5	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3440.5	31879.9	2888.3	56308.9	$\phi 12/15.0'$
0.79	3.26	3440.5	14168.8	2888.3	25026.2	$\phi 8/15.0'$
3.26	3.88	3440.5	31879.9	2888.3	56308.9	$\phi 12/15.0'$

- Pilastro: 354/454 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
354	14	-39783.7	-6454.7	-4991.0	1.00	1.00	0.27
454	14	-38265.0	6636.7	5053.9	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3230.9	31879.9	2551.8	56308.9	Ø 12/15.0'
0.79	3.26	3230.9	14168.8	2551.8	25026.2	Ø 8/15.0'
3.26	3.88	3230.9	31879.9	2551.8	56308.9	Ø 12/15.0'

- Pilastro: 454/554 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
454	14	-21479.6	-5707.6	-4913.5	1.00	1.00	0.29
554	14	-19960.9	5923.7	6394.3	1.00	1.00	0.33

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2870.7	31879.9	3090.1	56308.9	Ø 12/15.0'
0.79	3.26	2870.7	14168.8	3090.1	25026.2	Ø 8/15.0'
3.26	3.88	2870.7	31879.9	3090.1	56308.9	Ø 12/15.0'

- Pilastro: 554/654 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
554	14	-3582.5	-4279.7	15.4	1.00	1.00	0.27
654	14	-3095.0	1402.1	1954.6	1.00	1.00	0.10

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4367.5	10626.6	1802.7	18769.6	ø 8/20.0'

- Pilastro: 55/155 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 0ø20 x 2 H >

Staffe: ø 12/15.0' x 51.3+ø 8/15.0' x 205.3+ø 12/15.0' x 51.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
55	16	-88194.1	-3076.1	-999.0	1.00	1.00	0.18
155	16	-86975.4	3612.4	1081.4	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2173.9	31879.9	426.4	56308.9	ø 12/15.0'
0.51	2.57	2173.9	14168.8	426.4	25026.2	ø 8/15.0'
2.57	3.08	2173.9	31879.9	426.4	56308.9	ø 12/15.0'

- Pilastro: 155/255 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: 6 ø 20 Af=18.85 [cm²] < 1ø20 x 4 V + 1ø20 x 2 B + 0ø20 x 2 H >

Staffe: ø 12/15.0' x 62.2+ø 8/15.0' x 248.7+ø 12/15.0' x 62.2

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
155	14	-74719.8	-5726.5	-4498.9	1.00	1.00	0.26
255	14	-73193.5	5274.1	2200.1	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2700.9	31879.9	1690.4	56308.9	ø 12/15.0'
0.79	3.28	2700.9	14168.8	1690.4	25026.2	ø 8/15.0'
3.28	3.90	2700.9	31879.9	1690.4	56308.9	ø 12/15.0'

- Pilastro: 255/355 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
255	14	-56921.3	-6306.4	-6133.5	1.00	1.00	0.27
355	14	-55402.6	6197.3	5214.6	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	3085.9	31879.9	2896.4	56308.9	$\phi 12/15.0'$
0.79	3.26	3085.9	14168.8	2896.4	25026.2	$\phi 8/15.0'$
3.26	3.88	3085.9	31879.9	2896.4	56308.9	$\phi 12/15.0'$

- Pilastro: 355/455 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
355	14	-38885.3	-5830.0	-4983.9	1.00	1.00	0.25
455	14	-37366.6	5979.4	5058.5	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2914.6	31879.9	2576.9	56308.9	$\phi 12/15.0'$
0.79	3.26	2914.6	14168.8	2576.9	25026.2	$\phi 8/15.0'$
3.26	3.88	2914.6	31879.9	2576.9	56308.9	$\phi 12/15.0'$

- Pilastro: 455/555 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
455	14	-21058.4	-5218.2	-4849.4	1.00	1.00	0.26
555	14	-19539.6	5405.2	6243.3	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2621.8	31879.9	3030.0	56308.9	Ø 12/15.0'
0.79	3.26	2621.8	14168.8	3030.0	25026.2	Ø 8/15.0'
3.26	3.88	2621.8	31879.9	3030.0	56308.9	Ø 12/15.0'

- Pilastro: 555/655 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
555	14	-3488.2	-4066.5	97.9	1.00	1.00	0.26
655	6	-2947.2	1267.4	2142.5	1.00	1.00	0.10

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	4148.4	10626.6	2112.4	18769.6	Ø 8/20.0'

- Pilastro: 56/156 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
56	16	-86809.1	-2725.8	-998.7	1.00	1.00	0.18
156	16	-85590.4	3414.8	1081.4	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.00	0.51	1978.4	31879.9	426.6	56308.9	∅ 12/15.0'
0.51	2.57	1978.4	14168.8	426.6	25026.2	∅ 8/15.0'
2.57	3.08	1978.4	31879.9	426.6	56308.9	∅ 12/15.0'

- Pilastro: 156/256 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: **6 ∅ 20 Af=18.85 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 0∅20 x 2 H >**

Staffe: **∅ 12/15.0' x 62.2+∅ 8/15.0' x 248.7+∅ 12/15.0' x 62.2**

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
156	14	-72941.6	-5165.5	-4498.8	1.00	1.00	0.24
256	14	-71415.4	4799.2	2201.0	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2446.8	31879.9	1691.1	56308.9	∅ 12/15.0'
0.79	3.28	2446.8	14168.8	1691.1	25026.2	∅ 8/15.0'
3.28	3.90	2446.8	31879.9	1691.1	56308.9	∅ 12/15.0'

- Pilastro: 256/356 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: **6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >**

Staffe: **∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8**

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
256	14	-55581.9	-5577.1	-6131.9	1.00	1.00	0.25
356	14	-54063.2	5496.7	5209.1	1.00	1.00	0.23

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2733.2	31879.9	2894.2	56308.9	∅ 12/15.0'
0.79	3.26	2733.2	14168.8	2894.2	25026.2	∅ 8/15.0'
3.26	3.88	2733.2	31879.9	2894.2	56308.9	∅ 12/15.0'

- Pilastro: 356/456 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
356	14	-38051.1	-5210.2	-4997.1	1.00	1.00	0.23
456	14	-36532.3	5327.8	5095.6	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2601.0	31879.9	2593.6	56308.9	$\phi 12/15.0'$
0.79	3.26	2601.0	14168.8	2593.6	25026.2	$\phi 8/15.0'$
3.26	3.88	2601.0	31879.9	2593.6	56308.9	$\phi 12/15.0'$

- Pilastro: 456/556 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
456	14	-20688.2	-4729.8	-4763.9	1.00	1.00	0.24
556	14	-19169.5	4884.1	5999.5	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2372.3	31879.9	2919.2	56308.9	$\phi 12/15.0'$
0.79	3.26	2372.3	14168.8	2919.2	25026.2	$\phi 8/15.0'$
3.26	3.88	2372.3	31879.9	2919.2	56308.9	$\phi 12/15.0'$

- Pilastro: 556/656 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
556	14	-3302.5	-3936.5	-1014.7	1.00	1.00	0.25
656	6	-2514.3	1204.5	2321.6	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3997.9	10626.6	2817.9	18769.6	\varnothing 8/20.0'

- Pilastro: 57/157 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 51.3 + \varnothing 8/15.0' \times 205.3 + \varnothing 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
57	16	-85535.0	-2375.6	-1001.0	1.00	1.00	0.17
157	16	-84316.3	3216.4	1081.9	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	1783.6	31879.9	426.1	56308.9	$\varnothing 12/15.0'$
0.51	2.57	1783.6	14168.8	426.1	25026.2	$\varnothing 8/15.0'$
2.57	3.08	1783.6	31879.9	426.1	56308.9	$\varnothing 12/15.0'$

- Pilastro: 157/257 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \varnothing 20$ Af=18.85 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 0\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/15.0' \times 62.2 + \varnothing 8/15.0' \times 248.7 + \varnothing 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
157	14	-71289.7	-4604.3	-4497.0	1.00	1.00	0.22
257	14	-69763.4	4323.9	2190.5	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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0.17	0.79	2192.6	31879.9	1689.7	56308.9	∅ 12/15.0'
0.79	3.28	2192.6	14168.8	1689.7	25026.2	∅ 8/15.0'
3.28	3.90	2192.6	31879.9	1689.7	56308.9	∅ 12/15.0'

- Pilastro: 257/357 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
257	14	-54348.6	-4848.6	-6111.7	1.00	1.00	0.23
357	14	-52829.8	4796.1	5189.5	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2380.6	31879.9	2890.5	56308.9	∅ 12/15.0'
0.79	3.26	2380.6	14168.8	2890.5	25026.2	∅ 8/15.0'
3.26	3.88	2380.6	31879.9	2890.5	56308.9	∅ 12/15.0'

- Pilastro: 357/457 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: 6 ∅ 24 Af=27.14 [cm²] < 1∅24 x 4 V + 1∅24 x 2 B + 0∅12 x 2 H >

Staffe: ∅ 12/15.0' x 61.8+∅ 8/15.0' x 247.3+∅ 12/15.0' x 61.8

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
357	14	-37311.5	-4591.9	-5004.9	1.00	1.00	0.21
457	14	-35792.8	4678.1	5134.9	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2288.2	31879.9	2619.6	56308.9	∅ 12/15.0'
0.79	3.26	2288.2	14168.8	2619.6	25026.2	∅ 8/15.0'
3.26	3.88	2288.2	31879.9	2619.6	56308.9	∅ 12/15.0'

- Pilastro: 457/557 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

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Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
457	14	-20034.2	-4242.1	-4609.0	1.00	1.00	0.22
557	14	-18515.5	4367.0	5601.1	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	2123.6	31879.9	2755.1	56308.9	$\phi 12/15.0'$
0.79	3.26	2123.6	14168.8	2755.1	25026.2	$\phi 8/15.0'$
3.26	3.88	2123.6	31879.9	2755.1	56308.9	$\phi 12/15.0'$

- Pilastro: 557/657 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
557	13	-3286.7	-3853.0	-1865.8	1.00	1.00	0.25
657	6	-2546.3	1142.3	2588.3	1.00	1.00	0.11

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3919.6	10626.6	3919.4	18769.6	$\phi 8/20.0'$

- Pilastro: 58/158 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
58	16	-85537.0	-2003.7	-948.3	1.00	1.00	0.16

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158	16	-84318.3	2971.5	-695.3	1.00	1.00	0.18
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	1568.5	31879.9	429.9	56308.9	∅ 12/15.0'
0.51	2.57	1568.5	14168.8	429.9	25026.2	∅ 8/15.0'
2.57	3.08	1568.5	31879.9	429.9	56308.9	∅ 12/15.0'

- Pilastro: 158/258 / L 3.73[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 20 \text{ Af}=18.85 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 0\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 62.2 + \phi 8/15.0' \times 248.7 + \phi 12/15.0' \times 62.2$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
158	14	-70744.1	-3993.1	-4450.4	1.00	1.00	0.21
258	14	-69217.9	3801.1	2276.9	1.00	1.00	0.18

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1914.5	31879.9	1652.4	56308.9	∅ 12/15.0'
0.79	3.28	1914.5	14168.8	1652.4	25026.2	∅ 8/15.0'
3.28	3.90	1914.5	31879.9	1652.4	56308.9	∅ 12/15.0'

- Pilastro: 258/358 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
258	14	-53960.8	-4074.8	-6249.2	1.00	1.00	0.21
358	14	-52442.0	4044.0	5253.9	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.17	0.79	2004.2	31879.9	2829.3	56308.9	∅ 12/15.0'
0.79	3.26	2004.2	14168.8	2829.3	25026.2	∅ 8/15.0'
3.26	3.88	2004.2	31879.9	2829.3	56308.9	∅ 12/15.0'

- Pilastro: 358/458 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
358	14	-36997.0	-3922.3	-5129.6	1.00	1.00	0.19
458	14	-35478.2	3979.2	5375.7	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1950.5	31879.9	2580.2	56308.9	∅ 12/15.0'
0.79	3.26	1950.5	14168.8	2580.2	25026.2	∅ 8/15.0'
3.26	3.88	1950.5	31879.9	2580.2	56308.9	∅ 12/15.0'

- Pilastro: 458/558 / L 3.71[m] / Sezione 4 B 50 [cm]H 30 [cm]

Af: $6 \text{ } \phi 24 \text{ Af}=27.14 \text{ [cm}^2\text{]} < 1\phi 24 \times 4 \text{ V} + 1\phi 24 \times 2 \text{ B} + 0\phi 12 \times 2 \text{ H} >$

Staffe: $\phi 12/15.0' \times 61.8 + \phi 8/15.0' \times 247.3 + \phi 12/15.0' \times 61.8$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
458	6	-18807.5	-3551.7	-4851.9	1.00	1.00	0.20
558	14	-18390.2	3772.7	5098.9	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	0.79	1839.9	31879.9	2467.4	56308.9	∅ 12/15.0'
0.79	3.26	1839.9	14168.8	2467.4	25026.2	∅ 8/15.0'
3.26	3.88	1839.9	31879.9	2467.4	56308.9	∅ 12/15.0'

- Pilastro: 558/658 / L 1.01[m] / Sezione 11 B 50 [cm]H 30 [cm]

Af: $6 \phi 24$ Af=27.14 [cm²] < $1\phi 24 \times 4 V + 1\phi 24 \times 2 B + 0\phi 12 \times 2 H$ >

Staffe: $\phi 8/20.0' \times 100.6$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
558	13	-3076.3	-3801.7	-3423.9	1.00	1.00	0.26
658	2	-2252.5	1060.8	3685.2	1.00	1.00	0.15

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.17	1.18	3856.9	10626.6	5777.0	18769.6	$\phi 8/20.0'$

- Pilastro: 67/167 / L 3.08[m] / Sezione 2 B 50 [cm]H 30 [cm]

Af: $6 \phi 20$ Af=18.85 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 0\phi 20 \times 2 H$ >

Staffe: $\phi 12/15.0' \times 51.3 + \phi 8/15.0' \times 205.3 + \phi 12/15.0' \times 51.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
67	1	-17357.0	4008.8	-13128.4	1.00	1.00	0.59
167	1	-16138.3	-3763.6	12026.4	1.00	1.00	0.54

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.51	2391.3	31879.9	7739.8	56308.9	$\phi 12/15.0'$
0.51	2.57	2391.3	14168.8	7739.8	25026.2	$\phi 8/15.0'$
2.57	3.08	2391.3	31879.9	7739.8	56308.9	$\phi 12/15.0'$

- Pilastro: 59/159 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \phi 20$ Af=37.70 [cm²] < $2\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\phi 12/10.0' \times 50.1 + \phi 12/20.0' \times 200.3 + \phi 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
59	1	-27299.2	-1017.8	-23612.1	1.00	1.00	0.50

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159	24	-152588.3	-2665.7	-9840.1	1.00	1.00	0.19
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	8216.8	84463.4	10369.9	84463.4	∅ 12/10.0'
0.50	2.50	8216.8	42231.7	10369.9	42231.7	∅ 12/20.0'
2.50	3.01	8216.8	84463.4	10369.9	84463.4	∅ 12/10.0'

- Pilastro: 159/259 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \text{ } \emptyset 20 \text{ Af}=37.70 \text{ [cm}^2\text{]} < 2\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 59.7 + \emptyset 12/20.0' \times 238.7 + \emptyset 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
159	1	-25486.3	1429.1	-19840.7	1.00	1.00	0.40
259	1	-22942.5	-1559.3	17750.1	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	7551.8	84463.4	9604.8	84463.4	∅ 12/10.0'
0.84	3.23	7551.8	42231.7	9604.8	42231.7	∅ 12/20.0'
3.23	3.83	7551.8	84463.4	9604.8	84463.4	∅ 12/10.0'

- Pilastro: 259/359 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \text{ } \emptyset 20 \text{ Af}=37.70 \text{ [cm}^2\text{]} < 2\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
259	3	-33790.4	7469.2	-15678.5	1.00	1.00	0.31
359	3	-31259.1	-8017.3	16711.1	1.00	1.00	0.34

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.24	0.84	6640.7	84463.4	8331.1	84463.4	Ø 12/10.0'
0.84	3.21	6640.7	42231.7	8331.1	42231.7	Ø 12/20.0'
3.21	3.81	6640.7	84463.4	8331.1	84463.4	Ø 12/10.0'

- Pilastro: 359/459 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 12 Ø 20 Af=37.70 [cm²] < 2Ø20 x 4 V + 1Ø20 x 2 B + 1Ø20 x 2 H >

Staffe: Ø 12/10.0' x 59.3+Ø 12/20.0' x 237.3+Ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
359	3	-27679.4	6748.9	-12585.2	1.00	1.00	0.25
459	3	-25148.2	-7513.5	14306.9	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	5797.0	84463.4	6982.7	84463.4	Ø 12/10.0'
0.84	3.21	5797.0	42231.7	6982.7	42231.7	Ø 12/20.0'
3.21	3.81	5797.0	84463.4	6982.7	84463.4	Ø 12/10.0'

- Pilastro: 459/559 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 12 Ø 20 Af=37.70 [cm²] < 2Ø20 x 4 V + 1Ø20 x 2 B + 1Ø20 x 2 H >

Staffe: Ø 12/10.0' x 59.3+Ø 12/20.0' x 237.3+Ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
459	3	-19645.6	5672.2	-8789.8	1.00	1.00	0.19
559	3	-17114.4	-6637.5	11385.7	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	4670.0	84463.4	5291.7	84463.4	Ø 12/10.0'
0.84	3.21	4670.0	42231.7	5291.7	42231.7	Ø 12/20.0'
3.21	3.80	4670.0	84463.4	5291.7	84463.4	Ø 12/10.0'

- Pilastro: 559/659 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

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Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
559	4	-8862.4	4319.1	-3456.9	1.00	1.00	0.14
659	3	-6279.8	-5561.0	5853.1	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	3022.8	84463.4	2797.3	84463.4	$\varnothing 12/10.0'$
0.84	3.21	3022.8	42231.7	2797.3	42231.7	$\varnothing 12/20.0'$
3.21	3.80	3022.8	84463.4	2797.3	84463.4	$\varnothing 12/10.0'$

- Pilastro: 60/160 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \varnothing 20$ Af=37.70 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 50.1 + \varnothing 12/20.0' \times 200.3 + \varnothing 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
60	22	-27299.2	-1017.8	23612.1	1.00	1.00	0.50
160	3	-152588.3	-2665.7	9840.1	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	8216.8	84463.4	10369.9	84463.4	$\varnothing 12/10.0'$
0.50	2.50	8216.8	42231.7	10369.9	42231.7	$\varnothing 12/20.0'$
2.50	3.01	8216.8	84463.4	10369.9	84463.4	$\varnothing 12/10.0'$

- Pilastro: 160/260 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \varnothing 20$ Af=37.70 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.7 + \varnothing 12/20.0' \times 238.7 + \varnothing 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
160	22	-25486.3	1429.1	19840.7	1.00	1.00	0.40
260	22	-22942.5	-1559.3	-17750.1	1.00	1.00	0.36

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	7551.8	84463.4	9604.8	84463.4	Ø 12/10.0'
0.84	3.23	7551.8	42231.7	9604.8	42231.7	Ø 12/20.0'
3.23	3.83	7551.8	84463.4	9604.8	84463.4	Ø 12/10.0'

- Pilastro: 260/360 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \text{ } \phi 20 \text{ Af}=37.70 \text{ [cm}^2\text{]} < 2\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
260	24	-33790.4	7469.2	15678.5	1.00	1.00	0.31
360	24	-31259.1	-8017.3	-16711.1	1.00	1.00	0.34

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	6640.7	84463.4	8331.1	84463.4	Ø 12/10.0'
0.84	3.21	6640.7	42231.7	8331.1	42231.7	Ø 12/20.0'
3.21	3.81	6640.7	84463.4	8331.1	84463.4	Ø 12/10.0'

- Pilastro: 360/460 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \text{ } \phi 20 \text{ Af}=37.70 \text{ [cm}^2\text{]} < 2\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
360	24	-27679.4	6748.9	12585.2	1.00	1.00	0.25
460	24	-25148.2	-7513.5	-14306.9	1.00	1.00	0.31

- Verifiche a Taglio

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	5797.0	84463.4	6982.7	84463.4	∅ 12/10.0'
0.84	3.21	5797.0	42231.7	6982.7	42231.7	∅ 12/20.0'
3.21	3.81	5797.0	84463.4	6982.7	84463.4	∅ 12/10.0'

- Pilastro: 460/560 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 12 ∅ 20 Af=37.70 [cm²] < 2∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 59.3+∅ 12/20.0' x 237.3+∅ 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
460	24	-19645.6	5672.2	8789.8	1.00	1.00	0.19
560	24	-17114.4	-6637.4	-11385.7	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	4670.0	84463.4	5291.7	84463.4	∅ 12/10.0'
0.84	3.21	4670.0	42231.7	5291.7	42231.7	∅ 12/20.0'
3.21	3.80	4670.0	84463.4	5291.7	84463.4	∅ 12/10.0'

- Pilastro: 560/660 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 59.3+∅ 12/20.0' x 237.3+∅ 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
560	23	-8862.4	4319.1	3456.9	1.00	1.00	0.14
660	24	-6279.8	-5561.0	-5853.1	1.00	1.00	0.24

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	3022.8	84463.4	2797.3	84463.4	∅ 12/10.0'
0.84	3.21	3022.8	42231.7	2797.3	42231.7	∅ 12/20.0'
3.21	3.80	3022.8	84463.4	2797.3	84463.4	∅ 12/10.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 61/161 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 50.1 + \varnothing 12/20.0' \times 200.3 + \varnothing 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
61	3	-72167.2	8824.0	-17805.2	1.00	1.00	0.35
161	22	-164577.0	5101.8	-7298.7	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	9891.0	84463.4	7803.8	84463.4	$\varnothing 12/10.0'$
0.50	2.50	9891.0	42231.7	7803.8	42231.7	$\varnothing 12/20.0'$
2.50	3.01	9891.0	84463.4	7803.8	84463.4	$\varnothing 12/10.0'$

- Pilastro: 161/261 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.7 + \varnothing 12/20.0' \times 238.7 + \varnothing 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
161	25	-85611.7	20983.6	-4673.6	1.00	1.00	0.34
261	25	-83067.9	-19982.6	4127.9	1.00	1.00	0.32

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	10061.5	84463.4	7283.8	84463.4	$\varnothing 12/10.0'$
0.84	3.23	10061.5	42231.7	7283.8	42231.7	$\varnothing 12/20.0'$
3.23	3.83	10061.5	84463.4	7283.8	84463.4	$\varnothing 12/10.0'$

- Pilastro: 261/361 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
261	25	-68560.0	18195.5	-3632.8	1.00	1.00	0.31
361	25	-66028.7	-19134.1	3884.0	1.00	1.00	0.34

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	9208.6	84463.4	6328.9	84463.4	Ø 12/10.0'
0.84	3.21	9208.6	42231.7	6328.9	42231.7	Ø 12/20.0'
3.21	3.81	9208.6	84463.4	6328.9	84463.4	Ø 12/10.0'

- Pilastro: 361/461 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
361	25	-52079.0	14952.6	-2835.1	1.00	1.00	0.26
461	25	-49547.7	-16426.4	3267.4	1.00	1.00	0.32

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	7738.4	84463.4	5309.0	84463.4	Ø 12/10.0'
0.84	3.21	7738.4	42231.7	5309.0	42231.7	Ø 12/20.0'
3.21	3.81	7738.4	84463.4	5309.0	84463.4	Ø 12/10.0'

- Pilastro: 461/561 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
461	25	-33294.3	10764.3	-1468.0	1.00	1.00	0.20
561	25	-30763.1	-12603.7	2579.7	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	5762.0	84463.4	4027.6	84463.4	∅ 12/10.0'
0.84	3.21	5762.0	42231.7	4027.6	42231.7	∅ 12/20.0'
3.21	3.80	5762.0	84463.4	4027.6	84463.4	∅ 12/10.0'

- Pilastro: 561/661 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
561	25	-13702.9	5620.2	-287.3	1.00	1.00	0.12
661	25	-11171.6	-7776.7	677.5	1.00	1.00	0.22

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	3300.8	84463.4	2155.7	84463.4	∅ 12/10.0'
0.84	3.21	3300.8	42231.7	2155.7	42231.7	∅ 12/20.0'
3.21	3.80	3300.8	84463.4	2155.7	84463.4	∅ 12/10.0'

- Pilastro: 62/162 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 50.1 + \phi 12/20.0' \times 200.3 + \phi 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
62	24	-72167.2	8824.0	17805.2	1.00	1.00	0.35
162	1	-164577.0	5101.8	7298.7	1.00	1.00	0.21

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	9891.0	84463.4	7803.8	84463.4	∅ 12/10.0'
0.50	2.50	9891.0	42231.7	7803.8	42231.7	∅ 12/20.0'

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2.50	3.01	9891.0	84463.4	7803.8	84463.4	Ø 12/10.0'
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- Pilastro: 162/262 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 Ø 20 Af=25.13 [cm²] < 1Ø20 x 4 V + 1Ø20 x 2 B + 1Ø20 x 2 H >

Staffe: Ø 12/10.0' x 59.7+Ø 12/20.0' x 238.7+Ø 12/10.0' x 59.7

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
162	32	-85611.7	20983.6	4673.6	1.00	1.00	0.34
262	32	-83067.9	-19982.6	-4127.9	1.00	1.00	0.32

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	10061.5	84463.4	7283.8	84463.4	Ø 12/10.0'
0.84	3.23	10061.5	42231.7	7283.8	42231.7	Ø 12/20.0'
3.23	3.83	10061.5	84463.4	7283.8	84463.4	Ø 12/10.0'

- Pilastro: 262/362 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 Ø 20 Af=25.13 [cm²] < 1Ø20 x 4 V + 1Ø20 x 2 B + 1Ø20 x 2 H >

Staffe: Ø 12/10.0' x 59.3+Ø 12/20.0' x 237.3+Ø 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
262	32	-68560.0	18195.4	3632.8	1.00	1.00	0.31
362	32	-66028.7	-19134.1	-3884.0	1.00	1.00	0.34

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	9208.6	84463.4	6328.9	84463.4	Ø 12/10.0'
0.84	3.21	9208.6	42231.7	6328.9	42231.7	Ø 12/20.0'
3.21	3.81	9208.6	84463.4	6328.9	84463.4	Ø 12/10.0'

- Pilastro: 362/462 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 Ø 20 Af=25.13 [cm²] < 1Ø20 x 4 V + 1Ø20 x 2 B + 1Ø20 x 2 H >

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
362	32	-52079.0	14952.6	2835.1	1.00	1.00	0.26
462	32	-49547.7	-16426.4	-3267.4	1.00	1.00	0.32

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	7738.4	84463.4	5309.0	84463.4	$\emptyset 12/10.0'$
0.84	3.21	7738.4	42231.7	5309.0	42231.7	$\emptyset 12/20.0'$
3.21	3.81	7738.4	84463.4	5309.0	84463.4	$\emptyset 12/10.0'$

- Pilastro: 462/562 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \emptyset 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
462	32	-33294.3	10764.3	1468.0	1.00	1.00	0.20
562	32	-30763.1	-12603.7	-2579.7	1.00	1.00	0.28

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	5762.0	84463.4	4027.6	84463.4	$\emptyset 12/10.0'$
0.84	3.21	5762.0	42231.7	4027.6	42231.7	$\emptyset 12/20.0'$
3.21	3.80	5762.0	84463.4	4027.6	84463.4	$\emptyset 12/10.0'$

- Pilastro: 562/662 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \emptyset 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
562	32	-13702.9	5620.2	287.3	1.00	1.00	0.12

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

662	32	-11171.6	-7776.7	-677.5	1.00	1.00	0.22
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	3300.8	84463.4	2155.7	84463.4	∅ 12/10.0'
0.84	3.21	3300.8	42231.7	2155.7	42231.7	∅ 12/20.0'
3.21	3.80	3300.8	84463.4	2155.7	84463.4	∅ 12/10.0'

- Pilastro: 63/163 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 50.1 + \emptyset 12/20.0' \times 200.3 + \emptyset 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
63	6	-70403.6	-6752.9	-17987.5	1.00	1.00	0.33
163	19	-164996.9	-4265.3	-7307.3	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	9980.0	84463.4	7863.3	84463.4	∅ 12/10.0'
0.50	2.50	9980.0	42231.7	7863.3	42231.7	∅ 12/20.0'
2.50	3.01	9980.0	84463.4	7863.3	84463.4	∅ 12/10.0'

- Pilastro: 163/263 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 59.7 + \emptyset 12/20.0' \times 238.7 + \emptyset 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
163	14	-82871.8	-19876.4	-5378.1	1.00	1.00	0.33
263	14	-80328.0	19019.7	4727.1	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

0.24	0.84	10052.1	84463.4	7394.5	84463.4	∅ 12/10.0'
0.84	3.23	10052.1	42231.7	7394.5	42231.7	∅ 12/20.0'
3.23	3.83	10052.1	84463.4	7394.5	84463.4	∅ 12/10.0'

- Pilastro: 263/363 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 59.3+∅ 12/20.0' x 237.3+∅ 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
263	14	-66541.4	-17137.3	-4204.2	1.00	1.00	0.29
363	14	-64010.1	18122.8	4482.7	1.00	1.00	0.32

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	9013.1	84463.4	6453.9	84463.4	∅ 12/10.0'
0.84	3.21	9013.1	42231.7	6453.9	42231.7	∅ 12/20.0'
3.21	3.81	9013.1	84463.4	6453.9	84463.4	∅ 12/10.0'

- Pilastro: 363/463 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 59.3+∅ 12/20.0' x 237.3+∅ 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
363	14	-52118.7	-13940.5	-3275.6	1.00	1.00	0.24
463	14	-49587.5	15428.1	3784.1	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	7459.8	84463.4	5412.9	84463.4	∅ 12/10.0'
0.84	3.21	7459.8	42231.7	5412.9	42231.7	∅ 12/20.0'
3.21	3.81	7459.8	84463.4	5412.9	84463.4	∅ 12/10.0'

- Pilastro: 463/563 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

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Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
463	14	-32999.4	-9851.6	-2176.4	1.00	1.00	0.18
563	14	-30468.1	11681.0	2967.6	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	5482.6	84463.4	4093.3	84463.4	$\varnothing 12/10.0'$
0.84	3.21	5482.6	42231.7	4093.3	42231.7	$\varnothing 12/20.0'$
3.21	3.80	5482.6	84463.4	4093.3	84463.4	$\varnothing 12/10.0'$

- Pilastro: 563/663 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
563	16	-14821.1	-5043.3	1297.3	1.00	1.00	0.10
663	16	-12289.9	7087.8	-1451.5	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	2988.3	84463.4	2203.7	84463.4	$\varnothing 12/10.0'$
0.84	3.21	2988.3	42231.7	2203.7	42231.7	$\varnothing 12/20.0'$
3.21	3.80	2988.3	84463.4	2203.7	84463.4	$\varnothing 12/10.0'$

- Pilastro: 64/164 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 50.1 + \varnothing 12/20.0' \times 200.3 + \varnothing 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
64	17	-70403.6	-6752.9	17987.5	1.00	1.00	0.33
164	8	-164996.8	-4265.3	7307.3	1.00	1.00	0.20

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	9980.0	84463.4	7863.3	84463.4	Ø 12/10.0'
0.50	2.50	9980.0	42231.7	7863.3	42231.7	Ø 12/20.0'
2.50	3.01	9980.0	84463.4	7863.3	84463.4	Ø 12/10.0'

- Pilastro: 164/264 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.7 + \phi 12/20.0' \times 238.7 + \phi 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
164	11	-82871.8	-19876.4	5378.1	1.00	1.00	0.33
264	11	-80328.0	19019.7	-4727.1	1.00	1.00	0.31

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	10052.1	84463.4	7394.5	84463.4	Ø 12/10.0'
0.84	3.23	10052.1	42231.7	7394.5	42231.7	Ø 12/20.0'
3.23	3.83	10052.1	84463.4	7394.5	84463.4	Ø 12/10.0'

- Pilastro: 264/364 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
264	11	-66541.4	-17137.3	4204.1	1.00	1.00	0.29
364	11	-64010.2	18122.8	-4482.7	1.00	1.00	0.32

- Verifiche a Taglio

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 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	9013.1	84463.4	6453.9	84463.4	∅ 12/10.0'
0.84	3.21	9013.1	42231.7	6453.9	42231.7	∅ 12/20.0'
3.21	3.81	9013.1	84463.4	6453.9	84463.4	∅ 12/10.0'

- Pilastro: 364/464 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 59.3+∅ 12/20.0' x 237.3+∅ 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
364	11	-52118.7	-13940.5	3275.6	1.00	1.00	0.24
464	11	-49587.4	15428.1	-3784.1	1.00	1.00	0.29

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	7459.8	84463.4	5412.9	84463.4	∅ 12/10.0'
0.84	3.21	7459.8	42231.7	5412.9	42231.7	∅ 12/20.0'
3.21	3.81	7459.8	84463.4	5412.9	84463.4	∅ 12/10.0'

- Pilastro: 464/564 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: 8 ∅ 20 Af=25.13 [cm²] < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 59.3+∅ 12/20.0' x 237.3+∅ 12/10.0' x 59.3

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
464	11	-32999.4	-9851.6	2176.4	1.00	1.00	0.18
564	11	-30468.1	11681.0	-2967.6	1.00	1.00	0.25

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	5482.6	84463.4	4093.3	84463.4	∅ 12/10.0'
0.84	3.21	5482.6	42231.7	4093.3	42231.7	∅ 12/20.0'
3.21	3.80	5482.6	84463.4	4093.3	84463.4	∅ 12/10.0'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
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 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Pilastro: 564/664 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
564	9	-14821.1	-5043.3	-1297.3	1.00	1.00	0.10
664	9	-12289.9	7087.8	1451.5	1.00	1.00	0.19

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	2988.3	84463.4	2203.7	84463.4	$\varnothing 12/10.0'$
0.84	3.21	2988.3	42231.7	2203.7	42231.7	$\varnothing 12/20.0'$
3.21	3.80	2988.3	84463.4	2203.7	84463.4	$\varnothing 12/10.0'$

- Pilastro: 65/165 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $12 \varnothing 20$ Af=37.70 [cm²] < $2\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 50.1 + \varnothing 12/20.0' \times 200.3 + \varnothing 12/10.0' \times 50.1$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
65	8	-10890.6	2493.9	-20645.8	1.00	1.00	0.51
165	17	-128321.8	3943.6	-8465.5	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	8414.0	84463.4	9036.5	84463.4	$\varnothing 12/10.0'$
0.50	2.50	8414.0	42231.7	9036.5	42231.7	$\varnothing 12/20.0'$
2.50	3.01	8414.0	84463.4	9036.5	84463.4	$\varnothing 12/10.0'$

- Pilastro: 165/265 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \varnothing 20$ Af=25.13 [cm²] < $1\varnothing 20 \times 4 V + 1\varnothing 20 \times 2 B + 1\varnothing 20 \times 2 H$ >

Staffe: $\varnothing 12/10.0' \times 59.7 + \varnothing 12/20.0' \times 238.7 + \varnothing 12/10.0' \times 59.7$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
165	8	-11775.3	-624.6	-17449.1	1.00	1.00	0.60
265	8	-9231.5	978.4	15467.8	1.00	1.00	0.55

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	7812.0	84463.4	8458.7	84463.4	Ø 12/10.0'
0.84	3.23	7812.0	42231.7	8458.7	42231.7	Ø 12/20.0'
3.23	3.83	7812.0	84463.4	8458.7	84463.4	Ø 12/10.0'

- Pilastro: 265/365 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\varnothing 20 \times 4 \text{ V} + 1\varnothing 20 \times 2 \text{ B} + 1\varnothing 20 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
265	8	-13817.8	-1452.6	-13822.3	1.00	1.00	0.44
365	8	-11286.5	1262.7	14677.0	1.00	1.00	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	6914.5	84463.4	7376.2	84463.4	Ø 12/10.0'
0.84	3.21	6914.5	42231.7	7376.2	42231.7	Ø 12/20.0'
3.21	3.81	6914.5	84463.4	7376.2	84463.4	Ø 12/10.0'

- Pilastro: 365/465 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \varnothing 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\varnothing 20 \times 4 \text{ V} + 1\varnothing 20 \times 2 \text{ B} + 1\varnothing 20 \times 2 \text{ H} >$

Staffe: $\varnothing 12/10.0' \times 59.3 + \varnothing 12/20.0' \times 237.3 + \varnothing 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
365	6	-19501.3	-6384.6	-11046.6	1.00	1.00	0.34
465	8	-11610.9	1762.7	12579.6	1.00	1.00	0.41

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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	6083.7	84463.4	6182.3	84463.4	∅ 12/10.0'
0.84	3.21	6083.7	42231.7	6182.3	42231.7	∅ 12/20.0'
3.21	3.81	6083.7	84463.4	6182.3	84463.4	∅ 12/10.0'

- Pilastro: 465/565 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
465	6	-14432.2	-5552.8	-7667.9	1.00	1.00	0.25
565	6	-11901.0	6366.9	9986.2	1.00	1.00	0.35

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	4957.8	84463.4	4674.1	84463.4	∅ 12/10.0'
0.84	3.21	4957.8	42231.7	4674.1	42231.7	∅ 12/20.0'
3.21	3.80	4957.8	84463.4	4674.1	84463.4	∅ 12/10.0'

- Pilastro: 565/665 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \emptyset 20 \text{ Af}=25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
565	14	-9325.8	-5654.3	-87.4	1.00	1.00	0.15
665	14	-6794.5	7804.4	1802.2	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	3345.6	84463.4	2500.4	84463.4	∅ 12/10.0'
0.84	3.21	3345.6	42231.7	2500.4	42231.7	∅ 12/20.0'

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3.21	3.80	3345.6	84463.4	2500.4	84463.4	∅ 12/10.0'
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- Pilastro: 66/166 / L 3.01[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: **12 ∅ 20 Af=37.70 [cm²]** < 2∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 50.1+∅ 12/20.0' x 200.3+∅ 12/10.0' x 50.1

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
66	19	-10890.6	2493.9	20645.8	1.00	1.00	0.51
166	6	-128321.9	3943.6	8465.5	1.00	1.00	0.17

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.00	0.50	8414.0	84463.4	9036.5	84463.4	∅ 12/10.0'
0.50	2.50	8414.0	42231.7	9036.5	42231.7	∅ 12/20.0'
2.50	3.01	8414.0	84463.4	9036.5	84463.4	∅ 12/10.0'

- Pilastro: 166/266 / L 3.58[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: **8 ∅ 20 Af=25.13 [cm²]** < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

Staffe: ∅ 12/10.0' x 59.7+∅ 12/20.0' x 238.7+∅ 12/10.0' x 59.7

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α ₁₂	α ₁₃	Sd/Sr
166	19	-11775.2	-624.6	17449.1	1.00	1.00	0.60
266	19	-9231.5	978.4	-15467.8	1.00	1.00	0.55

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	7812.0	84463.4	8458.7	84463.4	∅ 12/10.0'
0.84	3.23	7812.0	42231.7	8458.7	42231.7	∅ 12/20.0'
3.23	3.83	7812.0	84463.4	8458.7	84463.4	∅ 12/10.0'

- Pilastro: 266/366 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: **8 ∅ 20 Af=25.13 [cm²]** < 1∅20 x 4 V + 1∅20 x 2 B + 1∅20 x 2 H >

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Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
266	19	-13817.8	-1452.6	13822.3	1.00	1.00	0.44
366	19	-11286.5	1262.7	-14677.0	1.00	1.00	0.50

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	6914.5	84463.4	7376.2	84463.4	$\emptyset 12/10.0'$
0.84	3.21	6914.5	42231.7	7376.2	42231.7	$\emptyset 12/20.0'$
3.21	3.81	6914.5	84463.4	7376.2	84463.4	$\emptyset 12/10.0'$

- Pilastro: 366/466 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \emptyset 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
366	17	-19501.3	-6384.6	11046.6	1.00	1.00	0.34
466	19	-11610.9	1762.8	-12579.6	1.00	1.00	0.41

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	6083.7	84463.4	6182.3	84463.4	$\emptyset 12/10.0'$
0.84	3.21	6083.7	42231.7	6182.3	42231.7	$\emptyset 12/20.0'$
3.21	3.81	6083.7	84463.4	6182.3	84463.4	$\emptyset 12/10.0'$

- Pilastro: 466/566 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \emptyset 20$ Af=25.13 [cm²] < $1\phi 20 \times 4 V + 1\phi 20 \times 2 B + 1\phi 20 \times 2 H$ >

Staffe: $\emptyset 12/10.0' \times 59.3 + \emptyset 12/20.0' \times 237.3 + \emptyset 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
466	17	-14432.3	-5552.8	7667.9	1.00	1.00	0.25

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566	17	-11901.0	6366.9	-9986.2	1.00	1.00	0.35
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- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.24	0.84	4957.8	84463.4	4674.1	84463.4	Ø 12/10.0'
0.84	3.21	4957.8	42231.7	4674.1	42231.7	Ø 12/20.0'
3.21	3.80	4957.8	84463.4	4674.1	84463.4	Ø 12/10.0'

- Pilastro: 566/666 / L 3.56[m] / Sezione 1 B 50 [cm]H 50 [cm]

Af: $8 \text{ } \phi 20 \text{ Af} = 25.13 \text{ [cm}^2\text{]} < 1\phi 20 \times 4 \text{ V} + 1\phi 20 \times 2 \text{ B} + 1\phi 20 \times 2 \text{ H} >$

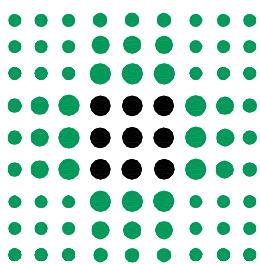
Staffe: $\phi 12/10.0' \times 59.3 + \phi 12/20.0' \times 237.3 + \phi 12/10.0' \times 59.3$

- Verifiche a Presso-Flessione S.L.U.

Nodo	Comb	N	Mx	My	α_{12}	α_{13}	Sd/Sr
566	11	-9325.8	-5654.3	87.4	1.00	1.00	0.15
666	11	-6794.5	7804.4	-1802.2	1.00	1.00	0.26

- Verifiche a Taglio

Da [m]	A [m]	Vdx [kg]	Vrx [kg]	Vdy [kg]	Vry [kg]	Staffe
0.25	0.84	3345.6	84463.4	2500.4	84463.4	Ø 12/10.0'
0.84	3.21	3345.6	42231.7	2500.4	42231.7	Ø 12/20.0'
3.21	3.80	3345.6	84463.4	2500.4	84463.4	Ø 12/10.0'



GRUPPO DI LAVORO:

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 geom. Lara Biavardi
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 ing. Federica Ceresa
 per. ind. Paolo Crovini
 ing. Elisa Degiovanni
 ing. jr. Roberto Degiovanni
 geom. Laura Del Bono
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 geom. Roberto Mellini
 per. ind. Paolo Robuschi
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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
 AMPLIAMENTO E RISTRUTTURAZIONE
 PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
 STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 9 - VERIFICA ELEMENTI IN TERMINI DI
 RESISTENZA (§7.3.7.1) - NUCLEI VANI SCALA**

PROGETTO STRUTTURE
 Dott. ing. MAURO FERRARI
 Via Aristotele n. 5
 Tel. 3356030441 - 0522 865441
 42122 - Reggio Emilia

ELABORATO

RS. 10

SCALA

IL DIRETTORE GENERALE
 dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
 dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
 ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
 geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
 ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
 ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

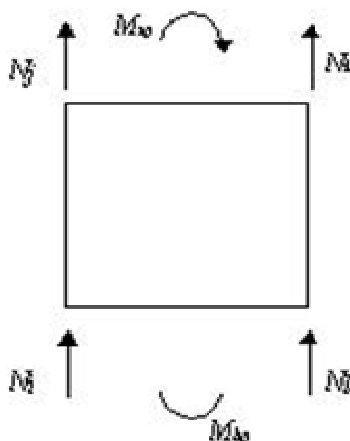
INDICE

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1 VERIFICHE SETTI IN C.A.

Modalità di verifica

I setti in c.a. vengono verificati, in ottemperanza al punto 5.3.4. del *D.M. 27 luglio 1985*, come setti o pareti.



Viene calcolato lo sforzo normale medio agente sul setto e il momento ad esso associato.

La sezione viene armata rispettando gli interassi minimi da regolamento e la verifica procede a presso-flessione retta via via incrementando il diametro dei ferri di parete.

Quando necessario vengono inoltre introdotti ferri laterali di completamento da disporsi sulle estremità del setto stesso.

Nelle verifiche vengono riportate, nelle sezioni di base e di sommità del setto, le tensioni massima e media dovuta al solo sforzo normale nel calcestruzzo (e la combinazione di carico che le produce) e le tensioni nei ferri tesi e compressi (nonché indicazione della combinazione di carico che le produce).

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2 VANO SCALA "A"

- Sezioni Impiegate:

Sezione Numero	Dimensioni	Calcestruzzo	f_{cd} [kg/cm ²]	τ_{rd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{FREQ} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yFREQ} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro [cm]
5	s 30 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
6	s 25 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
7	s 20 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
8	s 40 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50

- Verifiche Setti:

- NUCLEO 1007 1006 1004 1005 1003 1083 1073 1001 1002 / Nodi: 1007 1006 1004 1005 1003 1083 1073 1001 1002

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1007 1006	6	191	325	25	2x ø 20 15'	2x ø 12 15'
1006 1004	6	244	325	25	2x ø 20 15'	2x ø 12 15'
1005 1004	7	100	325	20	2x ø 16 15'	2x ø 10 15'
1004 1003	6	142	325	25	2x ø 20 15'	2x ø 12 15'
1003 1083	6	41	325	25	2x ø 20 15'	2x ø 12 15'
1073 1001	5	60	325	30	2x ø 20 15'	2x ø 12 15'
1002 1001	6	192	325	25	2x ø 20 15'	2x ø 12 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	24	-310554.1	-614743.8	-138233.1	0.53

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Som.	5	-147587.1	652762.3	76454.5	0.26
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- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
1002-1001	1.92	3.25	1	-23129.7	1.50	-34694.6	-213032.3	12019.8	309981.8	115854.7	274826.2	0.30
1073-1001	0.60	3.25	1	7745.5	1.50	11618.2	1758.0	-10943.8	112750.4	35116.8	105848.5	0.33
1007-1006-1004-1003-1083	6.18	3.25	22	134686.4	1.50	202029.6	-138251.3	-202635.8	1005438.9	375779.6	750075.3	0.54
1005-1004	1.00	3.25	32	-11147.2	1.50	-16720.8	-157522.7	173116.3	127456.9	41351.2	30159.3	0.55

- NUCLEO 1183 1102 1106 1104 1105 1103 1173 1101 / Nodi: 1183 1102 1106 1104 1105 1103 1173 1101

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1183 1102	6	160	407	25	2x ø 20 15'	2x ø 12 15'
1106 1104	6	244	407	25	2x ø 20 15'	2x ø 12 15'
1105 1104	7	100	407	20	2x ø 16 15'	2x ø 10 15'
1103 1183	6	41	407	25	2x ø 20 15'	2x ø 12 15'
1173 1101	5	60	407	30	2x ø 20 15'+ Sx: 2 x 2 ø 20 30'+ Dx: 2 x 2 ø 20 30'	2x ø 12 15'
1102 1101	6	192	407	25	2x ø 20 15'	2x ø 12 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	4inv.	-330283.1	-744022.1	88431.9	0.38
Som.	7	-63905.3	709000.2	-84048.0	0.37

- Verifiche a taglio dei diaframmi

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1103-1183-1102-1101	3.93	4.07	5	70322.3	1.50	105483.4	-29527.0	-71563.3	638428.4	238610.6	186835.1	0.56
1173-1101	0.60	4.07	1	7016.2	1.50	10524.3	0.0	-0.0	112750.4	35116.8	192265.8	0.30
1105-1104	1.00	4.07	7	12138.5	1.50	18207.7	-69169.0	75144.5	127456.9	41351.2	30808.7	0.59
1106-1104	2.44	4.07	9	55496.3	1.50	83244.5	40146.2	20440.6	394626.2	147490.3	114982.3	0.72

- NUCLEO 1204 1203 1283 1202 1206 1205 1273 1201 / Nodi: 1204 1203 1283 1202 1206 1205 1273 1201

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1204 1203	6	142	405	25	2x ø 16 15'	2x ø 10 15'
1283 1202	6	160	405	25	2x ø 16 15'	2x ø 10 15'
1206 1204	6	244	405	25	2x ø 16 15'	2x ø 10 15'
1205 1204	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1203 1283	6	41	405	25	2x ø 16 15'	2x ø 10 15'
1273 1201	5	60	405	30	2x ø 20 15'+ Sx: 2 x 2 ø 20 30'+ Dx: 2 x 2 ø 20 30'	2x ø 12 15'
1202 1201	6	192	405	25	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-55824.0	-631707.2	67380.6	0.32
Som.	7	-28915.4	544647.7	-50205.1	0.26

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1206-1204-1203-1283-1202-1201	7.79	4.05	1	88496.0	1.50	132743.9	0.0	0.0	1268849.8	329325.4	0.0	0.40

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

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1273-1201	0.60	4.05	1	6747.7	1.50	10121.6	0.0	-0.0	112750.4	35116.8	0.0	0.29
1205-1204	1.00	4.05	1	12672.1	1.50	19008.1	0.0	-0.0	127456.9	41351.2	0.0	0.46

- NUCLEO 1304 1303 1383 1302 1306 1305 1373 1301 / Nodi: 1304 1303 1383 1302 1306 1305 1373 1301

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1304 1303	6	142	405	25	2x ø 16 15'	2x ø 10 15'
1383 1302	6	160	405	25	2x ø 16 15'	2x ø 10 15'
1306 1304	6	244	405	25	2x ø 16 15'	2x ø 10 15'
1305 1304	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1303 1383	6	41	405	25	2x ø 12 15'	2x ø 10 20'
1373 1301	5	60	405	30	2x ø 20 15'	2x ø 12 15'
1302 1301	6	192	405	25	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-32042.6	544647.7	-50205.1	0.29
Som.	7	-13487.0	363098.6	-46872.7	0.27

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
1306-1304-1303-1383-1302-1301	7.79	4.05	1	88496.0	1.50	132743.9	0.0	0.0	1268849.8	324992.1	0.0	0.41
1373-1301	0.60	4.05	1	6747.7	1.50	10121.6	0.0	-0.0	112750.4	35116.8	0.0	0.29
1305-1304	1.00	4.05	1	12672.1	1.50	19008.1	0.0	-0.0	127456.9	41351.2	0.0	0.46

- NUCLEO 1404 1403 1483 1402 1406 1405 1473 1401 / Nodi: 1404 1403 1483 1402 1406 1405 1473 1401

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1404 1403	6	142	405	25	2x ø 12 15'	2x ø 10 20'
1483 1402	6	160	405	25	2x ø 12 15'	2x ø 10 20'
1406 1404	6	244	405	25	2x ø 12 15'	2x ø 10 20'
1405 1404	7	100	405	20	2x ø 12 15'	2x ø 10 20'
1403 1483	6	41	405	25	2x ø 12 15'	2x ø 10 20'
1473 1401	5	60	405	30	2x ø 14 15'	2x ø 10 15'
1402 1401	6	192	405	25	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	7inv.	-31656.6	363098.6	-46872.7	0.44	
Som.	7	-9741.9	181549.2	-29905.0	0.29	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
1406-1404-1403-1483-1402-1401	7.79	4.05	1	75819.3	1.50	113728.9	0.0	0.0	1268849.8	246994.0	0.0	0.46
1473-1401	0.60	4.05	1	6747.7	1.50	10121.6	0.0	-0.0	112750.4	24386.6	0.0	0.42
1405-1404	1.00	4.05	1	11204.1	1.50	16806.1	0.0	-0.0	127456.9	31013.4	0.0	0.54

- NUCLEO 1504 1503 1583 1502 1506 1505 1573 1501 / Nodi: 1504 1503 1583 1502 1506 1505 1573 1501

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1504 1503	6	142	130	25	2x ø 12 15'	2x ø 10 20'
1583 1502	6	160	130	25	2x ø 12 15'	2x ø 10 20'
1506 1504	6	244	130	25	2x ø 12 15'	2x ø 10 20'
1505 1504	7	100	130	20	2x ø 12 15'	2x ø 10 20'
1503 1583	6	41	130	25	2x ø 12 15'	2x ø 10 20'
1573 1501	5	60	130	30	2x ø 14 15'	2x ø 10 15'
1502 1501	6	192	130	25	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N	Mx	My	Sd/Sr	
		[kg]	[kgm]	[kgm]		
Base	7inv.	-11572.3	181549.2	-29905.0	0.28	
Som.	7	-7854.5	123274.1	-26647.0	0.25	

- Verifiche a taglio dei diaframmi

Diaframma	B	H	Comb.	V _{dc}	alpha	V _{Ed}	N _{Ed}	M _{Ed}	V _{Rcd}	V _{Rds}	V _{Rds,scorrimento}	V _s / V _R
	[m]	[m]	critica	[kg]		[kg]	[kg]	[kgm]	[kg]	[kg]	[kg]	
1506-1504-1503-1583-1502-1501	7.79	1.30	1	55676.8	1.50	83515.2	0.0	0.0	1268849.8	246994.0	0.0	0.34
1573-1501	0.60	1.30	1	4229.6	1.50	6344.4	0.0	-0.0	112750.4	24386.6	0.0	0.26
1505-1504	1.00	1.30	1	8097.0	1.50	12145.5	0.0	-0.0	127456.9	31013.4	0.0	0.39

- NUCLEO 1704 1703 1783 1702 1706 1705 1773 1701 / Nodi: 1704 1703 1783 1702 1706 1705 1773 1701

- Armature Nucleo

Nodi	Sezione Numero	B	H	Spessore	Armatura Verticale	Armatura Orizzontale
		[cm]	[cm]	[cm]		
1704 1703	6	142	140	25	2x ø 12 15'	2x ø 10 20'
1783 1702	6	160	140	25	2x ø 12 15'	2x ø 10 20'
1706 1704	6	244	140	25	2x ø 12 15'	2x ø 10 20'
1705 1704	7	100	140	20	2x ø 12 15'	2x ø 10 20'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1703 1783	6	41	140	25	2x ø 12 15'	2x ø 10 20'
1773 1701	5	60	140	30	2x ø 14 15'	2x ø 10 15'
1702 1701	6	192	140	25	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	7inv.	-8299.7	123274.1	-26647.0	0.25	
Som.	7	-3107.6	60516.3	-23138.3	0.22	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1706-1704-1703-1783-1702-1701	7.79	1.40	1	52008.3	1.50	78012.5	0.0	0.0	1268849.8	246994.0	0.0	0.32
1773-1701	0.60	1.40	1	5480.8	1.50	8221.2	0.0	-0.0	112750.4	24386.6	0.0	0.34
1705-1704	1.00	1.40	1	9681.6	1.50	14522.5	0.0	-0.0	127456.9	31013.4	0.0	0.47

- NUCLEO 1804 1803 1883 1802 1806 1805 1873 1801 / Nodi: 1804 1803 1883 1802 1806 1805 1873 1801

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1804 1803	6	142	135	25	2x ø 12 15'	2x ø 10 20'
1883 1802	6	160	135	25	2x ø 12 15'	2x ø 10 20'
1806 1804	6	244	135	25	2x ø 12 15'	2x ø 10 20'
1805 1804	7	100	135	20	2x ø 12 15'	2x ø 10 20'
1803 1883	6	41	135	25	2x ø 12 15'	2x ø 10 20'
1873 1801	5	60	135	30	2x ø 14 15'	2x ø 10 15'
1802 1801	6	192	135	25	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N	Mx	My	Sd/Sr	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[kg]	[kgm]	[kgm]	
Base	7inv.	-6561.9	60516.3	-23138.3	0.22
Som.	7	12991.6	0.0	-19754.9	0.21

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1806-1804-1803-1883-1802-1801	7.79	1.35	1	48057.6	1.50	72086.4	0.0	0.0	1268849.8	246994.0	0.0	0.29
1873-1801	0.60	1.35	1	5480.8	1.50	8221.2	0.0	-0.0	112750.4	24386.6	0.0	0.34
1805-1804	1.00	1.35	1	9681.6	1.50	14522.5	0.0	-0.0	127456.9	31013.4	0.0	0.47

- NUCLEO 1016 1017 1018 1015 1014 1013 1012 1011 1010 1009 1008 1007 / Nodi: 1016 1017 1018 1015 1014 1013 1012 1011 1010 1009 1008 1007

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1016 1017	7	100	325	20	2x ø 16 15'	2x ø 10 15'
1018 1016	7	60	325	20	2x ø 20 15'	2x ø 10 15'
1016 1015	7	190	325	20	2x ø 20 15'	2x ø 10 15'
1015 1014	7	535	325	20	2x ø 20 15'	2x ø 10 15'
1014 1013	8	157	325	40	2x ø 24 10'	2x ø 16 15'
1013 1012	8	101	325	40	2x ø 24 10'	2x ø 16 15'
1012 1011	8	157	325	40	2x ø 24 10'	2x ø 16 15'
1011 1010	6	535	325	25	2x ø 20 15'	2x ø 12 15'
1009 1008	7	100	325	20	2x ø 16 15'	2x ø 10 15'
1010 1008	6	190	325	25	2x ø 20 15'	2x ø 12 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1008 1007	6	65	325	25	2x ø 20 15'	2x ø 12 15'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	26	-513717.0	2826163.0	1457123.3	0.21	
Som.	25	-360000.8	2125953.3	730021.9	0.14	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1011-1010-1008-1007	7.90	3.25	4	-92603.7	1.50	-138905.5	-637847.1	232266.8	1286824.4	480946.6	383661.0	0.36
1009-1008	1.00	3.25	9	7822.0	1.50	11733.0	5220.3	14309.2	127456.9	41351.2	30159.3	0.39
1014-1013-1012-1011	4.15	3.25	30	207007.1	1.50	310510.6	126811.0	-241539.0	1078481.0	447865.4	571991.6	0.69
1018-1016-1015-1014	7.85	3.25	1	-138369.3	1.50	-207554.0	113597.6	15871.8	1022400.3	331700.4	1179849.1	0.63
1016-1017	1.00	3.25	9	10219.8	1.50	15329.8	1309.9	-4297.8	127456.9	41351.2	30159.3	0.51

**- NUCLEO 1116 1117 1118 1115 1114 1113 1112 1111 1110 1109 1108 1107 / Nodi: 1116 1117 1118 1115 1114 1113 1112
1111 1110 1109 1108 1107**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1116 1117	7	100	407	20	2x ø 16 15'	2x ø 10 15'
1118 1116	7	60	407	20	2x ø 20 15'	2x ø 10 15'
1116 1115	7	190	407	20	2x ø 20 15'	2x ø 10 15'
1115 1114	7	535	407	20	2x ø 20 15'	2x ø 10 15'
1114 1113	5	157	407	30	2x ø 24 10'	2x ø 14 15'
1112 1111	5	157	407	30	2x ø 24 10'	2x ø 14 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1111 1110	6	535	407	25	2x ø 20 15'	2x ø 12 15'
1109 1108	7	100	407	20	2x ø 16 15'	2x ø 10 15'
1110 1108	6	190	407	25	2x ø 20 15'	2x ø 12 15'
1108 1107	6	65	407	25	2x ø 20 15'	2x ø 12 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	8inv.	-973508.8	1662361.4	1465887.4	0.20
Som.	8	-763977.9	1662361.4	1465887.4	0.19

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1111-1110-1108-1107	7.90	4.07	5	147716.5	1.50	221574.8	-349068.5	-357621.2	1286824.4	480946.6	372278.8	0.60
1109-1108	1.00	4.07	3	10234.5	1.50	15351.7	30115.8	81403.9	127456.9	41351.2	30159.3	0.51
1112-1111	1.57	4.07	1	60832.6	1.50	91248.9	0.0	-0.0	302955.1	128430.5	522586.3	0.71
1114-1113	1.57	4.07	1	61950.7	1.50	92926.1	0.0	-0.0	302955.1	128430.5	522586.9	0.72
1118-1116-1115-1114	7.85	4.07	1	173833.1	1.50	260749.6	0.0	0.0	1022400.3	331700.4	1245786.1	0.79
1116-1117	1.00	4.07	2	12283.2	1.50	18424.8	-31191.4	106595.4	127456.9	41351.2	30159.3	0.61

- NUCLEO 1216 1217 1218 1215 1214 1213 1212 1211 1210 1209 1208 1207 / Nodi: 1216 1217 1218 1215 1214 1213 1212

1211 1210 1209 1208 1207

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1216 1217	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1218 1216	7	60	405	20	2x ø 16 15'	2x ø 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1216 1215	7	190	405	20	2x ø 16 15'	2x ø 10 15'
1215 1214	7	535	405	20	2x ø 16 15'	2x ø 10 15'
1214 1213	5	157	405	30	2x ø 20 15'	2x ø 14 15'
1212 1211	5	157	405	30	2x ø 20 15'	2x ø 14 15'
1211 1210	6	535	405	25	2x ø 16 15'	2x ø 10 15'
1209 1208	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1210 1208	6	190	405	25	2x ø 16 15'	2x ø 10 15'
1208 1207	6	65	405	25	2x ø 16 15'	2x ø 10 15'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	9inv.	-169727.7	1662361.4	1465887.4	0.24	
Som.	9	-126075.3	1341206.6	1176180.5	0.19	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1211-1210-1208-1207	7.90	4.05	1	147716.5	1.50	221574.8	0.0	0.0	1286824.5	333990.7	0.0	0.66
1209-1208	1.00	4.05	1	13840.0	1.50	20760.1	0.0	-0.0	127456.9	41351.2	0.0	0.50
1212-1211	1.57	4.05	1	60832.6	1.50	91248.9	0.0	-0.0	302955.1	128430.5	0.0	0.71
1214-1213	1.57	4.05	1	61950.7	1.50	92926.1	0.0	-0.0	302955.1	128430.5	0.0	0.72
1218-1216-1215-1214	7.85	4.05	1	173833.1	1.50	260749.6	0.0	0.0	1022400.3	331700.4	0.0	0.79
1216-1217	1.00	4.05	1	13434.7	1.50	20152.1	0.0	-0.0	127456.9	41351.2	0.0	0.49

**- NUCLEO 1316 1317 1318 1315 1314 1313 1312 1311 1310 1309 1308 1307 / Nodi: 1316 1317 1318 1315 1314 1313 1312
1311 1310 1309 1308 1307**

- Armature Nucleo

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1316 1317	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1318 1316	7	60	405	20	2x ø 16 15'	2x ø 10 15'
1316 1315	7	190	405	20	2x ø 16 15'	2x ø 10 15'
1315 1314	7	535	405	20	2x ø 16 15'	2x ø 10 15'
1314 1313	5	157	405	30	2x ø 20 15'	2x ø 14 15'
1312 1311	5	157	405	30	2x ø 20 15'	2x ø 14 15'
1311 1310	6	535	405	25	2x ø 16 15'	2x ø 10 15'
1309 1308	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1310 1308	6	190	405	25	2x ø 16 15'	2x ø 10 15'
1308 1307	6	65	405	25	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-90095.1	-988583.9	1176180.5	0.20
Som.	9	-86904.7	1020051.3	886473.3	0.15

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1311-1310-1308-1307	7.90	4.05	1	128633.2	1.50	192949.8	0.0	0.0	1286824.4	333990.7	0.0	0.58
1309-1308	1.00	4.05	1	13840.0	1.50	20760.1	0.0	-0.0	127456.9	41351.2	0.0	0.50
1312-1311	1.57	4.05	1	50804.4	1.50	76206.6	0.0	-0.0	302955.1	128430.5	0.0	0.59
1314-1313	1.57	4.05	1	51760.1	1.50	77640.2	0.0	-0.0	302955.1	128430.5	0.0	0.60
1318-1316-1315-1314	7.85	4.05	1	157389.0	1.50	236083.5	0.0	0.0	1022400.3	331700.4	0.0	0.71
1316-1317	1.00	4.05	1	13434.7	1.50	20152.1	0.0	-0.0	127456.9	41351.2	0.0	0.49

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

**- NUCLEO 1416 1417 1418 1415 1414 1413 1412 1411 1410 1409 1408 1407 / Nodi: 1416 1417 1418 1415 1414 1413 1412
1411 1410 1409 1408 1407**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1416 1417	7	100	405	20	2x ø 12 15'	2x ø 10 20'
1418 1416	7	60	405	20	2x ø 12 15'	2x ø 10 20'
1416 1415	7	190	405	20	2x ø 12 15'	2x ø 10 20'
1415 1414	7	535	405	20	2x ø 12 15'	2x ø 10 20'
1414 1413	5	157	405	30	2x ø 20 15'	2x ø 12 15'
1412 1411	5	157	405	30	2x ø 20 15'	2x ø 12 15'
1411 1410	6	535	405	25	2x ø 12 15'	2x ø 10 20'
1409 1408	7	100	405	20	2x ø 12 15'	2x ø 10 20'
1410 1408	6	190	405	25	2x ø 12 15'	2x ø 10 20'
1408 1407	6	65	405	25	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	5inv.	-83793.2	-748925.9	886473.3	0.22	
Som.	5	-44478.2	-509268.1	596766.2	0.16	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1411-1410-1408-1407	7.90	4.05	1	110374.9	1.50	165562.3	0.0	0.0	1286824.5	250493.0	0.0	0.66
1409-1408	1.00	4.05	1	9966.3	1.50	14949.4	0.0	-0.0	127456.9	31013.4	0.0	0.48
1412-1411	1.57	4.05	1	44008.4	1.50	66012.6	0.0	-0.0	302955.1	94357.1	0.0	0.70

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1414-1413	1.57	4.05	1	44831.9	1.50	67247.8	0.0	-0.0	302955.1	94357.1	0.0	0.71
1418-1416-1415-1414	7.85	4.05	1	130725.3	1.50	196088.0	0.0	0.0	1022400.3	248775.3	0.0	0.79
1416-1417	1.00	4.05	1	10433.6	1.50	15650.3	0.0	-0.0	127456.9	31013.4	0.0	0.50

**- NUCLEO 1516 1517 1518 1515 1514 1513 1512 1511 1510 1509 1508 1507 / Nodi: 1516 1517 1518 1515 1514 1513 1512
1511 1510 1509 1508 1507**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1516 1517	7	100	130	20	2x ø 12 15'	2x ø 10 20'
1516 1518	7	60	130	20	2x ø 12 15'	2x ø 10 20'
1515 1516	7	190	130	20	2x ø 12 15'	2x ø 10 20'
1514 1515	7	535	130	20	2x ø 12 15'	2x ø 10 20'
1514 1513	5	157	130	30	2x ø 20 15'	2x ø 12 15'
1512 1511	5	157	130	30	2x ø 20 15'	2x ø 12 15'
1511 1510	6	535	130	25	2x ø 12 15'	2x ø 10 20'
1509 1508	7	100	130	20	2x ø 12 15'	2x ø 10 20'
1510 1508	6	190	130	25	2x ø 12 15'	2x ø 10 20'
1508 1507	6	65	130	25	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-37366.5	-509268.1	596766.2	0.16
Som.	5	-15963.8	-432341.0	503774.0	0.14

- Verifiche a taglio dei diaframmi

Diaframma	B	H	Comb.	V _{dc}	alpha	V _{Ed}	N _{Ed}	M _{Ed}	V _{Rcd}	V _{Rds}	V _{Rds,scorrimento}	V _{s/}
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	[m]	[m]	critica	[kg]		[kg]	[kg]	[kgm]	[kg]	[kg]	[kg]	V _R
1511-1510-1508-1507	7.90	1.30	1	92116.6	1.50	138174.8	0.0	0.0	1286824.4	250493.0	0.0	0.55
1509-1508	1.00	1.30	1	7858.2	1.50	11787.3	0.0	-0.0	127456.9	31013.4	0.0	0.38
1512-1511	1.57	1.30	1	37212.3	1.50	55818.5	0.0	-0.0	302955.1	94357.1	0.0	0.59
1514-1513	1.57	1.30	1	37903.6	1.50	56855.4	0.0	-0.0	302955.1	94357.1	0.0	0.60
1514-1515-1516-1518	7.85	1.30	1	108820.9	1.50	163231.4	0.0	0.0	1022400.3	248775.3	0.0	0.66
1516-1517	1.00	1.30	1	8025.4	1.50	12038.0	0.0	-0.0	127456.9	31013.4	0.0	0.39

**- NUCLEO 1716 1717 1718 1715 2314 1713 1712 1711 1710 1709 1708 1707 / Nodi: 1716 1717 1718 1715 2314 1713 1712
1711 1710 1709 1708 1707**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1716 1717	7	100	140	20	2x ø 12 15'	2x ø 10 20'
1716 1718	7	60	140	20	2x ø 12 15'	2x ø 10 20'
1715 1716	7	190	140	20	2x ø 12 15'	2x ø 10 20'
2314 1715	7	535	140	20	2x ø 12 15'	2x ø 10 20'
2314 1713	5	157	140	30	2x ø 20 15'	2x ø 12 15'
1712 1711	5	157	140	30	2x ø 20 15'	2x ø 12 15'
1710 1711	6	535	140	25	2x ø 12 15'	2x ø 10 20'
1709 1708	7	100	140	20	2x ø 12 15'	2x ø 10 20'
1708 1710	6	190	140	25	2x ø 12 15'	2x ø 10 20'
1707 1708	6	65	140	25	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	5inv.	-19010.4	-432341.0	503774.0	0.14
Som.	5	-15195.3	-349495.8	403627.8	0.11

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1707-1708-1710-1711	7.90	1.40	1	86255.9	1.50	129383.8	0.0	0.0	1286824.4	250493.0	0.0	0.52
1709-1708	1.00	1.40	1	8008.2	1.50	12012.3	0.0	-0.0	127456.9	31013.4	0.0	0.39
1712-1711	1.57	1.40	1	35030.9	1.50	52546.3	0.0	-0.0	302955.1	94357.1	0.0	0.56
2314-1713	1.57	1.40	1	35679.7	1.50	53519.6	0.0	-0.0	302955.1	94357.1	0.0	0.57
2314-1715-1716-1718	7.85	1.40	1	101789.9	1.50	152684.9	0.0	0.0	1022400.3	248775.3	0.0	0.61
1716-1717	1.00	1.40	1	7441.9	1.50	11162.9	0.0	-0.0	127456.9	31013.4	0.0	0.36

**- NUCLEO 1816 1817 1818 1815 1814 1813 1812 1811 1810 1809 1808 1807 / Nodi: 1816 1817 1818 1815 1814 1813 1812
1811 1810 1809 1808 1807**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1816 1817	7	100	135	20	2x ø 12 15'	2x ø 10 20'
1816 1818	7	60	135	20	2x ø 12 15'	2x ø 10 20'
1815 1816	7	190	135	20	2x ø 12 15'	2x ø 10 20'
1814 1815	7	535	135	20	2x ø 12 15'	2x ø 10 20'
1814 1813	5	157	135	30	2x ø 20 15'	2x ø 12 15'
1812 1811	5	157	135	30	2x ø 20 15'	2x ø 12 15'
1810 1811	6	535	135	25	2x ø 12 15'	2x ø 10 20'
1809 1808	7	100	135	20	2x ø 12 15'	2x ø 10 20'
1808 1810	6	190	135	25	2x ø 12 15'	2x ø 10 20'
1807 1808	6	65	135	25	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Base	5inv.	-17069.7	-349495.8	403627.8	0.11
Som.	5	7504.2	-269610.4	307059.5	0.10

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1807-1808-1810-1811	7.90	1.35	1	79944.3	1.50	119916.5	0.0	0.0	1286824.4	250493.0	0.0	0.48
1809-1808	1.00	1.35	1	8008.2	1.50	12012.3	0.0	-0.0	127456.9	31013.4	0.0	0.39
1812-1811	1.57	1.35	1	32681.6	1.50	49022.5	0.0	-0.0	302955.1	94357.1	0.0	0.52
1814-1813	1.57	1.35	1	33284.8	1.50	49927.2	0.0	-0.0	302955.1	94357.1	0.0	0.53
1814-1815-1816-1818	7.85	1.35	1	94218.0	1.50	141327.0	0.0	0.0	1022400.3	248775.3	0.0	0.57
1816-1817	1.00	1.35	1	7441.9	1.50	11162.9	0.0	-0.0	127456.9	31013.4	0.0	0.36

- NUCLEO 1074 1022 1020 1021 1019 / Nodi: 1074 1022 1020 1021 1019

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1074 1022	5	60	325	30	2x ø 20 15'	2x ø 12 15'
1020 1021	7	100	325	20	2x ø 16 15'	2x ø 10 15'
1022 1020	7	535	325	20	2x ø 16 15'	2x ø 10 15'
1020 1019	7	241	325	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	M _x [kgm]	M _y [kgm]	Sd/Sr
Base	9inv.	-147492.5	1363317.4	141729.8	0.88
Som.	9	-135304.9	1292319.0	141729.8	0.88

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1022-1020-1019	7.76	3.25	1	145688.4	1.50	218532.6	0.0	0.0	1010634.9	327883.3	788074.4	0.67
1020-1021	1.00	3.25	4	10664.6	1.50	15996.9	-237793.7	-245394.1	127456.9	41351.2	30159.3	0.53
1074-1022	0.60	3.25	5	9289.1	1.50	13933.7	-15106.0	16723.8	112750.4	35116.8	28745.2	0.48

- NUCLEO 1174 1122 1120 1121 1119 / Nodi: 1174 1122 1120 1121 1119

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1174 1122	5	60	407	30	2x ø 20 15'	2x ø 12 15'
1120 1121	7	100	407	20	2x ø 16 15'	2x ø 10 15'
1122 1120	7	535	407	20	2x ø 16 15'	2x ø 10 15'
1120 1119	7	241	407	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-107005.6	1292319.0	141729.8	0.90
Som.	9	-109861.7	1061148.3	120670.7	0.75

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1122-1120-1119	7.76	4.07	1	145688.4	1.50	218532.6	0.0	0.0	1010634.9	327883.3	788074.4	0.67
1120-1121	1.00	4.07	4	10664.6	1.50	15996.9	-243781.0	-251030.9	127456.9	41351.2	30159.3	0.53

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1174-1122	0.60	4.07	5	9289.1	1.50	13933.7	-12440.7	15562.0	112750.4	35116.8	28668.5	0.49
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- NUCLEO 1274 1222 1220 1221 1219 / Nodi: 1274 1222 1220 1221 1219

- *Armature Nucleo*

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1274 1222	5	60	405	30	2x ø 20 15'	2x ø 12 15'
1220 1221	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1222 1220	7	535	405	20	2x ø 16 15'	2x ø 10 15'
1220 1219	7	241	405	20	2x ø 16 15'	2x ø 10 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-111388.7	1061148.3	120670.7	0.75
Som.	9	-68454.5	831113.4	99715.2	0.63

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1222-1220-1219	7.76	4.05	1	145688.4	1.50	218532.6	0.0	0.0	1010634.9	327883.3	0.0	0.67
1220-1221	1.00	4.05	1	12737.3	1.50	19106.0	0.0	-0.0	127456.9	41351.2	0.0	0.46
1274-1222	0.60	4.05	1	10052.3	1.50	15078.5	0.0	0.0	112750.4	35116.8	0.0	0.43

- NUCLEO 1374 1322 1320 1321 1319 / Nodi: 1374 1322 1320 1321 1319

- *Armature Nucleo*

Nodi	Sezione	B	H	Spessore	Armatura	Armatura
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Numero	[cm]	[cm]	[cm]	Verticale	Orizzontale
1374 1322	5	60	405	30	2x ø 20 15'	2x ø 12 15'
1320 1321	7	100	405	20	2x ø 16 15'	2x ø 10 15'
1322 1320	7	535	405	20	2x ø 16 15'	2x ø 10 15'
1320 1319	7	241	405	20	2x ø 16 15'	2x ø 10 15'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	9inv.	-81763.8	831113.4	99715.2	0.62	
Som.	9	-45531.7	601078.8	78759.6	0.50	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1322-1320-1319	7.76	4.05	1	123080.1	1.50	184620.2	0.0	0.0	1010634.9	327883.3	0.0	0.56
1320-1321	1.00	4.05	1	12737.3	1.50	19106.0	0.0	-0.0	127456.9	41351.2	0.0	0.46
1374-1322	0.60	4.05	1	10052.3	1.50	15078.5	0.0	0.0	112750.4	35116.8	0.0	0.43

- NUCLEO 1474 1422 1420 1421 1419 / Nodi: 1474 1422 1420 1421 1419

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1474 1422	5	60	405	30	2x ø 14 15'	2x ø 10 15'
1420 1421	7	100	405	20	2x ø 12 15'	2x ø 10 20'
1422 1420	7	535	405	20	2x ø 12 15'	2x ø 10 20'
1420 1419	7	241	405	20	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Base	9inv.	-45158.5	601078.8	78759.6	0.87
Som.	9	-13828.5	371044.0	58251.2	0.67

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1422-1420-1419	7.76	4.05	1	103152.3	1.50	154728.4	0.0	0.0	1010634.9	245912.5	0.0	0.63
1420-1421	1.00	4.05	1	12141.4	1.50	18212.1	0.0	-0.0	127456.9	31013.4	0.0	0.59
1474-1422	0.60	4.05	1	8988.4	1.50	13482.6	0.0	0.0	112750.4	24386.6	0.0	0.55

- NUCLEO 1574 1522 1520 1521 1519 / Nodi: 1574 1522 1520 1521 1519

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1574 1522	5	60	130	30	2x ø 14 15'	2x ø 10 15'
1520 1521	7	100	130	20	2x ø 12 15'	2x ø 10 20'
1520 1522	7	535	130	20	2x ø 12 15'	2x ø 10 20'
1519 1520	7	241	130	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	M _x [kgm]	M _y [kgm]	Sd/Sr
Base	9inv.	-15293.5	371044.0	58251.2	0.67
Som.	9	-15251.7	297205.6	52251.4	0.59

- Verifiche a taglio dei diaframmi

Diaframma	B	H	Comb.	V _{dc}	alpha	V _{Ed}	N _{Ed}	M _{Ed}	V _{Rcd}	V _{Rds}	V _{Rds,scorrimento}	V _S /
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	[m]	[m]	critica	[kg]	[kg]	[kg]	[kgm]	[kg]	[kg]	[kg]	V _R	
1519-1520-1522	7.76	1.30	1	83224.5	1.50	124836.7	0.0	0.0	1010634.9	245912.5	0.0	0.51
1520-1521	1.00	1.30	1	8432.5	1.50	12648.8	0.0	-0.0	127456.9	31013.4	0.0	0.41
1574-1522	0.60	1.30	1	8988.4	1.50	13482.6	0.0	0.0	112750.4	24386.6	0.0	0.55

- NUCLEO 1774 2322 1720 1721 1719 / Nodi: 1774 2322 1720 1721 1719

- *Armature Nucleo*

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1774 2322	5	60	140	30	2x ø 14 15'	2x ø 10 15'
1720 1721	7	100	140	20	2x ø 12 15'	2x ø 10 20'
1720 2322	7	535	140	20	2x ø 12 15'	2x ø 10 20'
1719 1720	7	241	140	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	M _x [kgm]	M _y [kgm]	Sd/Sr
Base	9inv.	-10671.8	297205.6	52251.4	0.60
Som.	9	-8869.0	217687.5	45790.0	0.52

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1719-1720-2322	7.76	1.40	1	76827.9	1.50	115241.8	0.0	0.0	1010634.9	245912.5	0.0	0.47
1720-1721	1.00	1.40	1	10476.4	1.50	15714.5	0.0	-0.0	127456.9	31013.4	0.0	0.51
1774-2322	0.60	1.40	1	8887.0	1.50	13330.6	0.0	0.0	112750.4	24386.6	0.0	0.55

- NUCLEO 1874 1822 1820 1821 1819 / Nodi: 1874 1822 1820 1821 1819

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1874 1822	5	60	135	30	2x ø 14 15'	2x ø 10 15'
1820 1821	7	100	135	20	2x ø 12 15'	2x ø 10 20'
1820 1822	7	535	135	20	2x ø 12 15'	2x ø 10 20'
1819 1820	7	241	135	20	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]		Mx [kgm]	My [kgm]	Sd/Sr
Base	9inv.	-9766.8		217687.5	45790.0	0.52
Som.	9	17137.7		141009.2	37719.2	0.47

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1819-1820-1822	7.76	1.35	1	69939.2	1.50	104908.9	0.0	0.0	1010634.9	245912.5	0.0	0.43
1820-1821	1.00	1.35	1	10476.4	1.50	15714.5	0.0	-0.0	127456.9	31013.4	0.0	0.51
1874-1822	0.60	1.35	1	8887.0	1.50	13330.6	0.0	0.0	112750.4	24386.6	0.0	0.55

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

3 VANO SCALA "B"

- Sezioni Impiegate:

Sezione Numero	Dimensioni	Calcestruzzo	f_{cd} [kg/cm ²]	τ_{rd} [kg/cm ²]	σ_{RARE} [kg/cm ²]	σ_{FREQ} [kg/cm ²]	σ_{QP} [kg/cm ²]	Acciaio	f_{yd} [kg/cm ²]	σ_{yRARE} [kg/cm ²]	σ_{yFREQ} [kg/cm ²]	σ_{yQP} [kg/cm ²]	Copriferro [cm]
5	s 30 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
6	s 25 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
7	s 20 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50
8	s 40 [cm]	C28/35	164.6	3.3	174.3	290.5	130.7	B 450 C	3913.0	3600.0	4500.0	4500.0	2.50

- Verifiche Setti:

- NUCLEO 1081 1051 1082 1052 1056 1053 1054 1057 1055 1059 1058 1060 1061 1062 1063 1064 1066 1080 1079 1085 1084 /

Nodi: 1081 1051 1082 1052 1056 1053 1054 1057 1055 1059 1058 1060 1061 1062 1063 1064 1066 1080 1079 1085 1084

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1081 1051	3	85	325	20	2x ø 20 10'	2x ø 14 15'
1082 1052	3	85	325	20	2x ø 16 15'	2x ø 10 15'
1056 1053	2	300	325	25	2x ø 24 15'	2x ø 12 15'
1054 1081	3	215	325	20	2x ø 20 10'	2x ø 14 15'
1057 1054	3	235	325	20	2x ø 20 10'	2x ø 14 15'
1055 1082	3	215	325	20	2x ø 16 15'	2x ø 10 15'
1059 1056	2	235	325	25	2x ø 24 15'	2x ø 12 15'
1058 1057	3	195	325	20	2x ø 20 15'	2x ø 12 15'
1060 1057	3	149	325	20	2x ø 20 10'	2x ø 14 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1058 1061	3	149	325	20	2x ø 16 15'	2x ø 12 15'
1062 1059	2	149	325	25	2x ø 24 15'	2x ø 12 15'
1063 1060	3	134	325	20	2x ø 20 10'	2x ø 14 15'
1064 1062	2	106	325	25	2x ø 24 15'	2x ø 12 15'
1066 1064	2	190	325	25	2x ø 24 15'	2x ø 12 15'
1056 1080	3	50	325	20	2x ø 16 15'	2x ø 10 15'
1079 1054	3	50	325	20	2x ø 16 15'	2x ø 12 15'
1053 1085	4	80	325	40	2x ø 26 9'	2x ø 20 15'
1052 1084	4	115	325	40	2x ø 26 9'	2x ø 20 15'
1085 1052	4	132	325	40	2x ø 26 9'	2x ø 20 15'
1084 1051	4	80	325	40	2x ø 26 9'	2x ø 20 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	21	-580465.0	-1316711.0	-6434382.0	0.37
Som.	21	-508146.0	-771080.0	-4974015.0	0.28

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1053-1085-1052-1084-1051	4.08	3.25	3	332409.1	1.50	498613.7	-225513.2	-741943.8	1057566.4	686218.9	1098337.8	0.73
1079-1054	0.50	3.25	31	519.6	1.50	779.4	-9861.0	-37622.6	61440.7	28704.1	15079.6	0.05
1056-1080	0.50	3.25	18	-441.5	1.50	-662.2	-41805.9	130344.5	61440.7	19933.4	15079.6	0.04
1066-1064-1062-1059-1056-1053	9.80	3.25	1	155793.5	1.50	233690.2	713726.4	-409666.0	1595662.0	596373.6	1847712.5	0.39
1063-1060-1057-1054-1081-1051	8.17	3.25	3	-194299.0	1.50	-291448.4	-1202814.0	-22137.0	1064624.4	676982.6	577786.2	0.50
1058-1061	1.49	3.25	6	19616.0	1.50	29424.0	-59693.8	933.9	190204.9	88860.6	44786.6	0.66
1058-1057	1.95	3.25	3	29372.6	1.50	44059.0	-168234.3	-428620.2	250992.6	117259.6	91891.8	0.48
1055-1082-1052	3.00	3.25	7	-19256.6	1.50	-28884.9	-98356.1	148.0	388253.2	125962.2	90477.9	0.32

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- NUCLEO 1181 1151 1182 1152 1156 1153 1154 1157 1155 1159 1160 1158 1161 1162 1163 1164 1180 1179 1185 1184 /

Nodi: 1181 1151 1182 1152 1156 1153 1154 1157 1155 1159 1160 1158 1161 1162 1163 1164 1180 1179 1185 1184

- *Armature Nucleo*

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1181 1151	3	85	407	20	2x ø 20 10'	2x ø 14 15'
1182 1152	3	85	407	20	2x ø 16 15'	2x ø 10 15'
1156 1153	2	300	407	25	2x ø 24 15'	2x ø 12 15'
1154 1181	3	215	407	20	2x ø 20 10'	2x ø 14 15'
1154 1157	3	235	407	20	2x ø 20 10'	2x ø 14 15'
1155 1182	3	215	407	20	2x ø 16 15'	2x ø 10 15'
1159 1156	2	235	407	25	2x ø 24 15'	2x ø 12 15'
1157 1160	3	149	407	20	2x ø 20 10'	2x ø 14 15'
1158 1161	3	149	407	20	2x ø 16 15'	2x ø 12 15'
1162 1159	2	149	407	25	2x ø 24 15'	2x ø 12 15'
1160 1163	3	134	407	20	2x ø 20 10'	2x ø 14 15'
1164 1162	2	106	407	25	2x ø 24 15'	2x ø 12 15'
1161 1160	3	195	407	20	2x ø 16 15'	2x ø 12 15'
1182 1181	3	195	407	20	2x ø 20 10'	2x ø 14 15'
1156 1180	3	50	407	20	2x ø 16 15'	2x ø 10 15'
1179 1154	3	50	407	20	2x ø 16 15'	2x ø 10 15'
1153 1185	4	80	407	40	2x ø 26 9'	2x ø 20 15'
1152 1184	4	115	407	40	2x ø 26 9'	2x ø 20 15'
1185 1152	4	132	407	40	2x ø 26 9'	2x ø 20 15'
1184 1151	4	80	407	40	2x ø 26 9'	2x ø 20 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-210179.7	1989716.1	-4998112.5	0.37

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Som.	7	-155265.0	1989716.1	-4998112.5	0.38
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- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
1153-1185-1152-1184-1151	4.08	4.07	1	338454.3	1.50	507681.4	0.0	-0.0	1057566.4	686218.9	1765553.8	0.74
1179-1154	0.50	4.07	4	2335.5	1.50	3503.3	-45627.6	-157012.0	61440.7	19933.4	15079.6	0.23
1156-1180	0.50	4.07	2	1904.0	1.50	2856.1	-45617.5	159427.5	61440.7	19933.4	15079.6	0.19
1182-1181	1.95	4.07	4	52915.6	1.50	79373.4	-109239.5	-250181.4	250992.6	159603.3	137837.7	0.58
1161-1160	1.95	4.07	1	46923.6	1.50	70385.4	0.0	-0.0	250992.6	117259.6	0.0	0.60
1164-1162-1159-1156-1153	7.90	4.07	1	248241.8	1.50	372362.6	0.0	0.0	1285190.3	480335.8	1805243.4	0.78
1151-1181-1154-1157-1160-1163	8.17	4.07	4	259196.0	1.50	388794.1	-1089582.3	359977.6	1064624.4	676982.7	577786.2	0.67
1158-1161	1.49	4.07	3	19224.0	1.50	28836.0	-47253.3	2687.2	190204.9	88860.6	44786.6	0.64
1155-1182-1152	3.00	4.07	2	12186.1	1.50	18279.2	-31727.4	-16289.0	388253.2	125962.2	90477.9	0.20

- NUCLEO 1281 1251 1282 1252 1256 1253 1254 1279 1257 1255 1280 1259 1260 1258 1261 1262 1263 1264 1285 1284 /

Nodi: 1281 1251 1282 1252 1256 1253 1254 1279 1257 1255 1280 1259 1260 1258 1261 1262 1263 1264 1285 1284

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1281 1251	3	85	405	20	2x ø 20 10'	2x ø 14 15'
1282 1252	3	85	405	20	2x ø 16 15'	2x ø 10 15'
1256 1253	2	300	405	25	2x ø 16 15'	2x ø 12 15'
1254 1281	3	215	405	20	2x ø 20 10'	2x ø 14 15'
1279 1254	3	50	405	20	2x ø 16 15'	2x ø 10 15'
1254 1257	3	235	405	20	2x ø 20 10'	2x ø 14 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1255 1282	3	215	405	20	2x ø 16 15'	2x ø 10 15'
1256 1280	3	50	405	20	2x ø 16 15'	2x ø 10 15'
1259 1256	2	235	405	25	2x ø 16 15'	2x ø 12 15'
1257 1260	3	149	405	20	2x ø 20 10'	2x ø 14 15'
1258 1261	3	149	405	20	2x ø 16 15'	2x ø 10 15'
1262 1259	2	149	405	25	2x ø 16 15'	2x ø 12 15'
1260 1263	3	134	405	20	2x ø 20 10'	2x ø 14 15'
1264 1262	2	106	405	25	2x ø 16 15'	2x ø 12 15'
1261 1260	3	195	405	20	2x ø 16 15'	2x ø 12 15'
1282 1281	3	195	405	20	2x ø 16 15'	2x ø 12 15'
1253 1285	4	80	405	40	2x ø 26 9'	2x ø 20 15'
1252 1284	4	115	405	40	2x ø 26 9'	2x ø 20 15'
1285 1252	4	132	405	40	2x ø 26 9'	2x ø 20 15'
1284 1251	4	80	405	40	2x ø 26 9'	2x ø 20 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-157193.3	1989716.1	-4998112.5	0.56
Som.	7	-111794.7	1602932.6	-3809211.5	0.43

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1253-1285-1252-1284-1251	4.08	4.05	1	338454.3	1.50	507681.4	0.0	-0.0	1057566.4	686218.9	0.0	0.74
1282-1281	1.95	4.05	1	52915.6	1.50	79373.4	0.0	0.0	250992.6	117259.6	0.0	0.68
1261-1260	1.95	4.05	1	46923.6	1.50	70385.4	0.0	-0.0	250992.6	117259.6	0.0	0.60
1264-1262-1259-1256-1253	7.90	4.05	1	248241.8	1.50	372362.6	0.0	0.0	1285190.3	480335.8	0.0	0.78
1251-1281-1254-1257-1260-1263	8.17	4.05	1	259196.0	1.50	388794.1	0.0	0.0	1064624.4	676982.7	0.0	0.57
1258-1261	1.49	4.05	1	19224.0	1.50	28836.0	0.0	0.0	190204.9	61708.8	0.0	0.47

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1256-1280	0.50	4.05	1	1904.0	1.50	2856.1	0.0	-0.0	61440.7	19933.4	0.0	0.14
1255-1282-1252	3.00	4.05	1	13304.2	1.50	19956.3	0.0	0.0	388253.2	125962.2	0.0	0.16
1279-1254	0.50	4.05	1	2335.5	1.50	3503.3	0.0	-0.0	61440.7	19933.4	0.0	0.18

- NUCLEO 1381 1351 1382 1352 1356 1353 1354 1379 1357 1355 1380 1359 1360 1358 1361 1362 1363 1364 1385 1384 /

Nodi: 1381 1351 1382 1352 1356 1353 1354 1379 1357 1355 1380 1359 1360 1358 1361 1362 1363 1364 1385 1384

- *Armature Nucleo*

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1381 1351	3	85	405	20	2x ø 20 10'	2x ø 14 15'
1382 1352	3	85	405	20	2x ø 16 15'	2x ø 10 15'
1356 1353	2	300	405	25	2x ø 16 15'	2x ø 12 15'
1354 1381	3	215	405	20	2x ø 20 10'	2x ø 14 15'
1379 1354	3	50	405	20	2x ø 16 15'	2x ø 10 15'
1354 1357	3	235	405	20	2x ø 20 10'	2x ø 14 15'
1355 1382	3	215	405	20	2x ø 16 15'	2x ø 10 15'
1356 1380	3	50	405	20	2x ø 16 15'	2x ø 10 15'
1359 1356	2	235	405	25	2x ø 16 15'	2x ø 12 15'
1357 1360	3	149	405	20	2x ø 20 10'	2x ø 14 15'
1358 1361	3	149	405	20	2x ø 16 15'	2x ø 10 15'
1362 1359	2	149	405	25	2x ø 16 15'	2x ø 12 15'
1360 1363	3	134	405	20	2x ø 20 10'	2x ø 14 15'
1364 1362	2	106	405	25	2x ø 16 15'	2x ø 12 15'
1361 1360	3	195	405	20	2x ø 16 15'	2x ø 12 15'
1382 1381	3	195	405	20	2x ø 16 15'	2x ø 12 15'
1353 1385	4	80	405	40	2x ø 24 10'	2x ø 18 15'
1352 1384	4	115	405	40	2x ø 24 10'	2x ø 18 15'
1385 1352	4	132	405	40	2x ø 24 10'	2x ø 18 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1384 1351	4	80	405	40	2x ø 24 10'	2x ø 18 15'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	7inv.	-82817.0	1602932.6	-3809211.5	0.47	
Som.	7	-45698.5	1216148.0	-2620306.8	0.32	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1353-1385-1352-1384-1351	4.08	4.05	1	286255.4	1.50	429383.2	0.0	-0.0	1057566.4	555837.3	0.0	0.77
1382-1381	1.95	4.05	1	49498.7	1.50	74248.1	0.0	0.0	250992.6	117259.6	0.0	0.63
1361-1360	1.95	4.05	1	46923.6	1.50	70385.4	0.0	-0.0	250992.6	117259.6	0.0	0.60
1364-1362-1359-1356-1353	7.90	4.05	1	233450.3	1.50	350175.5	0.0	0.0	1285190.3	480335.8	0.0	0.73
1351-1381-1354-1357-1360-1363	8.17	4.05	1	237773.9	1.50	356660.9	0.0	0.0	1064624.4	676982.7	0.0	0.53
1358-1361	1.49	4.05	1	15610.3	1.50	23415.4	0.0	0.0	190204.9	61708.8	0.0	0.38
1356-1380	0.50	4.05	1	1546.1	1.50	2319.2	0.0	-0.0	61440.7	19933.4	0.0	0.12
1355-1382-1352	3.00	4.05	1	13304.2	1.50	19956.3	0.0	0.0	388253.2	125962.2	0.0	0.16
1379-1354	0.50	4.05	1	1896.5	1.50	2844.7	0.0	-0.0	61440.7	19933.4	0.0	0.14

- NUCLEO 1481 1451 1482 1452 1456 1453 1454 1479 1457 1455 1459 1460 1458 1461 1462 1463 1464 1480 1485 1484 /

Nodi: 1481 1451 1482 1452 1456 1453 1454 1479 1457 1455 1459 1460 1458 1461 1462 1463 1464 1480 1485 1484

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1481 1451	3	85	405	20	2x ø 16 15'	2x ø 12 15'
1482 1452	3	85	405	20	2x ø 16 15'	2x ø 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1456 1453	2	300	405	25	2x ø 16 15'	2x ø 12 15'
1454 1481	3	215	405	20	2x ø 16 15'	2x ø 12 15'
1479 1454	3	50	405	20	2x ø 12 15'	2x ø 10 20'
1454 1457	3	235	405	20	2x ø 16 15'	2x ø 12 15'
1455 1482	3	215	405	20	2x ø 16 15'	2x ø 10 15'
1459 1456	2	235	405	25	2x ø 16 15'	2x ø 12 15'
1457 1460	3	149	405	20	2x ø 16 15'	2x ø 12 15'
1458 1461	3	149	405	20	2x ø 12 15'	2x ø 10 20'
1462 1459	2	149	405	25	2x ø 16 15'	2x ø 12 15'
1460 1463	3	134	405	20	2x ø 16 15'	2x ø 12 15'
1464 1462	2	106	405	25	2x ø 16 15'	2x ø 12 15'
1461 1460	3	195	405	20	2x ø 12 15'	2x ø 10 20'
1482 1481	3	195	405	20	2x ø 16 15'	2x ø 10 15'
1456 1480	3	50	405	20	2x ø 12 15'	2x ø 10 20'
1453 1485	4	80	405	40	2x ø 24 10'	2x ø 18 15'
1452 1484	4	115	405	40	2x ø 24 10'	2x ø 18 15'
1485 1452	4	132	405	40	2x ø 24 10'	2x ø 18 15'
1484 1451	4	80	405	40	2x ø 24 10'	2x ø 18 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	7inv.	-31855.8	1216148.0	-2620306.8	0.36
Som.	7	30827.7	829365.0	-1431407.1	0.21

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1453-1485-1452-1484-1451	4.08	4.05	1	228608.6	1.50	342912.9	0.0	-0.0	1057566.4	555837.3	0.0	0.62
1456-1480	0.50	4.05	1	1514.3	1.50	2271.5	0.0	-0.0	61440.7	14950.1	0.0	0.15

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1482-1481	1.95	4.05	1	39873.5	1.50	59810.3	0.0	0.0	250992.6	81430.3	0.0	0.73
1461-1460	1.95	4.05	1	21942.6	1.50	32913.9	0.0	-0.0	250992.6	61072.7	0.0	0.54
1464-1462-1459-1456-1453	7.90	4.05	1	193324.1	1.50	289986.1	0.0	0.0	1285190.3	480335.8	0.0	0.60
1451-1481-1454-1457-1460-1463	8.17	4.05	1	229807.6	1.50	344711.3	0.0	0.0	1064624.4	497375.0	0.0	0.69
1458-1461	1.49	4.05	1	12611.1	1.50	18916.7	0.0	0.0	190204.9	46281.6	0.0	0.41
1455-1482-1452	3.00	4.05	1	13304.2	1.50	19956.3	0.0	0.0	388253.2	125962.2	0.0	0.16
1479-1454	0.50	4.05	1	1532.1	1.50	2298.2	0.0	-0.0	61440.7	14950.1	0.0	0.15

- NUCLEO 1581 1551 1582 1552 1556 1553 1554 1579 1557 1555 1559 1560 1558 1561 1562 1563 1564 1580 1585 1584 /

Nodi: 1581 1551 1582 1552 1556 1553 1554 1557 1555 1559 1560 1562 1563 1564 1561 1580 1585 1584

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1581 1551	3	85	130	20	2x ø 16 15'	2x ø 10 15'
1582 1552	3	85	130	20	2x ø 16 15'	2x ø 10 15'
1556 1553	2	300	130	25	2x ø 16 15'	2x ø 10 15'
1554 1581	3	215	130	20	2x ø 16 15'	2x ø 10 15'
1557 1554	3	235	130	20	2x ø 16 15'	2x ø 10 15'
1555 1582	3	215	130	20	2x ø 16 15'	2x ø 10 15'
1556 1559	2	235	130	25	2x ø 16 15'	2x ø 10 15'
1560 1557	3	149	130	20	2x ø 16 15'	2x ø 10 15'
1559 1562	2	149	130	25	2x ø 16 15'	2x ø 10 15'
1563 1560	3	134	130	20	2x ø 16 15'	2x ø 10 15'
1562 1564	2	106	130	25	2x ø 16 15'	2x ø 10 15'
1561 1560	3	195	130	20	2x ø 12 15'	2x ø 10 20'
1582 1581	3	195	130	20	2x ø 16 15'	2x ø 10 15'
1556 1580	3	50	130	20	2x ø 12 15'	2x ø 10 20'
1553 1585	4	80	130	40	2x ø 24 10'	2x ø 16 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1552 1584	4	115	130	40	2x ø 24 10'	2x ø 16 15'
1585 1552	4	132	130	40	2x ø 24 10'	2x ø 16 15'
1584 1551	4	80	130	40	2x ø 24 10'	2x ø 16 15'
S.L.U.	Comb.	N		Mx	My	Sd/Sr
		[kg]		[kgm]	[kgm]	
Base	2inv.	-148430.5		-126472.4	-70394.5	0.02
Som.	2	-121805.0		-126472.4	-57111.6	0.01

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1553-1585-1552-1584-1551	4.08	1.30	1	14639.2	1.50	21958.8	0.0	-0.0	1057566.4	439180.1	0.0	0.05
1556-1580	0.50	1.30	1	770.8	1.50	1156.1	0.0	-0.0	61440.7	14950.1	0.0	0.08
1582-1581	1.95	1.30	1	15784.2	1.50	23676.2	0.0	0.0	250992.6	81430.3	0.0	0.29
1561-1560	1.95	1.30	1	6160.3	1.50	9240.4	0.0	-0.0	250992.6	61072.7	0.0	0.15
1553-1556-1559-1562-1564	7.90	1.30	1	75349.3	1.50	113024.0	0.0	0.0	1285190.3	333566.5	0.0	0.34
1563-1560-1557-1554-1581-1551	8.17	1.30	1	70935.8	1.50	106403.6	0.0	0.0	1064624.4	345399.3	0.0	0.31
1555-1582-1552	3.00	1.30	1	9060.1	1.50	13590.2	0.0	0.0	388253.2	125962.2	0.0	0.11

- NUCLEO 1781 1751 1782 1752 1756 1753 1754 1857 1755 1780 1759 1760 1758 1761 1762 1763 1764 1785 1784 /

Nodi: 1781 1751 1782 1752 1756 1753 1754 1857 1755 1780 1759 1760 1762 1763 1764 1761 1785 1784

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1781 1751	3	85	140	20	2x ø 16 15'	2x ø 10 15'
1782 1752	3	85	140	20	2x ø 16 15'	2x ø 10 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1756 1753	2	300	140	25	2x ø 16 15'	2x ø 10 15'
1754 1781	3	215	140	20	2x ø 16 15'	2x ø 10 15'
1857 1754	3	235	140	20	2x ø 16 15'	2x ø 10 15'
1755 1782	3	215	140	20	2x ø 16 15'	2x ø 10 15'
1756 1780	3	50	140	20	2x ø 12 15'	2x ø 10 20'
1756 1759	2	235	140	25	2x ø 16 15'	2x ø 10 15'
1760 1857	3	149	140	20	2x ø 16 15'	2x ø 10 15'
1759 1762	2	149	140	25	2x ø 16 15'	2x ø 10 15'
1763 1760	3	134	140	20	2x ø 16 15'	2x ø 10 15'
1762 1764	2	106	140	25	2x ø 16 15'	2x ø 10 15'
1761 1760	3	195	140	20	2x ø 12 15'	2x ø 10 20'
1782 1781	3	195	140	20	2x ø 16 15'	2x ø 10 15'
1753 1785	4	80	140	40	2x ø 24 10'	2x ø 16 15'
1752 1784	4	115	140	40	2x ø 24 10'	2x ø 16 15'
1785 1752	4	132	140	40	2x ø 24 10'	2x ø 16 15'
1784 1751	4	80	140	40	2x ø 24 10'	2x ø 16 15'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	2inv.	-98738.2	-126472.4	-57111.6	0.01
Som.	7	-5252.7	102944.5	-50110.1	0.01

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1753-1785-1752-1784-1751	4.08	1.40	1	14639.2	1.50	21958.8	0.0	-0.0	1057566.4	439180.1	0.0	0.05
1782-1781	1.95	1.40	1	15943.7	1.50	23915.5	0.0	0.0	250992.6	81430.3	0.0	0.29
1761-1760	1.95	1.40	1	6213.2	1.50	9319.8	0.0	-0.0	250992.6	61072.7	0.0	0.15
1753-1756-1759-1762-1764	7.90	1.40	1	75349.3	1.50	113024.0	0.0	0.0	1285190.3	333566.5	0.0	0.34

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1763-1760-1857-1754-1781-1751	8.17	1.40	1	76586.8	1.50	114880.3	0.0	0.0	1064624.4	345399.3	0.0	0.33
1756-1780	0.50	1.40	1	770.8	1.50	1156.1	0.0	-0.0	61440.7	14950.1	0.0	0.08
1755-1782-1752	3.00	1.40	1	9427.6	1.50	14141.4	0.0	0.0	388253.2	125962.2	0.0	0.11

- NUCLEO 1881 1851 1882 1852 1856 1853 1854 1757 1855 1859 1860 1858 1861 1862 1863 1864 1880 1879 1885 1884 /

Nodi: 1881 1851 1882 1852 1856 1853 1854 1757 1855 1859 1860 1862 1863 1864 1861 1880 1885 1884

- *Armature Nucleo*

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1881 1851	3	85	135	20	2x ø 16 15'	2x ø 10 15'
1882 1852	3	85	135	20	2x ø 16 15'	2x ø 10 15'
1856 1853	2	300	135	25	2x ø 16 15'	2x ø 10 15'
1854 1881	3	215	135	20	2x ø 16 15'	2x ø 10 15'
1757 1854	3	235	135	20	2x ø 16 15'	2x ø 10 15'
1855 1882	3	215	135	20	2x ø 16 15'	2x ø 10 15'
1856 1859	2	235	135	25	2x ø 16 15'	2x ø 10 15'
1860 1757	3	149	135	20	2x ø 16 15'	2x ø 10 15'
1859 1862	2	149	135	25	2x ø 16 15'	2x ø 10 15'
1863 1860	3	134	135	20	2x ø 16 15'	2x ø 10 15'
1862 1864	2	106	135	25	2x ø 16 15'	2x ø 10 15'
1861 1860	3	195	135	20	2x ø 12 15'	2x ø 10 20'
1882 1881	3	195	135	20	2x ø 16 15'	2x ø 10 15'
1856 1880	3	50	135	20	2x ø 12 15'	2x ø 10 20'
1853 1885	4	80	135	40	2x ø 24 10'	2x ø 16 15'
1852 1884	4	115	135	40	2x ø 24 10'	2x ø 16 15'
1885 1852	4	132	135	40	2x ø 24 10'	2x ø 16 15'
1884 1851	4	80	135	40	2x ø 24 10'	2x ø 16 15'
S.L.U.	Comb.	N	Mx	My	Sd/Sr	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

		[kg]	[kgm]	[kgm]	
Base	7inv.	-6735.3	102944.5	-50110.1	0.01
Som.	7	6948.2	47693.3	-29013.4	0.01

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S /V _R
1853-1885-1852-1884-1851	4.08	1.35	1	14639.2	1.50	21958.8	0.0	-0.0	1057566.4	439180.1	0.0	0.05
1856-1880	0.50	1.35	1	500.9	1.50	751.4	0.0	-0.0	61440.7	14950.1	0.0	0.05
1882-1881	1.95	1.35	1	15943.7	1.50	23915.5	0.0	0.0	250992.6	81430.3	0.0	0.29
1861-1860	1.95	1.35	1	6213.2	1.50	9319.8	0.0	-0.0	250992.6	61072.7	0.0	0.15
1853-1856-1859-1862-1864	7.90	1.35	1	75349.3	1.50	113024.0	0.0	0.0	1285190.3	333566.5	0.0	0.34
1863-1860-1757-1854-1881-1851	8.17	1.35	1	76586.8	1.50	114880.3	0.0	0.0	1064624.4	345399.3	0.0	0.33
1855-1882-1852	3.00	1.35	1	9427.6	1.50	14141.4	0.0	0.0	388253.2	125962.2	0.0	0.11

- NUCLEO 1075 1065 1078 1066 1069 1067 1072 1068 1070 1071 1076 1077 / Nodi: 1075 1065 1078 1066 1069 1067 1072 1068 1070 1071 1076 1077

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1075 1065	3	100	325	20	2x ø 20 15'	2x ø 12 15'
1078 1066	2	72	325	25	2x ø 24 15'	2x ø 12 15'
1069 1067	3	535	325	20	2x ø 20 15'	2x ø 12 15'
1067 1075	3	174	325	20	2x ø 20 15'	2x ø 12 15'
1072 1068	2	535	325	25	2x ø 24 15'	2x ø 12 15'
1068 1078	2	174	325	25	2x ø 24 15'	2x ø 12 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1070 1069	4	154	325	40	2x ø 26 9'	2x ø 20 15'
1071 1070	4	100	325	40	2x ø 26 9'	2x ø 20 15'
1072 1071	4	154	325	40	2x ø 26 9'	2x ø 20 15'
1076 1075	3	90	325	20	2x ø 16 15'	2x ø 10 15'
1078 1077	3	90	325	20	2x ø 16 15'	2x ø 10 15'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	27	-621924.3	1782513.8	-1981447.5	0.19	
Som.	27	-647269.3	871903.0	-940065.5	0.11	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1078-1077	0.90	3.25	15	-3549.4	1.50	-5324.1	15647.8	-44195.9	113730.9	36898.1	27143.4	0.20
1076-1075	0.90	3.25	15	-5695.0	1.50	-8542.6	-2024.0	-7034.3	113730.9	36898.1	27143.4	0.31
1072-1071-1070-1069	4.08	3.25	27	-361034.2	1.50	-541551.3	41961.7	261642.0	1057566.4	686218.9	957400.5	0.79
1072-1068-1078-1066	7.81	3.25	11	72872.5	1.50	109308.8	-32781.0	-341317.1	1270483.9	474839.3	1610403.8	0.23
1069-1067-1075-1065	8.09	3.25	18	148058.7	1.50	222088.0	82821.0	-95076.3	1052990.1	491939.7	1242872.0	0.45

- NUCLEO 1175 1165 1178 1166 1167 1169 1168 1172 1170 1171 1176 1177 / Nodi: 1175 1165 1178 1166 1167 1169 1168

1172 1170 1171 1176 1177

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1175 1165	3	100	407	20	2x ø 20 15'	2x ø 12 15'
1178 1166	2	72	407	25	2x ø 24 15'	2x ø 12 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1167 1169	3	535	407	20	2x ø 20 15'	2x ø 12 15'
1167 1175	3	174	407	20	2x ø 20 15'	2x ø 12 15'
1168 1172	2	535	407	25	2x ø 24 15'	2x ø 12 15'
1168 1178	2	174	407	25	2x ø 24 15'	2x ø 12 15'
1170 1169	1	154	407	30	2x ø 26 9'	2x ø 18 15'
1172 1171	1	154	407	30	2x ø 26 9'	2x ø 18 15'
1176 1175	3	90	407	20	2x ø 16 15'	2x ø 10 15'
1178 1177	3	90	407	20	2x ø 16 15'	2x ø 10 15'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	6inv.	-910056.0	1362253.8	-1374779.0	0.17	
Som.	6	-960505.8	1362253.8	-1374779.0	0.17	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1178-1177	0.90	4.07	2	3520.6	1.50	5281.0	-22231.2	62210.5	113730.9	36898.1	27143.4	0.19
1176-1175	0.90	4.07	1	5259.6	1.50	7889.5	0.0	-0.0	113730.9	36898.1	0.0	0.21
1172-1171	1.54	4.07	6	86792.4	1.50	130188.7	-67137.7	159307.8	295112.4	206807.5	203744.6	0.64
1170-1169	1.54	4.07	8	90140.8	1.50	135211.2	-63977.7	-185485.6	296092.3	207494.2	204407.9	0.66
1172-1168-1178-1166	7.81	4.07	1	183740.8	1.50	275611.3	0.0	0.0	1270483.9	474839.3	0.0	0.58
1169-1167-1175-1165	8.09	4.07	5	204658.0	1.50	306987.0	-228617.7	-372318.7	1052990.1	491939.7	380996.8	0.81

**- NUCLEO 1275 1265 1278 1266 1267 1269 1268 1272 1270 1271 1276 1277 / Nodi: 1275 1265 1278 1266 1267 1269 1268
1272 1270 1271 1276 1277**

- Armature Nucleo

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1275 1265	3	100	405	20	2x ø 16 15'	2x ø 12 15'
1278 1266	2	72	405	25	2x ø 16 15'	2x ø 12 15'
1267 1269	3	535	405	20	2x ø 16 15'	2x ø 12 15'
1267 1275	3	174	405	20	2x ø 16 15'	2x ø 12 15'
1268 1272	2	535	405	25	2x ø 16 15'	2x ø 12 15'
1268 1278	2	174	405	25	2x ø 16 15'	2x ø 12 15'
1270 1269	1	154	405	30	2x ø 26 9'	2x ø 18 15'
1272 1271	1	154	405	30	2x ø 26 9'	2x ø 18 15'
1276 1275	3	90	405	20	2x ø 16 15'	2x ø 10 15'
1278 1277	3	90	405	20	2x ø 16 15'	2x ø 10 15'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	3inv.	-123967.7	-1494481.3	-1374779.0	0.22	
Som.	3	-80817.9	-1205183.3	-1104262.1	0.18	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s /V _R
1278-1277	0.90	4.05	1	4161.2	1.50	6241.8	0.0	-0.0	113730.9	36898.1	0.0	0.17
1276-1275	0.90	4.05	1	5259.6	1.50	7889.5	0.0	-0.0	113730.9	36898.1	0.0	0.21
1272-1271	1.54	4.05	1	86792.4	1.50	130188.7	0.0	-0.0	295112.4	206807.5	0.0	0.63
1270-1269	1.54	4.05	1	90140.8	1.50	135211.2	0.0	-0.0	296092.3	207494.2	0.0	0.65
1272-1268-1278-1266	7.81	4.05	1	183740.8	1.50	275611.3	0.0	0.0	1270483.9	474839.3	0.0	0.58
1269-1267-1275-1265	8.09	4.05	1	204658.0	1.50	306987.0	0.0	0.0	1052990.1	491939.7	0.0	0.62

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

**- NUCLEO 1375 1365 1378 1366 1367 1369 1368 1372 1370 1371 1376 1377 / Nodi: 1375 1365 1378 1366 1367 1369 1368
1372 1370 1371 1376 1377**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1375 1365	3	100	405	20	2x ø 16 15'	2x ø 12 15'
1378 1366	2	72	405	25	2x ø 16 15'	2x ø 12 15'
1367 1369	3	535	405	20	2x ø 16 15'	2x ø 12 15'
1367 1375	3	174	405	20	2x ø 16 15'	2x ø 12 15'
1368 1372	2	535	405	25	2x ø 16 15'	2x ø 12 15'
1368 1378	2	174	405	25	2x ø 16 15'	2x ø 12 15'
1370 1369	1	154	405	30	2x ø 26 9'	2x ø 18 15'
1372 1371	1	154	405	30	2x ø 26 9'	2x ø 18 15'
1376 1375	3	90	405	20	2x ø 16 15'	2x ø 10 15'
1378 1377	3	90	405	20	2x ø 16 15'	2x ø 10 15'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	3inv.	-73813.2	-1205183.3	-1104262.1	0.18	
Som.	3	-64160.6	-915884.8	-833744.9	0.13	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _S / V _R
1378-1377	0.90	4.05	1	4161.2	1.50	6241.8	0.0	-0.0	113730.9	36898.1	0.0	0.17
1376-1375	0.90	4.05	1	5259.6	1.50	7889.5	0.0	-0.0	113730.9	36898.1	0.0	0.21
1372-1371	1.54	4.05	1	71078.7	1.50	106618.0	0.0	-0.0	295112.4	206807.5	0.0	0.52

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1370-1369	1.54	4.05	1	73643.6	1.50	110465.4	0.0	-0.0	296092.3	207494.2	0.0	0.53
1372-1368-1378-1366	7.81	4.05	1	183740.8	1.50	275611.3	0.0	0.0	1270483.9	474839.3	0.0	0.58
1369-1367-1375-1365	8.09	4.05	1	190260.4	1.50	285390.7	0.0	0.0	1052990.1	491939.7	0.0	0.58

- NUCLEO 1475 1465 1478 1466 1467 1469 1468 1472 1470 1471 1476 1477 / Nodi: 1475 1465 1478 1466 1467 1469 1468 1472 1470 1471 1476 1477

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1475 1465	3	100	405	20	2x ø 16 15'	2x ø 10 15'
1478 1466	2	72	405	25	2x ø 12 15'	2x ø 10 20'
1467 1469	3	535	405	20	2x ø 16 15'	2x ø 10 15'
1467 1475	3	174	405	20	2x ø 16 15'	2x ø 10 15'
1468 1472	2	535	405	25	2x ø 12 15'	2x ø 10 20'
1468 1478	2	174	405	25	2x ø 12 15'	2x ø 10 20'
1470 1469	1	154	405	30	2x ø 20 15'	2x ø 14 15'
1472 1471	1	154	405	30	2x ø 20 15'	2x ø 14 15'
1476 1475	3	90	405	20	2x ø 12 15'	2x ø 10 20'
1478 1477	3	90	405	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	3inv.	-59094.5	-915884.8	-833744.9	0.23
Som.	3	-32307.2	-626586.7	-563227.9	0.16

- Verifiche a taglio dei diaframmi

Diaframma	B	H	Comb.	V _{dc}	alpha	V _{Ed}	N _{Ed}	M _{Ed}	V _{Rcd}	V _{Rds}	V _{Rds,scorrimento}	V _{s/}
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COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	[m]	[m]	critica	[kg]	[kg]	[kg]	[kgm]	[kg]	[kg]	[kg]	[kg]	V _R
1478-1477	0.90	4.05	1	3417.9	1.50	5126.8	0.0	-0.0	113730.9	27673.6	0.0	0.19
1476-1475	0.90	4.05	1	4087.7	1.50	6131.5	0.0	-0.0	113730.9	27673.6	0.0	0.22
1472-1471	1.54	4.05	1	61851.2	1.50	92776.8	0.0	-0.0	295112.4	125105.8	0.0	0.74
1470-1469	1.54	4.05	1	64119.2	1.50	96178.8	0.0	-0.0	296092.3	125521.2	0.0	0.77
1472-1468-1478-1466	7.81	4.05	1	124953.7	1.50	187430.6	0.0	0.0	1270483.9	247312.1	0.0	0.76
1469-1467-1475-1465	8.09	4.05	1	154235.3	1.50	231353.0	0.0	0.0	1052990.1	341624.8	0.0	0.68

**- NUCLEO 1575 1565 1578 1566 1567 1569 1568 1572 1570 1571 1576 1577 / Nodi: 1575 1565 1578 1566 1567 1569 1568
1572 1570 1571 1576 1577**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1575 1565	3	100	130	20	2x ø 12 15'	2x ø 10 20'
1578 1566	2	72	130	25	2x ø 12 15'	2x ø 10 20'
1567 1569	3	535	130	20	2x ø 12 15'	2x ø 10 20'
1567 1575	3	174	130	20	2x ø 12 15'	2x ø 10 20'
1568 1572	2	535	130	25	2x ø 12 15'	2x ø 10 20'
1568 1578	2	174	130	25	2x ø 12 15'	2x ø 10 20'
1569 1570	1	154	130	30	2x ø 20 15'	2x ø 14 15'
1572 1571	1	154	130	30	2x ø 20 15'	2x ø 14 15'
1576 1575	3	90	130	20	2x ø 12 15'	2x ø 10 20'
1578 1577	3	90	130	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
Base	3inv.	-36205.7	-626586.7	-563227.9	0.16
Som.	3	-17638.1	-533725.7	-476395.4	0.14

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1578-1577	0.90	1.30	1	3417.9	1.50	5126.8	0.0	-0.0	113730.9	27673.6	0.0	0.19
1576-1575	0.90	1.30	1	4087.7	1.50	6131.5	0.0	-0.0	113730.9	27673.6	0.0	0.22
1572-1571	1.54	1.30	1	52623.7	1.50	78935.5	0.0	-0.0	295112.4	125105.8	0.0	0.63
1569-1570	1.54	1.30	1	54594.8	1.50	81892.2	0.0	0.0	296092.3	125521.2	0.0	0.65
1572-1568-1578-1566	7.81	1.30	1	93543.7	1.50	140315.6	0.0	0.0	1270483.9	247312.1	0.0	0.57
1569-1567-1575-1565	8.09	1.30	1	128282.1	1.50	192423.2	0.0	0.0	1052990.1	256218.6	0.0	0.75

**- NUCLEO 1775 1765 1778 1766 1769 1867 1768 1772 1770 1771 1776 1777 / Nodi: 1775 1765 1778 1766 1769 1867 1768
1772 1770 1771 1776 1777**

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1775 1765	3	100	140	20	2x ø 12 15'	2x ø 10 20'
1778 1766	2	72	140	25	2x ø 12 15'	2x ø 10 20'
1769 1867	3	535	140	20	2x ø 12 15'	2x ø 10 20'
1867 1775	3	174	140	20	2x ø 12 15'	2x ø 10 20'
1768 1772	2	535	140	25	2x ø 12 15'	2x ø 10 20'
1768 1778	2	174	140	25	2x ø 12 15'	2x ø 10 20'
1770 1769	1	154	140	30	2x ø 20 15'	2x ø 14 15'
1772 1771	1	154	140	30	2x ø 20 15'	2x ø 14 15'
1776 1775	3	90	140	20	2x ø 12 15'	2x ø 10 20'
1778 1777	3	90	140	20	2x ø 12 15'	2x ø 10 20'

S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr
--------	-------	-----------	-------------	-------------	-------

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Base	3inv.	-26001.7	-533725.7	-476395.4	0.14
Som.	3	-16186.1	-433720.8	-382882.8	0.12

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V _{dc} [kg]	alpha	V _{Ed} [kg]	N _{Ed} [kg]	M _{Ed} [kgm]	V _{Rcd} [kg]	V _{Rds} [kg]	V _{Rds,scorrimento} [kg]	V _s / V _R
1778-1777	0.90	1.40	1	2181.4	1.50	3272.1	0.0	-0.0	113730.9	27673.6	0.0	0.12
1776-1775	0.90	1.40	1	2484.2	1.50	3726.3	0.0	-0.0	113730.9	27673.6	0.0	0.13
1772-1771	1.54	1.40	1	49661.8	1.50	74492.7	0.0	-0.0	295112.4	125105.8	0.0	0.60
1770-1769	1.54	1.40	1	51537.6	1.50	77306.4	0.0	-0.0	296092.3	125521.2	0.0	0.62
1772-1768-1778-1766	7.81	1.40	1	83461.5	1.50	125192.3	0.0	0.0	1270483.9	247312.1	0.0	0.51
1769-1867-1775-1765	8.09	1.40	1	119951.5	1.50	179927.3	0.0	0.0	1052990.1	256218.6	0.0	0.70

- NUCLEO 1875 1865 1878 1866 1869 1767 1868 1872 1870 1871 1876 1877 / Nodi: 1875 1865 1878 1866 1869 1767 1868

1872 1870 1871 1876 1877

- Armature Nucleo

Nodi	Sezione Numero	B [cm]	H [cm]	Spessore [cm]	Armatura Verticale	Armatura Orizzontale
1875 1865	3	100	135	20	2x ø 12 15'	2x ø 10 20'
1878 1866	2	72	135	25	2x ø 12 15'	2x ø 10 20'
1869 1767	3	535	135	20	2x ø 12 15'	2x ø 10 20'
1767 1875	3	174	135	20	2x ø 12 15'	2x ø 10 20'
1868 1872	2	535	135	25	2x ø 12 15'	2x ø 10 20'
1868 1878	2	174	135	25	2x ø 12 15'	2x ø 10 20'
1870 1869	1	154	135	30	2x ø 20 15'	2x ø 14 15'
1872 1871	1	154	135	30	2x ø 20 15'	2x ø 14 15'

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

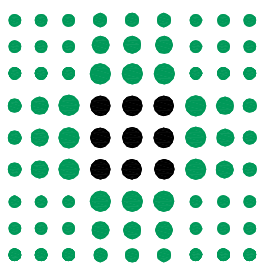
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1876 1875	3	90	135	20	2x ø 12 15'	2x ø 10 20'
1878 1877	3	90	135	20	2x ø 12 15'	2x ø 10 20'
S.L.U.	Comb.	N [kg]	Mx [kgm]	My [kgm]	Sd/Sr	
Base	3inv.	-16018.9	-433720.8	-382882.8	0.12	
Som.	3	12453.0	-337288.8	-292711.1	0.10	

- Verifiche a taglio dei diaframmi

Diaframma	B [m]	H [m]	Comb. critica	V_{dc} [kg]	alpha	V_{Ed} [kg]	N_{Ed} [kg]	M_{Ed} [kgm]	V_{Rcd} [kg]	V_{Rds} [kg]	V_{Rds,scorrimento} [kg]	V_s/ V_R
1878-1877	0.90	1.35	1	1967.0	1.50	2950.5	0.0	-0.0	113730.9	27673.6	0.0	0.11
1876-1875	0.90	1.35	1	2183.7	1.50	3275.5	0.0	-0.0	113730.9	27673.6	0.0	0.12
1872-1871	1.54	1.35	1	46472.0	1.50	69708.0	0.0	-0.0	295112.4	125105.8	0.0	0.56
1870-1869	1.54	1.35	1	48245.2	1.50	72367.8	0.0	-0.0	296092.3	125521.2	0.0	0.58
1872-1868-1878-1866	7.81	1.35	1	72603.7	1.50	108905.5	0.0	0.0	1270483.9	247312.1	0.0	0.44
1869-1767-1875-1865	8.09	1.35	1	110980.0	1.50	166470.0	0.0	0.0	1052990.1	256218.6	0.0	0.65



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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 10
PROGETTO E VERIFICA COPERTURA METALLICA**

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RS. 11

SCALA

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IL DIRETTORE DEL S.A.T.
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geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

ILLUSTRAZIONE SINTETICA DEGLI ELEMENTI ESSENZIALI DEL PROGETTO STRUTTURALE

- a) La copertura metallica è ancorata a pilastri in c.a. emergenti dall'ultimo solaio del fabbricato in c.a.p. ; si rimanda alla relazione di calcolo relativa a tale struttura per la descrizione del contesto edilizio e delle caratteristiche geologiche, morfologiche e idrogeologiche del sito in oggetto.
- b) La copertura è suddivisa in due blocchi separati da un giunto strutturale; il primo lotto ha dimensioni in asse di 16.98x20.23m ed il secondo di 16.98x36.26m.; ciascuno blocco trasferisce le azioni verticali ed orizzontali rispettivamente ai pilastri in cemento ed ai setti in cemento di estremità. La struttura è costituita da una serie di travi ad arco in IPE240, collegate da una orditura di controventi e puntoni, che sostengono, tramite arcarecci una semplice lamiera grecata. L'arco costituente la trave principale della copertura lavora come una trave continua su 4 appoggi in modo da eliminare le azioni spingenti: il primo appoggio è una cerniera mentre gli altri tre sono carrelli. La destinazione d'uso prevista per i locali sottostanti è quella di alloggiamento di impianti tecnologici a servizio dell'Ospedale.
- c) Le normative tecniche utilizzate sono le NTC2008; come riferimento per il calcolo dei coefficienti di forma relativi all'azione del vento in copertura sono state utilizzate le CNR DT207-2008.
- d) La funzione di ospedale induce ad optare nel calcolo agli stati limite per una classe d'uso IV (par.2.4.2 DM 2008) ed una vita nominale VN pari a 50 anni (par.2.4.1 DM 2008).

Vita nominale:	$V_N = 50$ anni
Classe d'uso:	IV Funz. pubbl. importanti
Coefficiente d'uso:	$C_U = 2.0$
Periodo di riferimento per l'azione sismica:	$V_R = 100$ anni
Categoria del sottosuolo	C
Zona sismica	3
Via Don Tincati 5, Fidenza (PR)	
Latitudine : 44.8471N	
Longitudine: 10.0413 E	
Altitudine s.l.m.: 75,0 m	

Le azioni considerate sulla costruzione sono quelle di carichi permanenti portati (lamiera di copertura), neve e vento. L'effetto delle variazioni termiche viene trascurato in seguito all'utilizzo di uno schema statico che evita la nascita di significativi stati coattivi e consente la libera deformazione della struttura.

- e) I materiali utilizzati sono acciaio S235 per arcarecci e sistema di controventamento, S275 per le travi principali e S355 per i tirafondi.
- f) La classe di duttilità scelta è $q=1$. La struttura è quindi calcolata con riferimento ad un comportamento puramente elastico. In particolare sfruttando la formula 7.2.2. della NTC2008 si è valutata la massima accelerazione cui possono essere sottoposte le strutture metalliche in esame.

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

g) Le combinazioni allo SLU sono quella fondamentale

$$\gamma_{G1} \cdot G_1 + \gamma_{G2} \cdot G_2 + \gamma_P \cdot P + \gamma_{Q1} \cdot Q_{k1} + \gamma_{Q2} \cdot \psi_{02} \cdot Q_{k2} + \gamma_{Q3} \cdot \psi_{03} \cdot Q_{k3} + \dots \quad (2.5.1)$$

e quella quella sismica

$$E + G_1 + G_2 + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \dots \quad (2.5.5)$$

Le combinazioni allo SLE sono quella rara

$$G_1 \mid G_2 \mid P \mid Q_{k1} \mid \psi_{02} \cdot Q_{k2} \mid \psi_{03} \cdot Q_{k3} \mid \dots \quad (2.5.2)$$

e quella quella sismica

$$E + G_1 + G_2 + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \dots \quad (2.5.5)$$

I valori dei coefficienti parziali per le azioni adottati sono quelli evidenziati in tabella

Tabella 2.6.I – Coefficienti parziali per le azioni o per l'effetto delle azioni nelle verifiche SLU

		Coefficiente γ_F	EQU	A1 STR	A2 GEO
Carichi permanenti	favorevoli	γ_{G1}	0,9	1,0	1,0
	sfavorevoli		1,1	1,3	1,0
Carichi permanenti non strutturali ⁽¹⁾	favorevoli	γ_{G2}	0,0	0,0	0,0
	sfavorevoli		1,5	1,5	1,3
Carichi variabili	favorevoli	γ_{Qi}	0,0	0,0	0,0
	sfavorevoli		1,5	1,5	1,3

I valori dei coefficienti di combinazione adottati sono quelli evidenziati in tabella

Tabella 2.5.I – Valori dei coefficienti di combinazione

Categoria/Azione variabile	ψ_{0j}	ψ_{1j}	ψ_{2j}
Categoria A Ambienti ad uso residenziale	0,7	0,5	0,3
Categoria B Uffici	0,7	0,5	0,3
Categoria C Ambienti suscettibili di affollamento	0,7	0,7	0,6
Categoria D Ambienti ad uso commerciale	0,7	0,7	0,6
Categoria E Biblioteche, archivi, magazzini e ambienti ad uso industriale	1,0	0,9	0,8
Categoria F Rimesse e parcheggi (per autoveicoli di peso ≤ 30 kN)	0,7	0,7	0,6
Categoria G Rimesse e parcheggi (per autoveicoli di peso > 30 kN)	0,7	0,5	0,3
Categoria H Coperture	0,0	0,0	0,0
Vento	0,6	0,2	0,0
Neve (a quota ≤ 1000 m s.l.m.)	0,5	0,2	0,0
Neve (a quota > 1000 m s.l.m.)	0,7	0,5	0,2
Variazioni termiche	0,6	0,5	0,0

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

A consuntivo le combinazioni di carico significative allo SLU per i vari elementi strutturali sono risultate essere le seguenti ossia quelle che prevedono il massimo carico di neve uniforme (dimensionante per la trave IPE240), il massimo carico di neve accumulata (dimensionante per gli arcarecci) ed il sisma in direzione longitudinale (dimensionante per il sistema di controventamento).

CASES	13	15	26
	Comb. SLU A1 13	Comb. SLU A1 15	Comb.SLV sism. 26
1: pp	1.3	1.3	1
2: g	1.3	1.3	1
3: qs_1		1.5	
4: qs_2	1.5		
5: Vento +X			
6: Vento -X			
7: SLV X			0.3
8: SLV Z			1
9: SLD X			
10: SLD Z			

Parimenti le combinazioni di carico che danno gli spostamenti verticali maggiori sono

CASES	41	42
	Comb. SLE(rara) 41	Comb. SLE(rara) 42
1: pp	1	1
2: g	1	1
3: qs_1		1
4: qs_2	1	
5: Vento +X		
6: Vento -X		
7: SLV X		
8: SLV Z		
9: SLD X		
10: SLD Z		

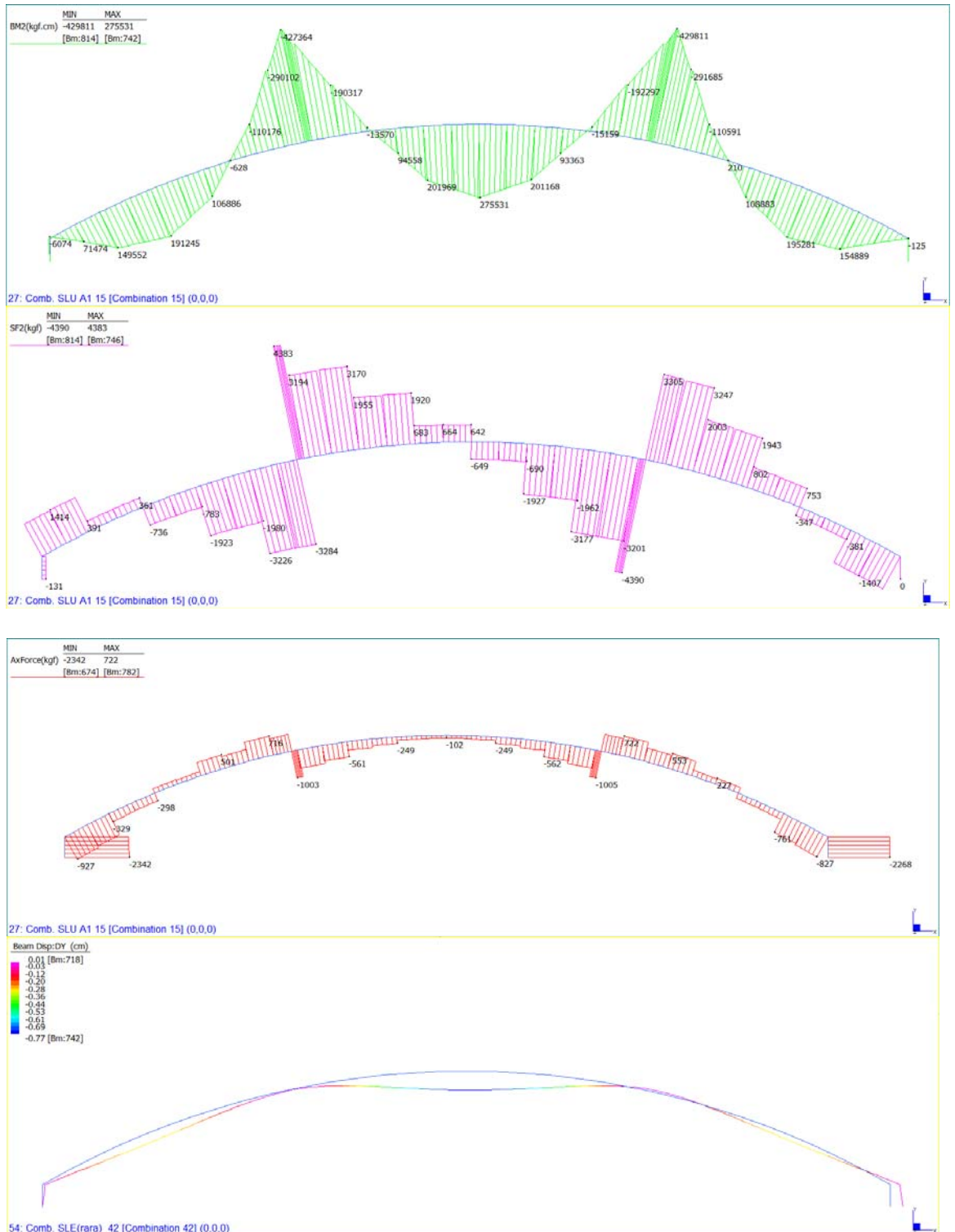
Per il dettaglio delle altre combinazioni di carico si veda il § 2.7.6.

- h) La analisi condotta è di tipo statico lineare in quanto per tenere in conto sulla copertura dell'effetto di amplificazione dinamica dovuto alle oscillazioni della struttura in cemento sottostante si è deciso di sfruttare la formula 7.2.2 delle NTC2008 trattando, ragionevolmente, le strutture metalliche di copertura come elementi strutturali secondari rispetto alle opere in cemento armato. In tal modo si è potuto sviluppare un modello di calcolo "semplice" della sola struttura metallica che risulta essere di più facile lettura e si è altresì garantiti di tenere in considerazione delle massime accelerazioni possibili alla quota di installazione della stessa.
- i) In presenza di azione sismica sono stati considerati gli SLV e le relative verifiche solo in termini di resistenza in quanto utilizzando un fattore $q=1$ non si è sfruttata la duttilità del materiale e si è preferito mantenere la struttura in campo elastico; le verifiche allo SLD sono condotte in termini di contenimento del danno agli elementi non strutturali; in particolare gli spostamenti ottenuti sono compatibili con la deformabilità della lamiera metallica di copertura. I risultati relativi alle verifiche SLO non sono esplicitamente riportati in quanto non si prevede la posa di componenti tecnologico-impiantistiche, controsoffitti e/o tramezzature direttamente collegate alla copertura metallica la quale è unicamente deputata alla funzione di protezione dagli agenti atmosferici. A titolo di esempio, gli spostamenti massimi della copertura per il sisma allo SLO

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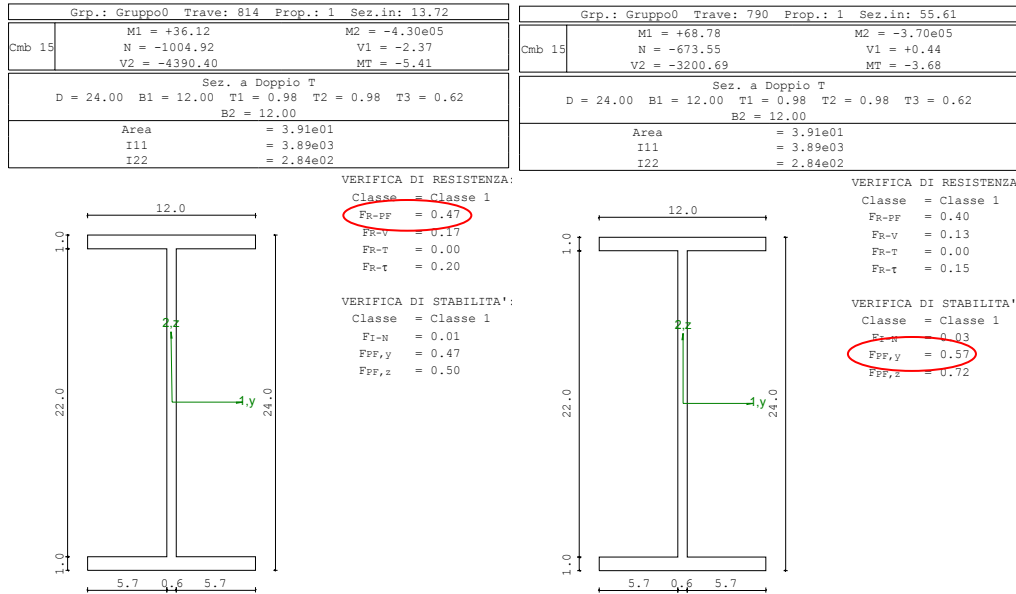
sono pari a circa 0.2 cm e risultano comunque ampiamente compatibili con la operatività della costruzione.

j) Di seguito si riporta lo stato di sollecitazione della trave principale nella combinazione SLU15 e lo stato deformativo nella comb. SLE42.



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Di seguito la sintesi delle verifiche di resistenza e stabilità per trave principale IPE240.



A seguito del riscontro eseguito con calcoli effettuati con schemi semplificati, si assevera l'attendibilità dei risultati del programma di calcolo per quanto riguarda lo stato deformativo e di sollecitazione, nonché le verifiche strutturali.

- k) Il calcolo strutturale è stato effettuato mediante elaboratore, utilizzando il codice di calcolo Straus7 realizzato dalla australiana Strand7 Pty Ltd e distribuito in Italia dalla HSH srl di Padova. Il software solutore è corredato di esempi di validazione che sono stati esaminati dallo scrivente.

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INDICE DEGLI ELABORATI

In generale, il progetto esecutivo riguardante le strutture è composto da più "fascicoli" ciascuno contenente uno o più elaborati. Le pagine e/o le tavole che costituiscono ciascun fascicolo devono essere numerate. L'indice elenca tutti gli elaborati presenti (e relative parti/paragrafi, secondo la numerazione di seguito riportata, nonché gli eventuali allegati) indicando, per ciascuno di essi, il fascicolo che lo contiene.

Fascicolo	Allegato	Numero
Progetto esecutivo		683-03r01
	Relazione geologica, geotecnica e pericolosità di base	
	Piano di manutenzione della parte strutturale dell'opera	683-03r03 Piano di manutenzione
	Relazioni sui materiali	683-03r04 Relazione sui materiali
Disegni esecutivi elevazione		683-03-01P-03P

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1. DOCUMENTI DI SINTESI

1.1.SINTESI DEL PERCORSO PROGETTUALE

Il presente elaborato contiene una sintesi delle principali fasi conoscitive, valutazioni e decisioni che hanno caratterizzato il percorso progettuale. Esso ha lo scopo di agevolare l'interpretazione e la verifica del progetto, sia ad opera delle figure preposte al controllo, sia a soggetti diversi dal progettista, che intervengono nel processo costruttivo (D.L., collaudatore, costruttore, etc.) e nell'uso della costruzione (committente, gestore, utilizzatore, etc.).

Il sottoscritto ha ricevuto l'incarico dalla committenza di redigere il progetto strutturale della copertura in carpenteria metallica relativa all'ampliamento dell'Ospedale di Fidenza.

In analogia a quanto fatto per i fabbricati adiacenti esistenti si è optato per una copertura cilindrica in acciaio impostata sui pilastri in c.a. emergenti dal 5° solaio (destinato ad alloggiare gli impianti) di una struttura multipiano in c.a.p...

L'arco costituente la trave principale della copertura lavora come una trave continua su 4 appoggi in modo da eliminare le azioni spingenti: il primo appoggio è una cerniera mentre gli altri tre sono carrelli.

La stabilità della struttura in senso trasversale è garantita da un sistema di controventamento di falda costituito da controventi a croce di Sant'Andrea in tondo con tenditore e puntoni in tubo tondo che si vanno a scaricare su setti di controventamento in c.a..

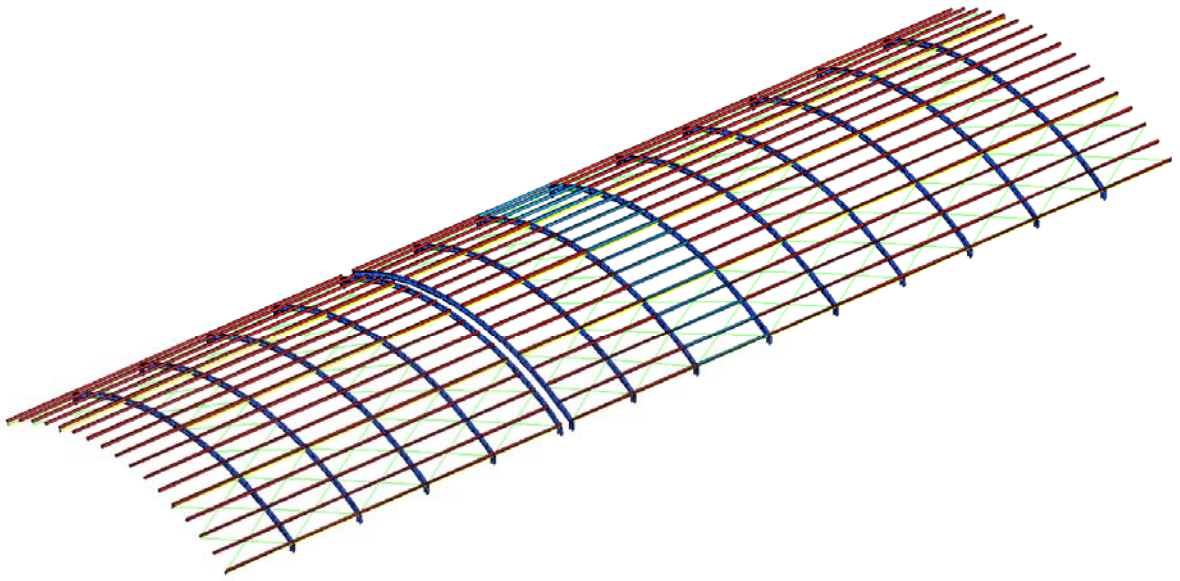
Da un punto di vista computazionale sono stati sviluppati diversi modelli in modo da garantirsi nei confronti della massime azioni agenti sulla copertura; per tenere in conto sulla copertura dell'effetto di amplificazione dinamica dovuto alle oscillazioni della struttura in cemento sottostante (senza dover necessariamente sviluppare un modello di calcolo globale, peraltro già utilizzato per la verifica della struttura in c.a.) si è deciso di sfruttare la formula 7.2.2 delle NTC2008 trattando, ragionevolmente, le strutture metalliche di copertura come elementi strutturali secondari rispetto alle opere in cemento armato.

In tal modo si è potuto sviluppare un modello di calcolo "semplice" della sola struttura metallica che risulta essere di più facile lettura e si è altresì garantiti di tenere in considerazione delle massime accelerazioni possibili alla quota di installazione della stessa.

La copertura dell'ampliamento è suddivisa in due blocchi separati da un giunto strutturale; il primo lotto ha dimensioni in asse di 16.98x20.23m ed il secondo di 16.98x36.26m.; ciascuno blocco trasferisce le azioni verticali ed orizzontali rispettivamente ai pilastri in cemento ed ai setti in cemento di estremità.

La struttura sorge in zona sismica 3.

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Modello di calcolo struttura

1.2. CONDIZIONI D'USO E LIVELLI DI SICUREZZA DELLA COSTRUZIONE

Nella presente relazione vengono riportate, mediante schemi grafici di sintesi, le informazioni relative all'uso della costruzione ed alle azioni naturali considerate su di essa, dando particolare rilievo, nel caso delle costruzioni esistenti non adeguate, alle eventuali limitazioni dovute a carenze strutturali non risolte e/o non risolvibili con l'intervento.

La costruzione è di classe IV con vita nominale pari a 50 anni.

Gli effetti della neve in copertura saranno trattati nel relativo paragrafo tenendo in conto la possibilità di accumulo in caso di vento.

L'azione del vento è valutata sia con riferimento alle NTC2008 che alle CNR-DT 207-2008.

Per quanto riguarda, invece, gli effetti del gradiente termico, essi sono trascurati in quanto la copertura è vincolata in modo tale da non indurre stati di coazione sulle strutture principali.

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2. RELAZIONE DI CALCOLO STRUTTURALE

Si intendono compresi in questo elaborato la relazione tecnica e il fascicolo dei calcoli delle strutture portanti, sia in fondazione che in elevazione, previsti dall'art. 93, comma 3 del D.P.R. n. 380/2001, da redigersi secondo l'articolazione qui prevista. La relazione di calcolo strutturale deve essere costituita dalle parti con numerazione da 2.1 a 2.11, come di seguito illustrate.

2.1.PREMESSA

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

Il progetto esecutivo strutturale verrà presentato contestualmente alla presentazione di quello architettonico.

La funzione di ospedale induce ad optare nel calcolo agli stati limite per una classe d'uso IV (par.2.4.2 DM 2008) ed una vita nominale VN pari a 50 anni (par.2.4.1 DM 2008).

Vita nominale:	$V_N = 50$ anni
Classe d'uso:	IV Funzioni pubbliche importanti
Coefficiente d'uso:	$C_U = 2.0$
Periodo di riferimento per l'azione sismica:	$V_R = 100$ anni

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2.2.ES ANALISI STORICO-CRITICA ED ESITO DEL RILIEVO GEOMETRICO-STRUTTURALE

In coerenza con il paragrafo 8.2 delle NTC-08, l'analisi storico-critica ed il rilievo geometrico - strutturale devono evidenziare i seguenti aspetti: (a) la costruzione riflette lo stato delle conoscenze al tempo della sua realizzazione; (b) possono essere insiti e non palesi difetti di impostazione e di realizzazione; (c) la costruzione può essere stata soggetta ad azioni, anche eccezionali, i cui effetti non siano completamente manifesti; (d) le strutture possono presentare degrado e/o modificazioni significative rispetto alla situazione originaria.

2.2.1. ES ANALISI STORICO-CRITICA

Viene indicata la documentazione reperita e vengono esplicitate le informazioni desunte da ciascuno dei documenti esaminati per le finalità indicate al paragrafo 8.5.1 delle NTC-08.

Trattandosi di nuovo intervento, il paragrafo non è sviluppato.

2.2.2. ES ESITO DEL RILIEVO GEOMETRICO - STRUTTURALE

Vengono descritte le modalità con cui è stato effettuato il rilievo geometrico strutturale e gli esiti di quest'ultimo, anche con riferimenti espliciti e puntuali agli elaborati grafici che saranno riportati nella parte "4.1. Rilievo geometrico - strutturale". Il rilievo delle strutture deve essere eseguito e restituito secondo le modalità e con le finalità riportate nei paragrafi 8.5.2 e 8.7 delle NTC-08.

Trattandosi di nuovo intervento, il paragrafo non è sviluppato.

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2.3. DESCRIZIONE GENERALE DELL'OPERA E CRITERI GENERALI DI PROGETTAZIONE, ANALISI E VERIFICA

In questa parte vengono riportate tutte le informazioni e le considerazioni necessarie, ad un soggetto non coinvolto nella fase di progettazione strutturale, per la comprensione: della struttura, dei suoi sottosistemi e del loro comportamento statico (e dinamico, se pertinente); delle scelte progettuali e delle loro motivazioni; dei criteri e dei principali parametri che caratterizzano il dimensionamento, l'analisi e la verifica delle strutture; delle interazioni (vincoli subiti e vincoli imposti) con gli aspetti "non-strutturali" della costruzione; dei vincoli esecutivi; del processo realizzativo.

Le strutture saranno costituite da acciaio S275JR e S235JR zincato a caldo.

La trave principale è su 4 appoggi con campata centrale di 690 cm e campate laterali di 504 cm .

Le travi principali sono ad interasse praticamente costante di 4050 mm ad eccezione di alcuni interassi di luce poco inferiore ed una sola di luce 4390 per la quale sono stati adottati arcarecci in tubo 120x80x4mm anziché 120x80x3 mm come su tutto il resto della costruzione.

Le travi sono profilati del tipo IPE240; l'orditura secondaria di copertura è costituita da arcarecci in profili tubolari formati a freddo appoggiati sulle travi principali; la controventatura di falda è realizzata mediante croci di S.Andrea in tondo con tenditore; il controventamento di falda coinvolge solo in parte gli arcarecci essendo presenti opportune strutture (tubo Ø88.9x4) svolgenti la funzione di puntoni/tiranti di falda. La stabilità dei portali nel loro piano è affidata al comportamento flessionale delle colonne, considerate incastrate alla base. In direzione ortogonale e nelle testate sono disposti controventi metallici a croce di S.Andrea.

Il sito sorge in una zona caratterizzata da una sismicità bassa. La struttura sismo-resistente è costituita dalle travi ad arco nella direzione dei portali e da controventi a croce di Sant'Andrea e puntoni in quella ortogonale: essa è dimensionata assumendo un comportamento sismico NON DISSIPATIVO ($q=1$).

Le verifiche sono condotte secondo il metodo semiprobabilistico agli stati limite facendo riferimento al D.M. 14/01/2008 ed alle norme e circolari esplicative ad esso collegate. Alla presente sono allegati, quale parte integrante, i disegni di progetto della struttura.

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2.4. QUADRO NORMATIVO DI RIFERIMENTO ADOTTATO

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati e commentati come di seguito precisato.

2.4.1. NORME DI RIFERIMENTO COGENTI

Deve essere definito il quadro normativo tecnico, assunto quale riferimento cogente nello sviluppo della progettazione strutturale.

- D.M. 14 gennaio 2008
Nuove norme tecniche per le costruzioni.

- CIRCOLARE 2 febbraio 2009, n. 617
Istruzioni per l'applicazione delle 'Nuove norme tecniche per le costruzioni' di cui al decreto ministeriale 14 gennaio 2008. (GU n. 47 del 26-2-2009 - Suppl. Ordinario n.27)

2.4.2. ALTRE NORME E DOCUMENTI TECNICI INTEGRATIVI

Qualora si faccia uso di norme e/o documenti tecnici ad integrazione del quadro normativo assunto quale cogente, vengono indicati gli estremi esatti del/i documento/i, gli aspetti per i quali viene impiegato nel progetto in esame e le motivazioni del suo uso.

Non vengono utilizzate norme ad integrazione delle suddette. Le sollecitazioni di calcolo e le verifiche degli elementi strutturali trovano riscontro nei paragrafi di riferimento delle medesime.

2.5. ES LIVELLI DI CONOSCENZA E FATTORI DI CONFIDENZA

Nella presente parte vengono descritti i criteri con cui si sono definiti i livelli di conoscenza della struttura esistente, definiti i corrispondenti fattori di confidenza e sintetizzate le proprietà meccaniche dei materiali esistenti assunte alla base del calcolo.

Trattandosi di nuovo intervento, il paragrafo non è sviluppato.

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2.6. AZIONI DI PROGETTO SULLA COSTRUZIONE

Nella presente parte sono definite le azioni sulla costruzione in relazione alle prescrizioni normative ed alle reali condizioni d'uso previste e/o prescritte.

Località: FIDENZA
Provincia: PARMA
Regione: EMILIA-ROMAGNA
Coordinate GPS:
Latitudine : 44.8471N
Longitudine: 10.0413 E
Altitudine s.l.m.: 75,0 m
Via don Tincati 5, Fidenza (PR)

2.6.1. CARICHI PERMANENTI

Il peso proprio degli elementi strutturali viene conteggiato automaticamente dal programma.

Pannelli di copertura Coverib 8/10

$$g = 20 \text{ daN/m}^2$$

2.6.2. CARICO NEVE

Zona Neve = I Mediterranea

Ce (coeff. di esposizione al vento) = 1,00

Valore caratteristico del carico al suolo ($q_{sk} C_e$) = 150 daN/mq

Copertura a falda cilindrica:

L = 17,0m

h = 2,1m

per $\alpha < 60^\circ$

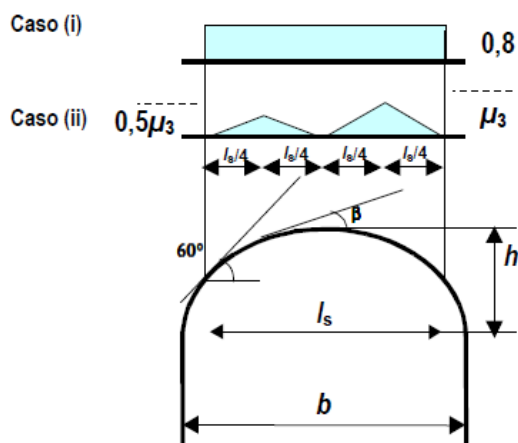
$\mu_1 = 0,80 \Rightarrow q = 120 \text{ daN/mq}$

In presenza di vento

$\mu_3 = 0,2 + 10 \cdot 2,1 / 17 = 1,44 \Rightarrow q = 216 \text{ daN/mq}$

$0,5 \cdot \mu_3 = 0,72 \Rightarrow q = 108 \text{ daN/mq}$

Schema di carico:



Su richiesta del Committente ed in analogia a quanto fatto per le altre coperture esistenti si adotta un carico uniforme sulla copertura pari a $150 \text{ daN/mq} > 120 \text{ daN/mq}$ prescritti dalla Norma.

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2.6.3. CARICO VENTO

Zona vento = 2

($V_{b.o} = 25$ m/s; $A_o = 750$ m; $K_a = 0,015$ 1/s)

Classe di rugosità del terreno: C

[Aree con ostacoli diffusi (alberi, case, muri, recinzioni...); aree con rugosità non riconducibile alle classi A, B, D]

Categoria esposizione: tipo III

($K_r = 0,20$; $Z_o = 0,10$ m; $Z_{min} = 5$ m)

Velocità di riferimento = 25,00 m/s

Pressione cinetica di riferimento (q_b) = 39 daN/mq

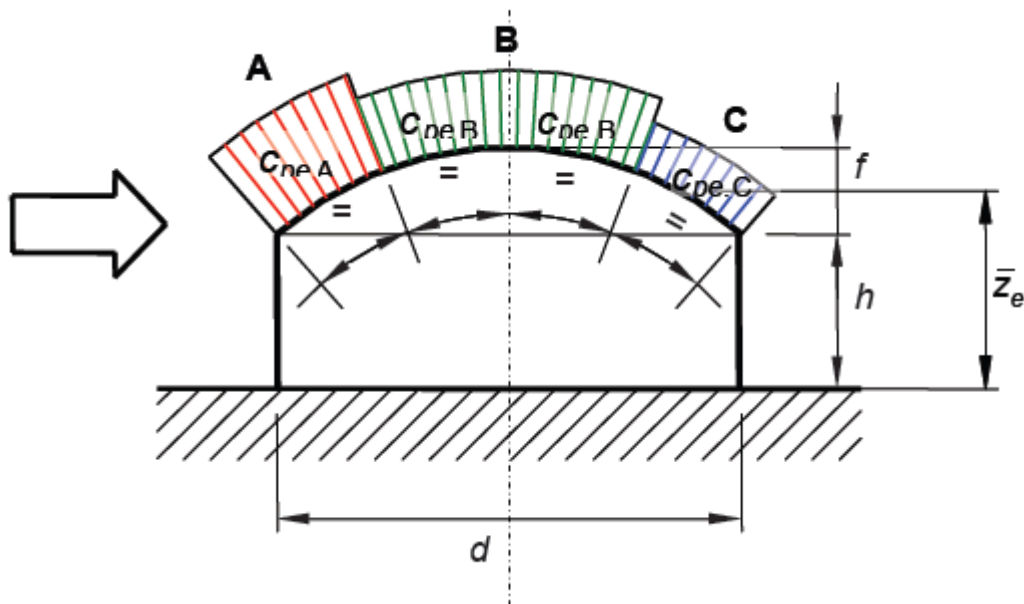
Coefficiente di esposizione (C_e) = 2,55

Coefficiente di esposizione topografica (C_t) = 1,00

Altezza di riferimento dell'edificio = 18,5 m

Pressione del vento ($p = q_b C_e C_d$) = 100 daN/mq

Per il calcolo del coefficiente di forma su coperture ad arco si fa riferimento alla CNR-DT 207-2008 al §G.2.3.6



La quota di riferimento per le coperture a volta cilindrica è pari a

$$z_e = h + f/2 = 17.35 + 2.1/2 = 18.4$$

Nel caso di vento perpendicolare alle generatrici della copertura, la copertura è suddivisa in quattro zone distinte di uguale sviluppo:

- nella prima zona (A, sopravento) si adottano i coefficienti di pressione $C_{pe,A}$;
- nelle due zone intermedie (B) si adottano i coefficienti di pressione $C_{pe,B}$;
- nell'ultima zona (C, sottovento) si adottano i coefficienti di pressione $C_{pe,C}$.

$$h/d = 17.35/17 \cong 1$$

$$f/d = 2.1/17 = 0.124$$

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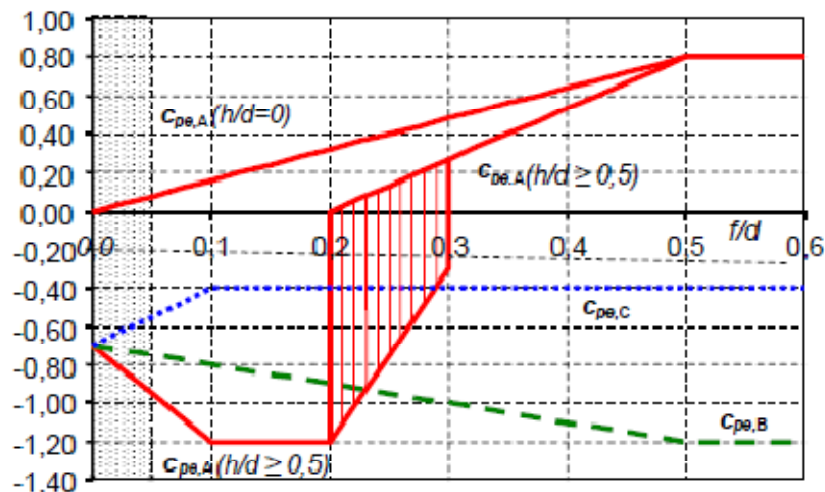


Figura G.16 – Coefficienti di pressione per coperture a volta cilindrica.

Coefficiente di forma: $C_{pe,A} = -1.2$ (zona sopravento)
 $C_{pe,B} = -0.8$ (zona intermedia)
 $C_{pe,C} = -0.4$ (zona sottovento)

$C_{pi} = -0.2$

Carico totale vento: $q_{w,A} = -140 \text{ daN/m}^2$ (zona sopravento)
 $q_{w,B} = -100 \text{ daN/m}^2$ (zona intermedia)
 $q_{w,C} = -80 \text{ daN/m}^2$ (zona sottovento)

2.6.4. AZIONE SISMICA

Categoria del suolo di fondazione: C
 Categoria topografica: T1
 Fattore di struttura: $q = 1.0$

Il sisma verticale non è considerato in quanto non ricorrono situazioni d'interesse.

I sovraccarichi di progetto hanno tutti coefficiente di combinazione per le situazioni di progetto quasi permanenti nullo ($\psi_2 = 0$), per cui le uniche masse eccitate dall'azione sismica risultano essere quelle dovute ai carichi permanenti.

Questi ultimi sono definiti in maniera compiuta, per cui perde di significato l'assunzione di un'eccentricità accidentale pari al 5%. Nel calcolo il baricentro delle masse è considerato nella sua reale posizione.

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FASE 1. INDIVIDUAZIONE DELLA PERICOLOSITÀ DEL SITO

Ricerca per coordinate

Ricerca per comune

LONGITUDINE LATITUDINE

REGIONE: PROVINCIA: COMUNE:

Elaborazioni grafiche


Grafici spettri di risposta

Variabilità dei parametri

Elaborazioni numeriche

Tabella parametri

Reticolo di riferimento



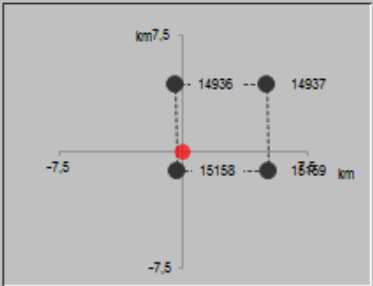
Controllo sul reticolo

- Sito esterno al reticolo
- Interpolazione su 3 nodi
- Interpolazione corretta

Interpolazione

La "Ricerca per comune" utilizza le ... coordinate ISTAT del comune per identificare il sito. Si sottolinea che ... all'interno del territorio comunale le azioni sismiche possono essere significativamente diverse da quelle così individuate e si consiglia, quindi, la "Ricerca per coordinate".

Nodi del reticolo intorno al sito



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FASE 1

FASE 2

FASE 3

FASE 2. SCELTA DELLA STRATEGIA DI PROGETTAZIONE

Vita nominale della costruzione (in anni) - V_N info

Coefficiente d'uso della costruzione - C_U info

Valori di progetto

Periodo di riferimento per la costruzione (in anni) - V_R info

Periodi di ritorno per la definizione dell'azione sismica (in anni) - T_R info

Stati limite di esercizio - SLE	<ul style="list-style-type: none"> SLO - $P_{VR} = 81\%$ SLD - $P_{VR} = 63\%$ 	<input type="text" value="60"/> <input type="text" value="101"/>	
Stati limite ultimi - SLU	<ul style="list-style-type: none"> SLV - $P_{VR} = 10\%$ SLC - $P_{VR} = 5\%$ 	<input type="text" value="949"/> <input type="text" value="1950"/>	

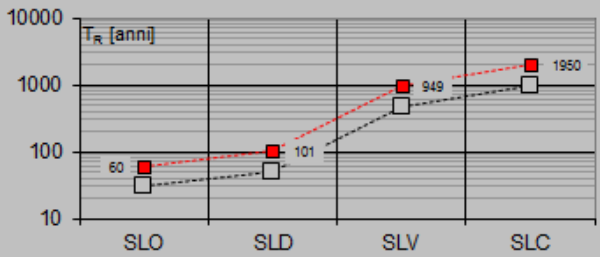
Elaborazioni

Grafici parametri azione

Grafici spettri di risposta

Tabella parametri azione

Strategia di progettazione



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FASE 1

FASE 2

FASE 3

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

FASE 3. DETERMINAZIONE DELL'AZIONE DI PROGETTO

Stato Limite
 Stato Limite considerato **SLV** info

Risposta sismica locale
 Categoria di sottosuolo **C** info $S_S = 1,419$ $C_C = 1,593$ info
 Categoria topografica **T1** info $h/H = 1,000$ $S_T = 1,000$ info
(h=quota sito, H=altezza rilievo topografico)

Compon. orizzontale
 Spettro di progetto elastico (SLE) Smorzamento ξ (%) **5** $\eta = 1,000$ info
 Spettro di progetto inelastico (SLU) Fattore q_0 **1** Regol. in altezza **si** info

Compon. verticale
 Spettro di progetto Fattore q **1,5** $\eta = 0,667$ info

Elaborazioni
 Grafici spettri di risposta ▶▶▶
 Parametri e punti spettri di risposta ▶▶▶

Spettri di risposta

— Spettro di progetto - componente orizzontale
 — Spettro di progetto - componente verticale
 — Spettro elastico di riferimento (Cat. A-T1, $\xi = 5\%$)

INTRO
FASE 1
FASE 2
FASE 3

STATO LIMITE	SLV
a_g	0,190 g
F_0	2,465
T_C	0,283 s
S_S	1,419
C_C	1,593
S_T	1,000
q	1,000

$S_a =$	0,90	accelerazione massima, adimensionalizzata rispetto a quella di gravità, che l'elemento strutturale subisce durante il sisma
$\alpha =$	0,19	rapporto tra l'accelerazione massima del terreno ag su sottosuolo tipo A nello stato limite in esame l'accelerazione di gravità g
$S =$	1,42	tiene conto della categoria di sottosuolo e delle condizioni topografiche
$Z =$	17 m	quota del baricentro dell'elemento non strutturale misurata a partire dal piano di fondazione
$H =$	17 m	l'altezza della costruzione misurata a partire dal piano di fondazione
$T_a =$	0,125 s	periodo fondamentale di vibrazione dell'elemento non strutturale
$T_1 =$	0,5 s	periodo fondamentale di vibrazione della costruzione nella direzione considerata

In definitiva gli effetti dell'azione sismica sulla copertura allo SLV sono determinati applicando una accelerazione orizzontale pari a 0.9g amplificata rispetto a quella che si otterrebbe considerando la analisi dinamica della copertura con lo spettro da normativa avente ordinata massima pari a 0.67g.

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FASE 3. DETERMINAZIONE DELL'AZIONE DI PROGETTO

Stato Limite
 Stato Limite considerato SLD info

Risposta sismica locale
 Categoria di sottosuolo C info $S_S =$ 1,500 $C_C =$ 1,632 info
 Categoria topografica T1 info $h/H =$ 1,000 $S_T =$ 1,000 info
(h=quota sito, H=altezza rilievo topografico)

Compon. orizzontale
 Spettro di progetto elastico (SLE) Smorzamento ξ (%) 5 $\eta =$ 1,000 info
 Spettro di progetto inelastico (SLU) Fattore q_0 1 Regol. in altezza si info

Compon. verticale
 Spettro di progetto Fattore q 1,5 $\eta =$ 0,667 info

Elaborazioni
 Grafici spettri di risposta ▶▶▶
 Parametri e punti spettri di risposta ▶▶▶

— Spettro di progetto - componente orizzontale

— Spettro di progetto - componente verticale

— Spettro elastico di riferimento (Cat. A-T1, $\xi = 5\%$)

Spettri di risposta

INTRO

FASE 1

FASE 2

FASE 3

Parametri indipendenti

STATO LIMITE	SLD
a_g	0,080 g
F_0	2,444
T_C^*	0,263 s
S_S	1,500
C_C	1,632
S_T	1,000
q	1,000

$S_a =$	0,40	accelerazione massima, adimensionalizzata rispetto a quella di gravità, che l'elemento strutturale subisce durante il sisma	
$\alpha =$	0,08	rapporto tra l'accelerazione massima del terreno a_g su sottosuolo tipo A nello stato limite in esame l'accelerazione di gravità g	
$S =$	1,5	tiene conto della categoria di sottosuolo e delle condizioni topografiche	
$Z =$	17 m	quota del baricentro dell'elemento non strutturale misurata a partire dal piano di fondazione	
$H =$	17 m	l'altezza della costruzione misurata a partire dal piano di fondazione	
$T_a =$	0,125 s	periodo fondamentale di vibrazione dell'elemento non strutturale	
$T_1 =$	0,5 s	periodo fondamentale di vibrazione della costruzione nella direzione considerata	

In definitiva gli effetti dell'azione sismica sulla copertura allo SLD sono determinati applicando una accelerazione orizzontale pari a 0.4g amplificata rispetto a quella che si otterrebbe considerando la analisi dinamica della copertura con lo spettro da normativa avente ordinata massima pari a 0.29g.

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FASE 3. DETERMINAZIONE DELL'AZIONE DI PROGETTO

Stato Limite
Stato Limite considerato **SLO** info

Risposta sismica locale
 Categoria di sottosuolo **C** info $S_S = 1.500$ $C_C = 1.647$ info
 Categoria topografica **T1** info $h/H = 1.000$ $S_T = 1.000$ info
(h=quota sito, H=altezza rilievo topografico)

Compon. orizzontale
 Spettro di progetto elastico (SLE) Smorzamento ξ (%) **5** $\eta = 1.000$ info
 Spettro di progetto inelastico (SLU) Fattore q_0 **1** Regol. in altezza **sì** info

Compon. verticale
 Spettro di progetto Fattore q **1.5** $\eta = 0.667$ info

Elaborazioni
 Grafici spettri di risposta
 Parametri e punti spettri di risposta

Spettri di risposta

— Spettro di progetto - componente orizzontale
 — Spettro di progetto - componente verticale
 — Spettro elastico di riferimento (Cat. A-T1, $\xi = 5\%$)

Legend: $S_{d,o}$ [g] (black), $S_{d,v}$ [g] (blue), S_e [g] (red)

Navigation: INTRO | FASE 1 | FASE 2 | **FASE 3**

Parametri indipendenti

STATO LIMITE	SLO
a_g	0.064 g
F_0	2.453
T_C^*	0.255 s
S_S	1.500
C_C	1.647
S_T	1.000
q	1.000

S_a	=	0.32	accelerazione massima, adimensionalizzata rispetto a quella di gravità, che l'elemento strutturale subisce durante il sisma
α	=	0.064	rapporto tra l'accelerazione massima del terreno ag su sottosuolo tipo A nello stato limite in esame l'accelerazione di gravità g
S	=	1.5	tiene conto della categoria di sottosuolo e delle condizioni topografiche
Z	=	17 m	quota del baricentro dell'elemento non strutturale misurata a partire dal piano di fondazione
H	=	17 m	l'altezza della costruzione misurata a partire dal piano di fondazione
T_a	=	0.125 s	periodo fondamentale di vibrazione dell'elemento non strutturale
T_1	=	0.5 s	periodo fondamentale di vibrazione della costruzione nella direzione considerata

In definitiva gli effetti dell'azione sismica sulla copertura allo SLO sono determinati applicando una accelerazione orizzontale pari a 0.32g amplificata rispetto a quella che si otterrebbe considerando la analisi dinamica della copertura con lo spettro da normativa avente ordinata massima pari a 0.23g.

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2.6.5. IMPERFEZIONI STRUTTURALI ED EFFETTI DEL SECOND'ORDINE

L'incidenza delle azioni verticali ed orizzontali agenti sulla struttura, valutata con riferimento all'unità di superficie, può essere stimata come segue:

$$V \sim pp + g \cong 40000 \text{ daN}$$

$$H \sim p_w = 7700 \text{ daN}$$

Essendo $H > 0.15 V$ non si tiene conto degli effetti del secondo ordine legati a eventuali difetti di verticalità della struttura in quanto già si tiene conto di forze orizzontali considerevoli.

2.6.6. AZIONI ECCEZIONALI

In considerazione della tipologia della struttura e della destinazione d'uso non sono previste azioni eccezionali di rilievo.

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2.7. MODELLI NUMERICI

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l'analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 delle NTC-08, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità.

2.7.1. METODOLOGIA DI MODELLAZIONE ED ANALISI

Viene definito e motivato il tipo di analisi condotta (statica o dinamica, lineare o non lineare per geometria e/o materiali, etc.) e se trattasi di un passo nell'ambito di più analisi concatenate. Vengono altresì evidenziate eventuali interazioni con altre unità strutturali ed esplicitate le modalità con cui tali interazioni sono considerate nelle analisi.

Il modello tridimensionale della struttura in oggetto rappresenta le effettive distribuzioni spaziali di massa, rigidità e resistenza.

Nella definizione del modello, gli elementi non strutturali quali i pannelli di copertura configurati attraverso l'inserimento di elementi load patch (puri ripartitori di carico verticale e orizzontale) sono rappresentati unicamente in termini di massa, senza considerare il loro contributo alla rigidità e alla resistenza del sistema strutturale in quanto, appunto, essi non possiedono rigidità e resistenza tali da modificare significativamente il comportamento del modello.

Avendo ipotizzato un comportamento non dissipativo della struttura, per rappresentare la rigidità degli elementi strutturali si sono adottati unicamente modelli lineari, che trascurano le non linearità di materiale e geometriche.

Le azioni conseguenti al moto sismico sono modellate direttamente, attraverso un sistema di forze orizzontali generate dall'applicazione di una accelerazione orizzontale costante determinata al §2.6.4.

Per quanto riguarda la variabilità spaziale del moto sismico, nonché le eventuali incertezze nella localizzazione delle masse, essendo presente un'esatta e regolare distribuzione delle masse derivanti dai carichi permanenti e, parimenti, tipologie di carico variabile da non considerare nell'accelerazione sismica (vento e neve) che nel novero dell'analisi globale dei carichi risultano preponderanti rispetto alle prime, al centro di massa non è stata attribuita l'eccentricità accidentale in ogni direzione rispetto alla sua posizione quale deriva dal calcolo. L'analisi della struttura è lineare elastica.

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2.7.2. INFORMAZIONI SUL CODICE DI CALCOLO

Le informazioni relative ad "origine e caratteristiche dei codici di calcolo", "affidabilità dei codici utilizzati" e "validazione dei codici", devono essere riportate secondo quanto previsto al paragrafo 10.2 delle NTC-08 e relative parti della "Circolare Ministeriale".

Il calcolo strutturale è stato effettuato mediante elaboratore, utilizzando il codice di calcolo Straus7 realizzato dalla australiana Strand7 Pty Ltd e distribuito in Italia dalla HSH srl di Padova.

L'analisi della struttura è condotta secondo il metodo degli elementi finiti con approccio negli spostamenti, discretizzando la struttura in elementi connessi in corrispondenza dei nodi, ed assumendo le componenti di spostamento nodale (traslazioni e rotazioni) quali incognite del problema. La soluzione del problema si ottiene risolvendo un sistema di equazioni lineari:

$$[K] \{u\} = \{F\} \quad \text{dove} \quad [K] = \text{matrice di rigidezza} \\ \{u\} = \text{vettore spostamenti nodali} \\ \{F\} = \text{vettore forze nodali}$$

La soluzione numerica del sistema lineare è effettuata mediante il metodo classico Skyline ovvero mediante il metodo diretto per matrici sparse (Sparse Matrix). Il software effettua la scelta in maniera automatizzata mediante algoritmi di ottimizzazione: in generale per modelli con prevalenza di elementi di tipo Beam (monodimensionali) viene scelto il primo approccio, mentre il secondo diventa vantaggioso in presenza di molti elementi Shell o Brick (bi- o tri- dimensionali).

Gli effetti del sisma sono analizzati mediante un'analisi dinamica multimodale a spettro di risposta.

I periodi ed i modi propri di vibrare della struttura sono ricavati risolvendo il problema di autovalori/autovettori:

$$[K] \{x\} = \omega^2 [M] \{x\} \quad \text{dove} \quad [K] = \text{matrice di rigidezza} \\ \{x\} = \text{autovettore corrispondente al modo proprio di vibrare} \\ [M] = \text{matrice delle masse} \\ \omega = \text{pulsazione propria del modo di vibrare.}$$

L'estrazione degli autovalori è effettuata mediante il metodo dell'iterazione nel sottospazio, con controllo della sequenza di Sturm per la verifica dell'estrazione dei modi principali.

L'accelerazione al piede dovuta all'evento tellurico comporta sollecitazioni sulla struttura che vengono analizzate mediante sovrapposizione modale. Per ogni modo proprio di vibrazione della struttura si risolve un sistema:

$$[M] \{a\} + [C] \{v\} + [K] \{u\} = \{r(t)\} \quad \text{dove} \quad [C] = \text{matrice di smorzamento} \\ \{a\} = \text{vettore dell'accelerazione nodale (derivata seconda} \\ \text{degli spostamenti)} \\ \{v\} = \text{vettore delle velocità nodali (derivata prima degli} \\ \text{spostamenti)} \\ \{r(t)\} = \text{vettore dei carichi dinamici}$$

Le soluzioni ottenute per ogni modo vengono sovrapposte utilizzando la combinazione quadratica completa (CQC).

Il software solutore è corredato di esempi di validazione che sono stati esaminati dallo scrivente.

La verifica della sicurezza degli elementi strutturali avviene secondo i metodi della Scienza e della Tecnica delle Costruzioni. Sono state condotte diffuse verifiche a

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campione per la verifica dei risultati utilizzando controlli manuali ovvero fogli elettronici elaborati dallo scrivente.

Gli stati limite considerati e le prestazioni della struttura nei confronti degli stessi sono quelli indicati nelle Norme Tecniche per le Costruzioni di cui al D.M. 14/01/2008.

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2.7.3. MODELLAZIONE DELLA GEOMETRIA E DELLE PROPRIETÀ MECCANICHE

Vengono riportate le informazioni necessarie alla comprensione ed alla ricostruzione geometrica e meccanica del modello numerico, anche con riferimento alla fase esecutiva modellata.

Il modello di calcolo è costituito da:

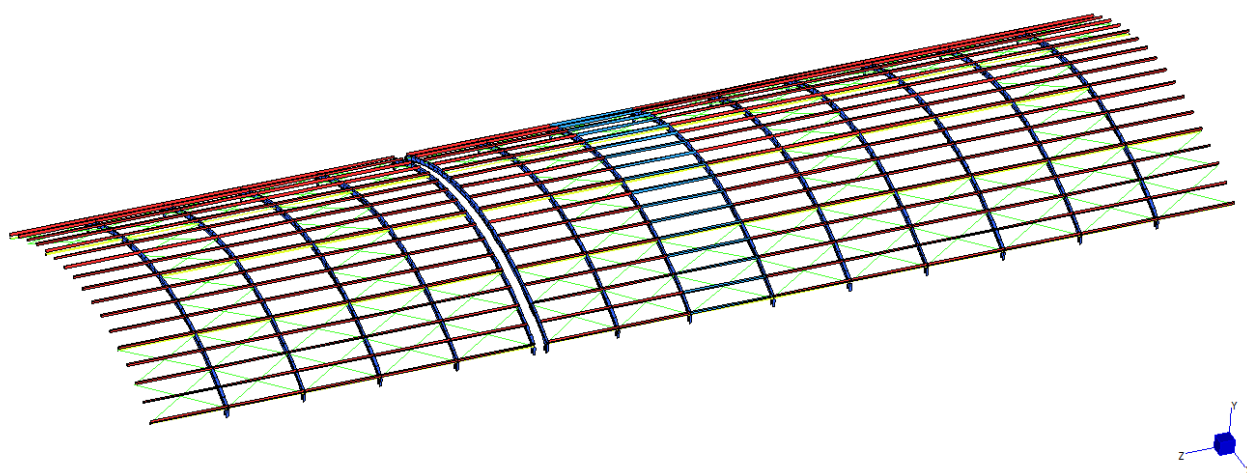
802 nodi

962 elementi di tipo BEAM (trave/pilastro)

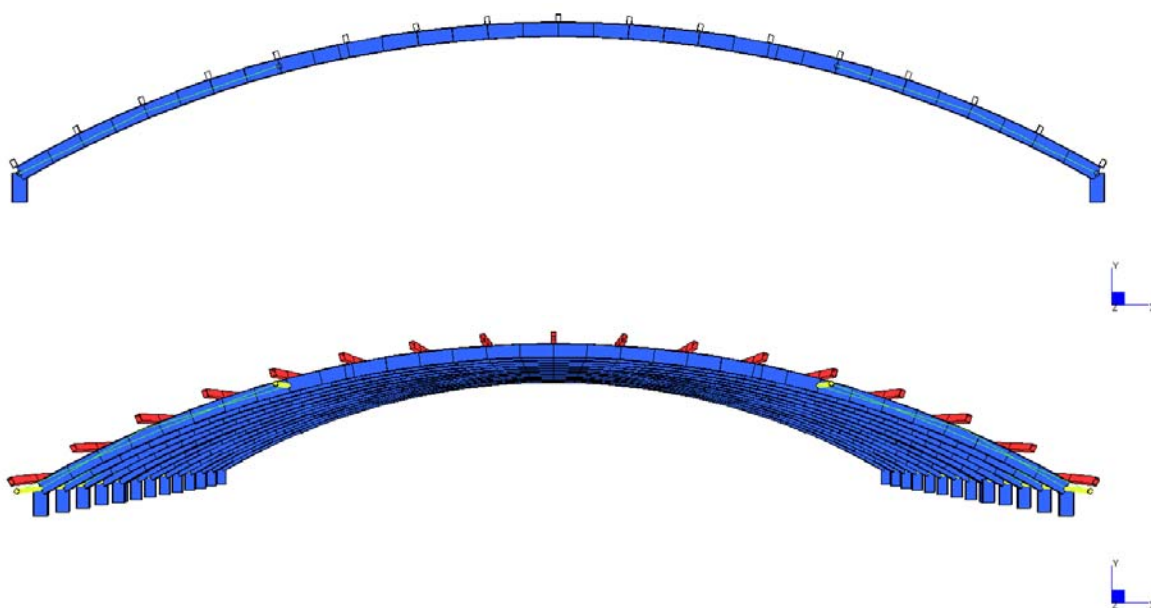
224 elementi di tipo Plate [Load Patch (aree di carico) e shell]

238 elementi links (collegamento) per gestire i disassamenti

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ assumendo l'asse Y verticale ed orientato verso l'alto.

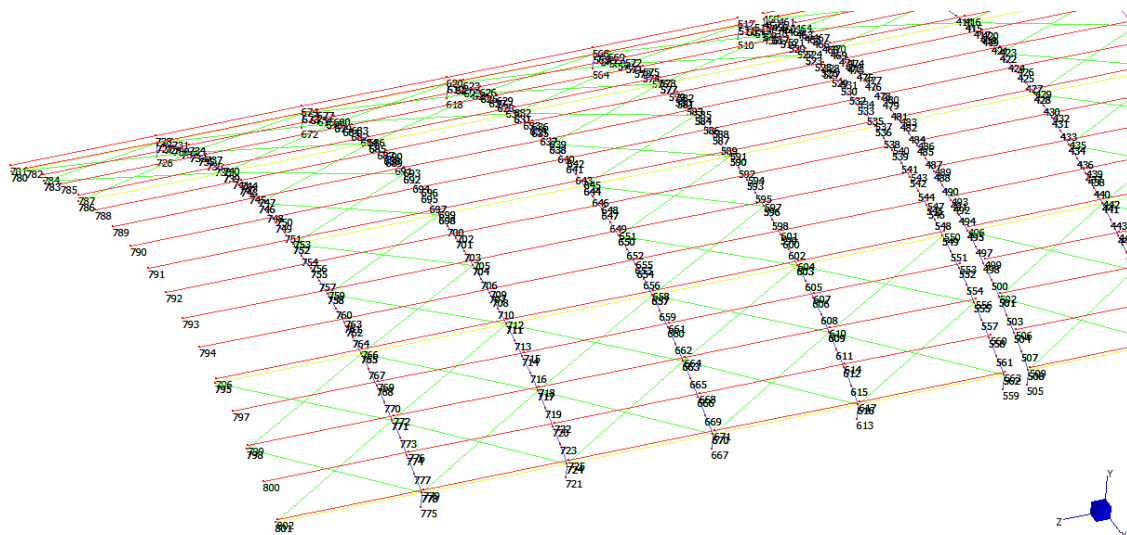
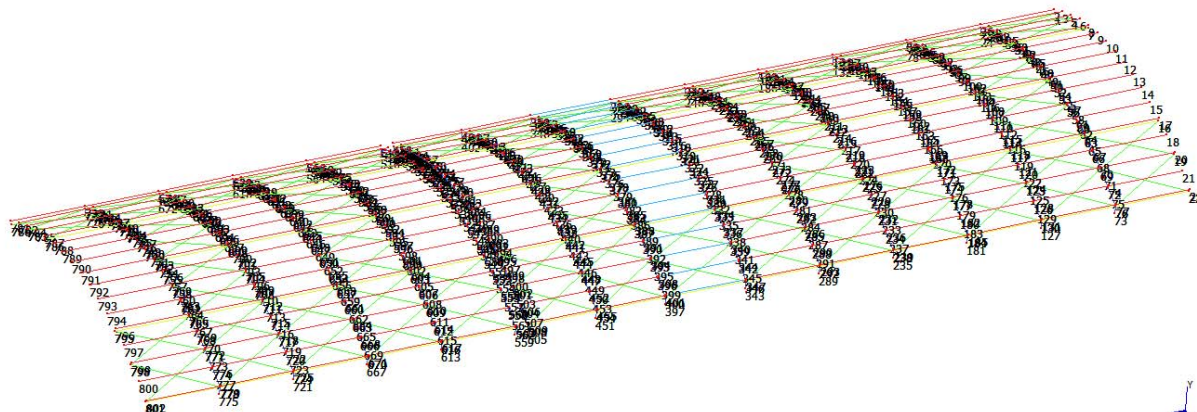


Modello di calcolo della struttura – vista solida



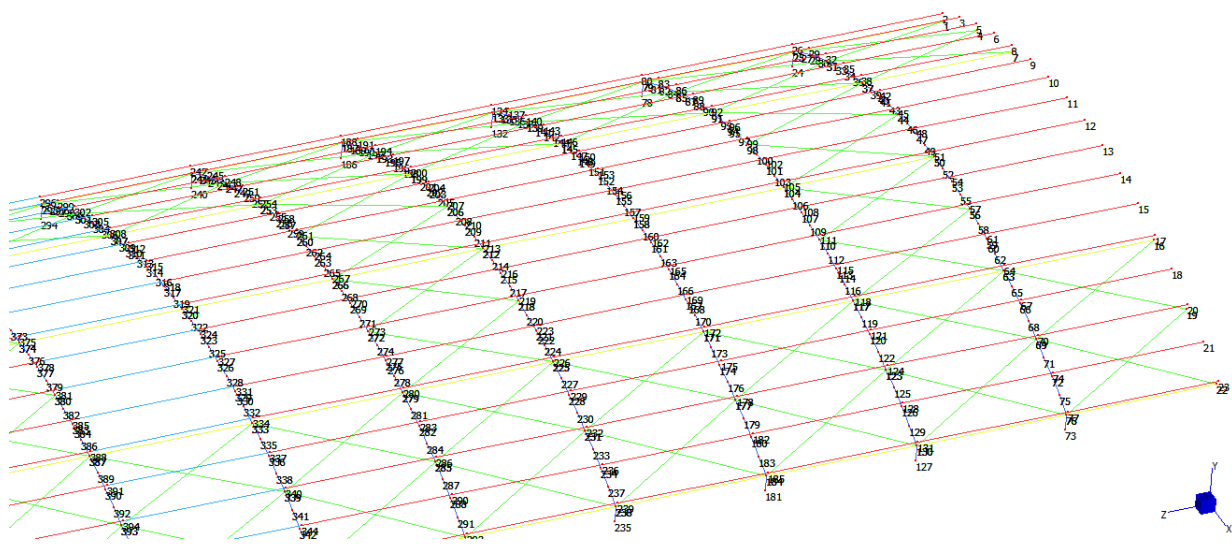
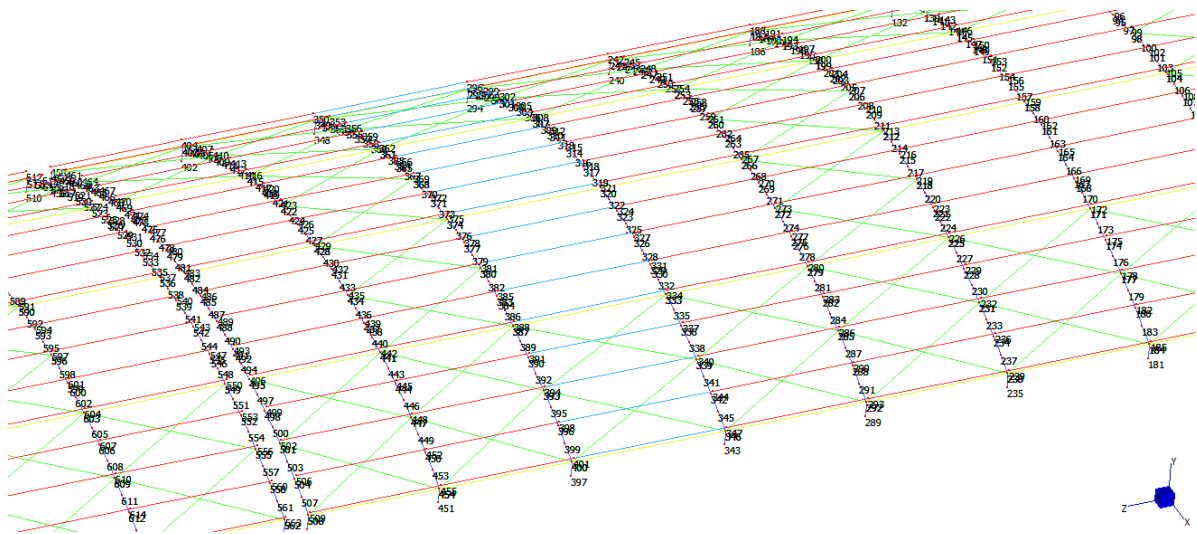
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COORDINATE NODALI



Numerazione nodale

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Numerazione nodale

	X (cm)	Y (cm)	Z (cm)
Node 1	0	1735	-3693
Node 2	-8,97	1750,6	-3693
Node 3	90,22	1803,43	-3693
Node 4	199,52	1833,03	-3693
Node 5	192,66	1849,67	-3693
Node 6	297,88	1889,14	-3693
Node 7	410,11	1904,27	-3693
Node 8	405,46	1921,66	-3693
Node 9	514,93	1947,1	-3693
Node 10	625,82	1965,35	-3693
Node 11	737,67	1976,33	-3693
Node 12	850	1980	-3693
Node 13	962,33	1976,33	-3693
Node 14	1074,18	1965,35	-3693
Node 15	1185,07	1947,1	-3693
Node 16	1289,89	1904,27	-3693
Node 17	1294,54	1921,66	-3693
Node 18	1402,12	1889,14	-3693
Node 19	1500,48	1833,03	-3693
Node 20	1507,34	1849,67	-3693
Node 21	1609,78	1803,43	-3693
Node 22	1700	1735	-3693
Node 23	1708,97	1750,6	-3693

	X (cm)	Y (cm)	Z (cm)
Node 24	0	1690	-3288
Node 25	0	1735	-3288
Node 26	-8,97	1750,6	-3288
Node 27	48,65	1761,94	-3288
Node 28	98,16	1787,27	-3288
Node 29	90,22	1803,43	-3288
Node 30	148,47	1810,98	-3288
Node 31	199,52	1833,03	-3288
Node 32	192,66	1849,67	-3288
Node 33	251,27	1853,41	-3288
Node 34	303,65	1872,09	-3288
Node 35	297,88	1889,14	-3288
Node 36	356,62	1889,05	-3288
Node 37	410,11	1904,27	-3288
Node 38	405,46	1921,66	-3288
Node 39	464,06	1917,74	-3288
Node 40	505	1926,66	-3288
Node 41	518,43	1929,45	-3288
Node 42	514,93	1947,1	-3288
Node 43	573,15	1939,37	-3288
Node 44	628,17	1947,51	-3288
Node 45	625,82	1965,35	-3288
Node 46	683,42	1953,84	-3288

	X (cm)	Y (cm)	Z (cm)
Node 47	738,85	1958,37	-3288
Node 48	737,67	1976,33	-3288
Node 49	794,39	1961,09	-3288
Node 50	850	1962	-3288
Node 51	850	1980	-3288
Node 52	905,61	1961,09	-3288
Node 53	961,15	1958,37	-3288
Node 54	962,33	1976,33	-3288
Node 55	1016,58	1953,84	-3288
Node 56	1071,83	1947,51	-3288
Node 57	1074,18	1965,35	-3288
Node 58	1126,85	1939,37	-3288
Node 59	1181,57	1929,45	-3288
Node 60	1195	1926,66	-3288
Node 61	1185,07	1947,1	-3288
Node 62	1235,94	1917,74	-3288
Node 63	1289,89	1904,27	-3288
Node 64	1294,54	1921,66	-3288
Node 65	1343,38	1889,05	-3288
Node 66	1396,35	1872,09	-3288
Node 67	1402,12	1889,14	-3288
Node 68	1448,73	1853,41	-3288
Node 69	1500,48	1833,03	-3288

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	X	Y	Z
	(cm)	(cm)	(cm)
Node 70	1507,34	1849,67	-3288
Node 71	1551,53	1810,98	-3288
Node 72	1601,84	1787,27	-3288
Node 73	1700	1690	-3288
Node 74	1609,78	1803,43	-3288
Node 75	1651,35	1761,94	-3288
Node 76	1700	1735	-3288
Node 77	1708,97	1750,6	-3288
Node 78	0	1690	-2883
Node 79	0	1735	-2883
Node 80	-8,97	1750,6	-2883
Node 81	48,65	1761,94	-2883
Node 82	98,16	1787,27	-2883
Node 83	90,22	1803,43	-2883
Node 84	148,47	1810,98	-2883
Node 85	199,52	1833,03	-2883
Node 86	192,66	1849,67	-2883
Node 87	251,27	1853,41	-2883
Node 88	303,65	1872,09	-2883
Node 89	297,88	1889,14	-2883
Node 90	356,62	1889,05	-2883
Node 91	410,11	1904,27	-2883
Node 92	405,46	1921,66	-2883
Node 93	464,06	1917,74	-2883
Node 94	505	1926,66	-2883
Node 95	518,43	1929,45	-2883
Node 96	514,93	1947,1	-2883
Node 97	573,15	1939,37	-2883
Node 98	628,17	1947,51	-2883
Node 99	625,82	1965,35	-2883
Node 100	683,42	1953,84	-2883
Node 101	738,85	1958,37	-2883
Node 102	737,67	1976,33	-2883
Node 103	794,39	1961,09	-2883
Node 104	850	1962	-2883
Node 105	850	1980	-2883
Node 106	905,61	1961,09	-2883
Node 107	961,15	1958,37	-2883
Node 108	962,33	1976,33	-2883
Node 109	1016,58	1953,84	-2883
Node 110	1071,83	1947,51	-2883
Node 111	1074,18	1965,35	-2883
Node 112	1126,85	1939,37	-2883
Node 113	1181,57	1929,45	-2883
Node 114	1195	1926,66	-2883
Node 115	1185,07	1947,1	-2883
Node 116	1235,94	1917,74	-2883
Node 117	1289,89	1904,27	-2883
Node 118	1294,54	1921,66	-2883
Node 119	1343,38	1889,05	-2883
Node 120	1396,35	1872,09	-2883
Node 121	1402,12	1889,14	-2883
Node 122	1448,73	1853,41	-2883
Node 123	1500,48	1833,03	-2883
Node 124	1507,34	1849,67	-2883
Node 125	1551,53	1810,98	-2883
Node 126	1601,84	1787,27	-2883
Node 127	1700	1690	-2883
Node 128	1609,78	1803,43	-2883
Node 129	1651,35	1761,94	-2883
Node 130	1700	1735	-2883
Node 131	1708,97	1750,6	-2883
Node 132	0	1690	-2478
Node 133	0	1735	-2478
Node 134	-8,97	1750,6	-2478
Node 135	48,65	1761,94	-2478
Node 136	98,16	1787,27	-2478
Node 137	90,22	1803,43	-2478
Node 138	148,47	1810,98	-2478

	X	Y	Z
	(cm)	(cm)	(cm)
Node 139	199,52	1833,03	-2478
Node 140	192,66	1849,67	-2478
Node 141	251,27	1853,41	-2478
Node 142	303,65	1872,09	-2478
Node 143	297,88	1889,14	-2478
Node 144	356,62	1889,05	-2478
Node 145	410,11	1904,27	-2478
Node 146	405,46	1921,66	-2478
Node 147	464,06	1917,74	-2478
Node 148	505	1926,66	-2478
Node 149	518,43	1929,45	-2478
Node 150	514,93	1947,1	-2478
Node 151	573,15	1939,37	-2478
Node 152	628,17	1947,51	-2478
Node 153	625,82	1965,35	-2478
Node 154	683,42	1953,84	-2478
Node 155	738,85	1958,37	-2478
Node 156	737,67	1976,33	-2478
Node 157	794,39	1961,09	-2478
Node 158	850	1962	-2478
Node 159	850	1980	-2478
Node 160	905,61	1961,09	-2478
Node 161	961,15	1958,37	-2478
Node 162	962,33	1976,33	-2478
Node 163	1016,58	1953,84	-2478
Node 164	1071,83	1947,51	-2478
Node 165	1074,18	1965,35	-2478
Node 166	1126,85	1939,37	-2478
Node 167	1181,57	1929,45	-2478
Node 168	1195	1926,66	-2478
Node 169	1185,07	1947,1	-2478
Node 170	1235,94	1917,74	-2478
Node 171	1289,89	1904,27	-2478
Node 172	1294,54	1921,66	-2478
Node 173	1343,38	1889,05	-2478
Node 174	1396,35	1872,09	-2478
Node 175	1402,12	1889,14	-2478
Node 176	1448,73	1853,41	-2478
Node 177	1500,48	1833,03	-2478
Node 178	1507,34	1849,67	-2478
Node 179	1551,53	1810,98	-2478
Node 180	1601,84	1787,27	-2478
Node 181	1700	1690	-2478
Node 182	1609,78	1803,43	-2478
Node 183	1651,35	1761,94	-2478
Node 184	1700	1735	-2478
Node 185	1708,97	1750,6	-2478
Node 186	0	1690	-2073
Node 187	0	1735	-2073
Node 188	-8,97	1750,6	-2073
Node 189	48,65	1761,94	-2073
Node 190	98,16	1787,27	-2073
Node 191	90,22	1803,43	-2073
Node 192	148,47	1810,98	-2073
Node 193	199,52	1833,03	-2073
Node 194	192,66	1849,67	-2073
Node 195	251,27	1853,41	-2073
Node 196	303,65	1872,09	-2073
Node 197	297,88	1889,14	-2073
Node 198	356,62	1889,05	-2073
Node 199	410,11	1904,27	-2073
Node 200	405,46	1921,66	-2073
Node 201	464,06	1917,74	-2073
Node 202	505	1926,66	-2073
Node 203	518,43	1929,45	-2073
Node 204	514,93	1947,1	-2073
Node 205	573,15	1939,37	-2073
Node 206	628,17	1947,51	-2073
Node 207	625,82	1965,35	-2073

	X	Y	Z
	(cm)	(cm)	(cm)
Node 208	683,42	1953,84	-2073
Node 209	738,85	1958,37	-2073
Node 210	737,67	1976,33	-2073
Node 211	794,39	1961,09	-2073
Node 212	850	1962	-2073
Node 213	850	1980	-2073
Node 214	905,61	1961,09	-2073
Node 215	961,15	1958,37	-2073
Node 216	962,33	1976,33	-2073
Node 217	1016,58	1953,84	-2073
Node 218	1071,83	1947,51	-2073
Node 219	1074,18	1965,35	-2073
Node 220	1126,85	1939,37	-2073
Node 221	1181,57	1929,45	-2073
Node 222	1195	1926,66	-2073
Node 223	1185,07	1947,1	-2073
Node 224	1235,94	1917,74	-2073
Node 225	1289,89	1904,27	-2073
Node 226	1294,54	1921,66	-2073
Node 227	1343,38	1889,05	-2073
Node 228	1396,35	1872,09	-2073
Node 229	1402,12	1889,14	-2073
Node 230	1448,73	1853,41	-2073
Node 231	1500,48	1833,03	-2073
Node 232	1507,34	1849,67	-2073
Node 233	1551,53	1810,98	-2073
Node 234	1601,84	1787,27	-2073
Node 235	1700	1690	-2073
Node 236	1609,78	1803,43	-2073
Node 237	1651,35	1761,94	-2073
Node 238	1700	1735	-2073
Node 239	1708,97	1750,6	-2073
Node 240	0	1690	-1668
Node 241	0	1735	-1668
Node 242	-8,97	1750,6	-1668
Node 243	48,65	1761,94	-1668
Node 244	98,16	1787,27	-1668
Node 245	90,22	1803,43	-1668
Node 246	148,47	1810,98	-1668
Node 247	199,52	1833,03	-1668
Node 248	192,66	1849,67	-1668
Node 249	251,27	1853,41	-1668
Node 250	303,65	1872,09	-1668
Node 251	297,88	1889,14	-1668
Node 252	356,62	1889,05	-1668
Node 253	410,11	1904,27	-1668
Node 254	405,46	1921,66	-1668
Node 255	464,06	1917,74	-1668
Node 256	505	1926,66	-1668
Node 257	518,43	1929,45	-1668
Node 258	514,93	1947,1	-1668
Node 259	573,15	1939,37	-1668
Node 260	628,17	1947,51	-1668
Node 261	625,82	1965,35	-1668
Node 262	683,42	1953,84	-1668
Node 263	738,85	1958,37	-1668
Node 264	737,67	1976,33	-1668
Node 265	794,39	1961,09	-1668
Node 266	850	1962	-1668
Node 267	850	1980	-1668
Node 268	905,61	1961,09	-1668
Node 269	961,15	1958,37	-1668
Node 270	962,33	1976,33	-1668
Node 271	1016,58	1953,84	-1668
Node 272	1071,83	1947,51	-1668
Node 273	1074,18	1965,35	-1668
Node 274	1126,85	1939,37	-1668
Node 275	1181,57	1929,45	-1668
Node 276	1195	1926,66	-1668

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	X	Y	Z
	(cm)	(cm)	(cm)
Node 277	1185,07	1947,1	-1668
Node 278	1235,94	1917,74	-1668
Node 279	1289,89	1904,27	-1668
Node 280	1294,54	1921,66	-1668
Node 281	1343,38	1889,05	-1668
Node 282	1396,35	1872,09	-1668
Node 283	1402,12	1889,14	-1668
Node 284	1448,73	1853,41	-1668
Node 285	1500,48	1833,03	-1668
Node 286	1507,34	1849,67	-1668
Node 287	1551,53	1810,98	-1668
Node 288	1601,84	1787,27	-1668
Node 289	1700	1690	-1668
Node 290	1609,78	1803,43	-1668
Node 291	1651,35	1761,94	-1668
Node 292	1700	1735	-1668
Node 293	1708,97	1750,6	-1668
Node 294	0	1690	-1263
Node 295	0	1735	-1263
Node 296	-8,97	1750,6	-1263
Node 297	48,65	1761,94	-1263
Node 298	98,16	1787,27	-1263
Node 299	90,22	1803,43	-1263
Node 300	148,47	1810,98	-1263
Node 301	199,52	1833,03	-1263
Node 302	192,66	1849,67	-1263
Node 303	251,27	1853,41	-1263
Node 304	303,65	1872,09	-1263
Node 305	297,88	1889,14	-1263
Node 306	356,62	1889,05	-1263
Node 307	410,11	1904,27	-1263
Node 308	405,46	1921,66	-1263
Node 309	464,06	1917,74	-1263
Node 310	505	1926,66	-1263
Node 311	518,43	1929,45	-1263
Node 312	514,93	1947,1	-1263
Node 313	573,15	1939,37	-1263
Node 314	628,17	1947,51	-1263
Node 315	625,82	1965,35	-1263
Node 316	683,42	1953,84	-1263
Node 317	738,85	1958,37	-1263
Node 318	737,67	1976,33	-1263
Node 319	794,39	1961,09	-1263
Node 320	850	1962	-1263
Node 321	850	1980	-1263
Node 322	905,61	1961,09	-1263
Node 323	961,15	1958,37	-1263
Node 324	962,33	1976,33	-1263
Node 325	1016,58	1953,84	-1263
Node 326	1071,83	1947,51	-1263
Node 327	1074,18	1965,35	-1263
Node 328	1126,85	1939,37	-1263
Node 329	1181,57	1929,45	-1263
Node 330	1195	1926,66	-1263
Node 331	1185,07	1947,1	-1263
Node 332	1235,94	1917,74	-1263
Node 333	1289,89	1904,27	-1263
Node 334	1294,54	1921,66	-1263
Node 335	1343,38	1889,05	-1263
Node 336	1396,35	1872,09	-1263
Node 337	1402,12	1889,14	-1263
Node 338	1448,73	1853,41	-1263
Node 339	1500,48	1833,03	-1263
Node 340	1507,34	1849,67	-1263
Node 341	1551,53	1810,98	-1263
Node 342	1601,84	1787,27	-1263
Node 343	1700	1690	-1263
Node 344	1609,78	1803,43	-1263
Node 345	1651,35	1761,94	-1263

	X	Y	Z
	(cm)	(cm)	(cm)
Node 346	1700	1735	-1263
Node 347	1708,97	1750,6	-1263
Node 348	0	1690	-824
Node 349	0	1735	-824
Node 350	-8,97	1750,6	-824
Node 351	48,65	1761,94	-824
Node 352	98,16	1787,27	-824
Node 353	90,22	1803,43	-824
Node 354	148,47	1810,98	-824
Node 355	199,52	1833,03	-824
Node 356	192,66	1849,67	-824
Node 357	251,27	1853,41	-824
Node 358	303,65	1872,09	-824
Node 359	297,88	1889,14	-824
Node 360	356,62	1889,05	-824
Node 361	410,11	1904,27	-824
Node 362	405,46	1921,66	-824
Node 363	464,06	1917,74	-824
Node 364	505	1926,66	-824
Node 365	518,43	1929,45	-824
Node 366	514,93	1947,1	-824
Node 367	573,15	1939,37	-824
Node 368	628,17	1947,51	-824
Node 369	625,82	1965,35	-824
Node 370	683,42	1953,84	-824
Node 371	738,85	1958,37	-824
Node 372	737,67	1976,33	-824
Node 373	794,39	1961,09	-824
Node 374	850	1962	-824
Node 375	850	1980	-824
Node 376	905,61	1961,09	-824
Node 377	961,15	1958,37	-824
Node 378	962,33	1976,33	-824
Node 379	1016,58	1953,84	-824
Node 380	1071,83	1947,51	-824
Node 381	1074,18	1965,35	-824
Node 382	1126,85	1939,37	-824
Node 383	1181,57	1929,45	-824
Node 384	1195	1926,66	-824
Node 385	1185,07	1947,1	-824
Node 386	1235,94	1917,74	-824
Node 387	1289,89	1904,27	-824
Node 388	1294,54	1921,66	-824
Node 389	1343,38	1889,05	-824
Node 390	1396,35	1872,09	-824
Node 391	1402,12	1889,14	-824
Node 392	1448,73	1853,41	-824
Node 393	1500,48	1833,03	-824
Node 394	1507,34	1849,67	-824
Node 395	1551,53	1810,98	-824
Node 396	1601,84	1787,27	-824
Node 397	1700	1690	-824
Node 398	1609,78	1803,43	-824
Node 399	1651,35	1761,94	-824
Node 400	1700	1735	-824
Node 401	1708,97	1750,6	-824
Node 402	0	1690	-444
Node 403	0	1735	-444
Node 404	-8,97	1750,6	-444
Node 405	48,65	1761,94	-444
Node 406	98,16	1787,27	-444
Node 407	90,22	1803,43	-444
Node 408	148,47	1810,98	-444
Node 409	199,52	1833,03	-444
Node 410	192,66	1849,67	-444
Node 411	251,27	1853,41	-444
Node 412	303,65	1872,09	-444
Node 413	297,88	1889,14	-444
Node 414	356,62	1889,05	-444

	X	Y	Z
	(cm)	(cm)	(cm)
Node 415	410,11	1904,27	-444
Node 416	405,46	1921,66	-444
Node 417	464,06	1917,74	-444
Node 418	505	1926,66	-444
Node 419	518,43	1929,45	-444
Node 420	514,93	1947,1	-444
Node 421	573,15	1939,37	-444
Node 422	628,17	1947,51	-444
Node 423	625,82	1965,35	-444
Node 424	683,42	1953,84	-444
Node 425	738,85	1958,37	-444
Node 426	737,67	1976,33	-444
Node 427	794,39	1961,09	-444
Node 428	850	1962	-444
Node 429	850	1980	-444
Node 430	905,61	1961,09	-444
Node 431	961,15	1958,37	-444
Node 432	962,33	1976,33	-444
Node 433	1016,58	1953,84	-444
Node 434	1071,83	1947,51	-444
Node 435	1074,18	1965,35	-444
Node 436	1126,85	1939,37	-444
Node 437	1181,57	1929,45	-444
Node 438	1195	1926,66	-444
Node 439	1185,07	1947,1	-444
Node 440	1235,94	1917,74	-444
Node 441	1289,89	1904,27	-444
Node 442	1294,54	1921,66	-444
Node 443	1343,38	1889,05	-444
Node 444	1396,35	1872,09	-444
Node 445	1402,12	1889,14	-444
Node 446	1448,73	1853,41	-444
Node 447	1500,48	1833,03	-444
Node 448	1507,34	1849,67	-444
Node 449	1551,53	1810,98	-444
Node 450	1601,84	1787,27	-444
Node 451	1700	1690	-444
Node 452	1609,78	1803,43	-444
Node 453	1651,35	1761,94	-444
Node 454	1700	1735	-444
Node 455	1708,97	1750,6	-444
Node 456	0	1690	-69
Node 457	0	1735	-69
Node 458	-8,97	1750,6	-69
Node 459	48,65	1761,94	-69
Node 460	98,16	1787,27	-69
Node 461	90,22	1803,43	-69
Node 462	148,47	1810,98	-69
Node 463	199,52	1833,03	-69
Node 464	192,66	1849,67	-69
Node 465	251,27	1853,41	-69
Node 466	303,65	1872,09	-69
Node 467	297,88	1889,14	-69
Node 468	356,62	1889,05	-69
Node 469	410,11	1904,27	-69
Node 470	405,46	1921,66	-69
Node 471	464,06	1917,74	-69
Node 472	505	1926,66	-69
Node 473	518,43	1929,45	-69
Node 474	514,93	1947,1	-69
Node 475	573,15	1939,37	-69
Node 476	628,17	1947,51	-69
Node 477	625,82	1965,35	-69
Node 478	683,42	1953,84	-69
Node 479	738,85	1958,37	-69
Node 480	737,67	1976,33	-69
Node 481	794,39	1961,09	-69
Node 482	850	1962	-69
Node 483	850	1980	-69

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	X	Y	Z
	(cm)	(cm)	(cm)
Node 484	905,61	1961,09	-69
Node 485	961,15	1958,37	-69
Node 486	962,33	1976,33	-69
Node 487	1016,58	1953,84	-69
Node 488	1071,83	1947,51	-69
Node 489	1074,18	1965,35	-69
Node 490	1126,85	1939,37	-69
Node 491	1181,57	1929,45	-69
Node 492	1195	1926,66	-69
Node 493	1185,07	1947,1	-69
Node 494	1235,94	1917,74	-69
Node 495	1289,89	1904,27	-69
Node 496	1294,54	1921,66	-69
Node 497	1343,38	1889,05	-69
Node 498	1396,35	1872,09	-69
Node 499	1402,12	1889,14	-69
Node 500	1448,73	1853,41	-69
Node 501	1500,48	1833,03	-69
Node 502	1507,34	1849,67	-69
Node 503	1551,53	1810,98	-69
Node 504	1601,84	1787,27	-69
Node 505	1700	1690	-69
Node 506	1609,78	1803,43	-69
Node 507	1651,35	1761,94	-69
Node 508	1700	1735	-69
Node 509	1708,97	1750,6	-69
Node 510	0	1690	0
Node 511	0	1735	0
Node 512	-8,97	1750,6	0
Node 513	48,65	1761,94	0
Node 514	98,16	1787,27	0
Node 515	90,22	1803,43	0
Node 516	148,47	1810,98	0
Node 517	199,52	1833,03	0
Node 518	192,66	1849,67	0
Node 519	251,27	1853,41	0
Node 520	303,65	1872,09	0
Node 521	297,88	1889,14	0
Node 522	356,62	1889,05	0
Node 523	410,11	1904,27	0
Node 524	405,46	1921,66	0
Node 525	464,06	1917,74	0
Node 526	505	1926,66	0
Node 527	518,43	1929,45	0
Node 528	514,93	1947,1	0
Node 529	573,15	1939,37	0
Node 530	628,17	1947,51	0
Node 531	625,82	1965,35	0
Node 532	683,42	1953,84	0
Node 533	738,85	1958,37	0
Node 534	737,67	1976,33	0
Node 535	794,39	1961,09	0
Node 536	850	1962	0
Node 537	850	1980	0
Node 538	905,61	1961,09	0
Node 539	961,15	1958,37	0
Node 540	962,33	1976,33	0
Node 541	1016,58	1953,84	0
Node 542	1071,83	1947,51	0
Node 543	1074,18	1965,35	0
Node 544	1126,85	1939,37	0
Node 545	1181,57	1929,45	0
Node 546	1195	1926,66	0
Node 547	1185,07	1947,1	0
Node 548	1235,94	1917,74	0
Node 549	1289,89	1904,27	0
Node 550	1294,54	1921,66	0
Node 551	1343,38	1889,05	0
Node 552	1396,35	1872,09	0

	X	Y	Z
	(cm)	(cm)	(cm)
Node 553	1402,12	1889,14	0
Node 554	1448,73	1853,41	0
Node 555	1500,48	1833,03	0
Node 556	1507,34	1849,67	0
Node 557	1551,53	1810,98	0
Node 558	1601,84	1787,27	0
Node 559	1700	1690	0
Node 560	1609,78	1803,43	0
Node 561	1651,35	1761,94	0
Node 562	1700	1735	0
Node 563	1708,97	1750,6	0
Node 564	0	1690	405
Node 565	0	1735	405
Node 566	-8,97	1750,6	405
Node 567	48,65	1761,94	405
Node 568	98,16	1787,27	405
Node 569	90,22	1803,43	405
Node 570	148,47	1810,98	405
Node 571	199,52	1833,03	405
Node 572	192,66	1849,67	405
Node 573	251,27	1853,41	405
Node 574	303,65	1872,09	405
Node 575	297,88	1889,14	405
Node 576	356,62	1889,05	405
Node 577	410,11	1904,27	405
Node 578	405,46	1921,66	405
Node 579	464,06	1917,74	405
Node 580	505	1926,66	405
Node 581	518,43	1929,45	405
Node 582	514,93	1947,1	405
Node 583	573,15	1939,37	405
Node 584	628,17	1947,51	405
Node 585	625,82	1965,35	405
Node 586	683,42	1953,84	405
Node 587	738,85	1958,37	405
Node 588	737,67	1976,33	405
Node 589	794,39	1961,09	405
Node 590	850	1962	405
Node 591	850	1980	405
Node 592	905,61	1961,09	405
Node 593	961,15	1958,37	405
Node 594	962,33	1976,33	405
Node 595	1016,58	1953,84	405
Node 596	1071,83	1947,51	405
Node 597	1074,18	1965,35	405
Node 598	1126,85	1939,37	405
Node 599	1181,57	1929,45	405
Node 600	1195	1926,66	405
Node 601	1185,07	1947,1	405
Node 602	1235,94	1917,74	405
Node 603	1289,89	1904,27	405
Node 604	1294,54	1921,66	405
Node 605	1343,38	1889,05	405
Node 606	1396,35	1872,09	405
Node 607	1402,12	1889,14	405
Node 608	1448,73	1853,41	405
Node 609	1500,48	1833,03	405
Node 610	1507,34	1849,67	405
Node 611	1551,53	1810,98	405
Node 612	1601,84	1787,27	405
Node 613	1700	1690	405
Node 614	1609,78	1803,43	405
Node 615	1651,35	1761,94	405
Node 616	1700	1735	405
Node 617	1708,97	1750,6	405
Node 618	0	1690	810
Node 619	0	1735	810
Node 620	-8,97	1750,6	810
Node 621	48,65	1761,94	810

	X	Y	Z
	(cm)	(cm)	(cm)
Node 622	98,16	1787,27	810
Node 623	90,22	1803,43	810
Node 624	148,47	1810,98	810
Node 625	199,52	1833,03	810
Node 626	192,66	1849,67	810
Node 627	251,27	1853,41	810
Node 628	303,65	1872,09	810
Node 629	297,88	1889,14	810
Node 630	356,62	1889,05	810
Node 631	410,11	1904,27	810
Node 632	405,46	1921,66	810
Node 633	464,06	1917,74	810
Node 634	505	1926,66	810
Node 635	518,43	1929,45	810
Node 636	514,93	1947,1	810
Node 637	573,15	1939,37	810
Node 638	628,17	1947,51	810
Node 639	625,82	1965,35	810
Node 640	683,42	1953,84	810
Node 641	738,85	1958,37	810
Node 642	737,67	1976,33	810
Node 643	794,39	1961,09	810
Node 644	850	1962	810
Node 645	850	1980	810
Node 646	905,61	1961,09	810
Node 647	961,15	1958,37	810
Node 648	962,33	1976,33	810
Node 649	1016,58	1953,84	810
Node 650	1071,83	1947,51	810
Node 651	1074,18	1965,35	810
Node 652	1126,85	1939,37	810
Node 653	1181,57	1929,45	810
Node 654	1195	1926,66	810
Node 655	1185,07	1947,1	810
Node 656	1235,94	1917,74	810
Node 657	1289,89	1904,27	810
Node 658	1294,54	1921,66	810
Node 659	1343,38	1889,05	810
Node 660	1396,35	1872,09	810
Node 661	1402,12	1889,14	810
Node 662	1448,73	1853,41	810
Node 663	1500,48	1833,03	810
Node 664	1507,34	1849,67	810
Node 665	1551,53	1810,98	810
Node 666	1601,84	1787,27	810
Node 667	1700	1690	810
Node 668	1609,78	1803,43	810
Node 669	1651,35	1761,94	810
Node 670	1700	1735	810
Node 671	1708,97	1750,6	810
Node 672	0	1690	1215
Node 673	0	1735	1215
Node 674	-8,97	1750,6	1215
Node 675	48,65	1761,94	1215
Node 676	98,16	1787,27	1215
Node 677	90,22	1803,43	1215
Node 678	148,47	1810,98	1215
Node 679	199,52	1833,03	1215
Node 680	192,66	1849,67	1215
Node 681	251,27	1853,41	1215
Node 682	303,65	1872,09	1215
Node 683	297,88	1889,14	1215
Node 684	356,62	1889,05	1215
Node 685	410,11	1904,27	1215
Node 686	405,46	1921,66	1215
Node 687	464,06	1917,74	1215
Node 688	505	1926,66	1215
Node 689	518,43	1929,45	1215
Node 690	514,93	1947,1	1215

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

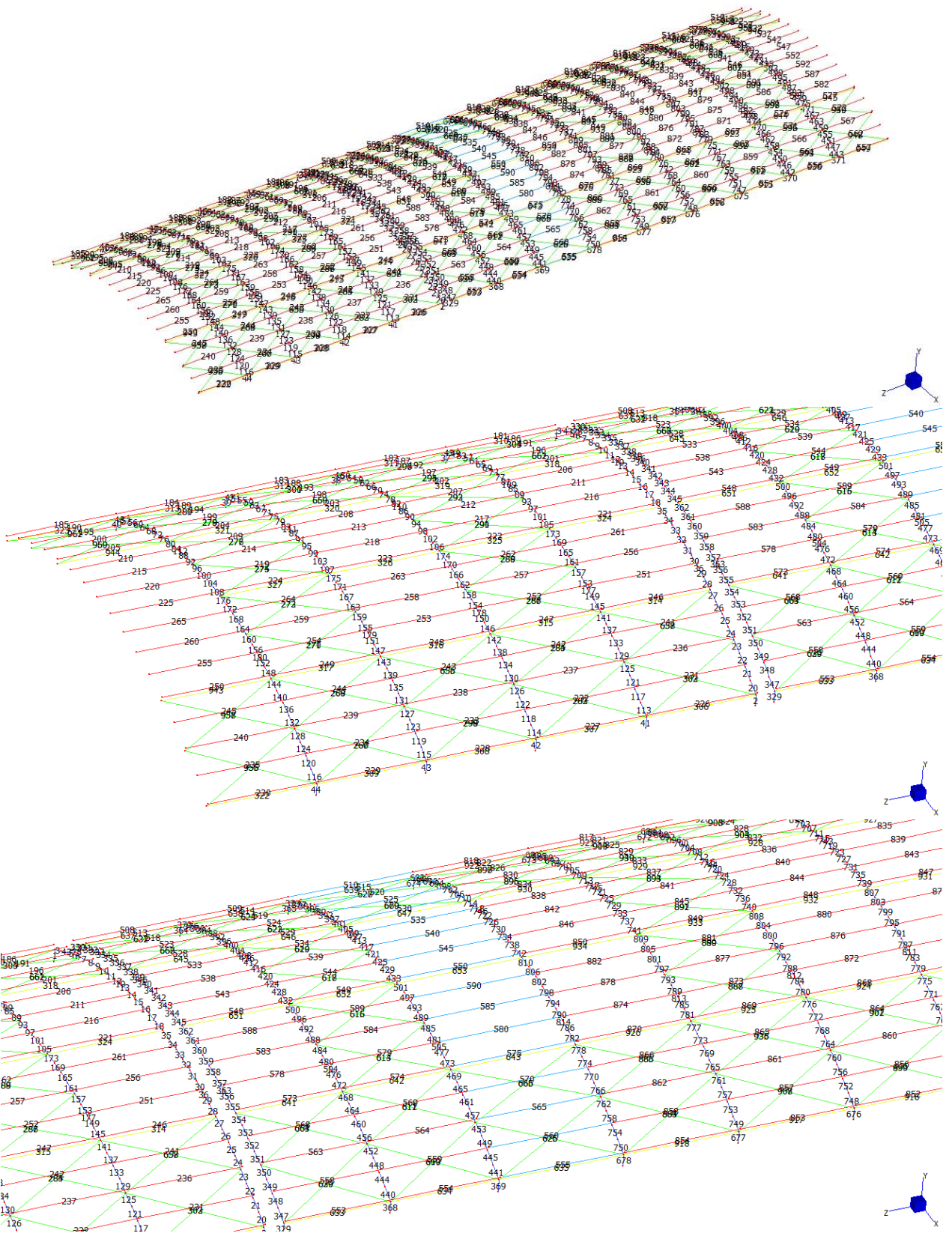
	X	Y	Z
	(cm)	(cm)	(cm)
Node 691	573,15	1939,37	1215
Node 692	628,17	1947,51	1215
Node 693	625,82	1965,35	1215
Node 694	683,42	1953,84	1215
Node 695	738,85	1958,37	1215
Node 696	737,67	1976,33	1215
Node 697	794,39	1961,09	1215
Node 698	850	1962	1215
Node 699	850	1980	1215
Node 700	905,61	1961,09	1215
Node 701	961,15	1958,37	1215
Node 702	962,33	1976,33	1215
Node 703	1016,58	1953,84	1215
Node 704	1071,83	1947,51	1215
Node 705	1074,18	1965,35	1215
Node 706	1126,85	1939,37	1215
Node 707	1181,57	1929,45	1215
Node 708	1195	1926,66	1215
Node 709	1185,07	1947,1	1215
Node 710	1235,94	1917,74	1215
Node 711	1289,89	1904,27	1215
Node 712	1294,54	1921,66	1215
Node 713	1343,38	1889,05	1215
Node 714	1396,35	1872,09	1215
Node 715	1402,12	1889,14	1215
Node 716	1448,73	1853,41	1215
Node 717	1500,48	1833,03	1215
Node 718	1507,34	1849,67	1215
Node 719	1551,53	1810,98	1215
Node 720	1601,84	1787,27	1215
Node 721	1700	1690	1215
Node 722	1609,78	1803,43	1215
Node 723	1651,35	1761,94	1215
Node 724	1700	1735	1215
Node 725	1708,97	1750,6	1215
Node 726	0	1690	1620
Node 727	0	1735	1620
Node 728	-8,97	1750,6	1620

	X	Y	Z
	(cm)	(cm)	(cm)
Node 729	48,65	1761,94	1620
Node 730	98,16	1787,27	1620
Node 731	90,22	1803,43	1620
Node 732	148,47	1810,98	1620
Node 733	199,52	1833,03	1620
Node 734	192,66	1849,67	1620
Node 735	251,27	1853,41	1620
Node 736	303,65	1872,09	1620
Node 737	297,88	1889,14	1620
Node 738	356,62	1889,05	1620
Node 739	410,11	1904,27	1620
Node 740	405,46	1921,66	1620
Node 741	464,06	1917,74	1620
Node 742	505	1926,66	1620
Node 743	518,43	1929,45	1620
Node 744	514,93	1947,1	1620
Node 745	573,15	1939,37	1620
Node 746	628,17	1947,51	1620
Node 747	625,82	1965,35	1620
Node 748	683,42	1953,84	1620
Node 749	738,85	1958,37	1620
Node 750	737,67	1976,33	1620
Node 751	794,39	1961,09	1620
Node 752	850	1962	1620
Node 753	850	1980	1620
Node 754	905,61	1961,09	1620
Node 755	961,15	1958,37	1620
Node 756	962,33	1976,33	1620
Node 757	1016,58	1953,84	1620
Node 758	1071,83	1947,51	1620
Node 759	1074,18	1965,35	1620
Node 760	1126,85	1939,37	1620
Node 761	1181,57	1929,45	1620
Node 762	1195	1926,66	1620
Node 763	1185,07	1947,1	1620
Node 764	1235,94	1917,74	1620
Node 765	1289,89	1904,27	1620
Node 766	1294,54	1921,66	1620

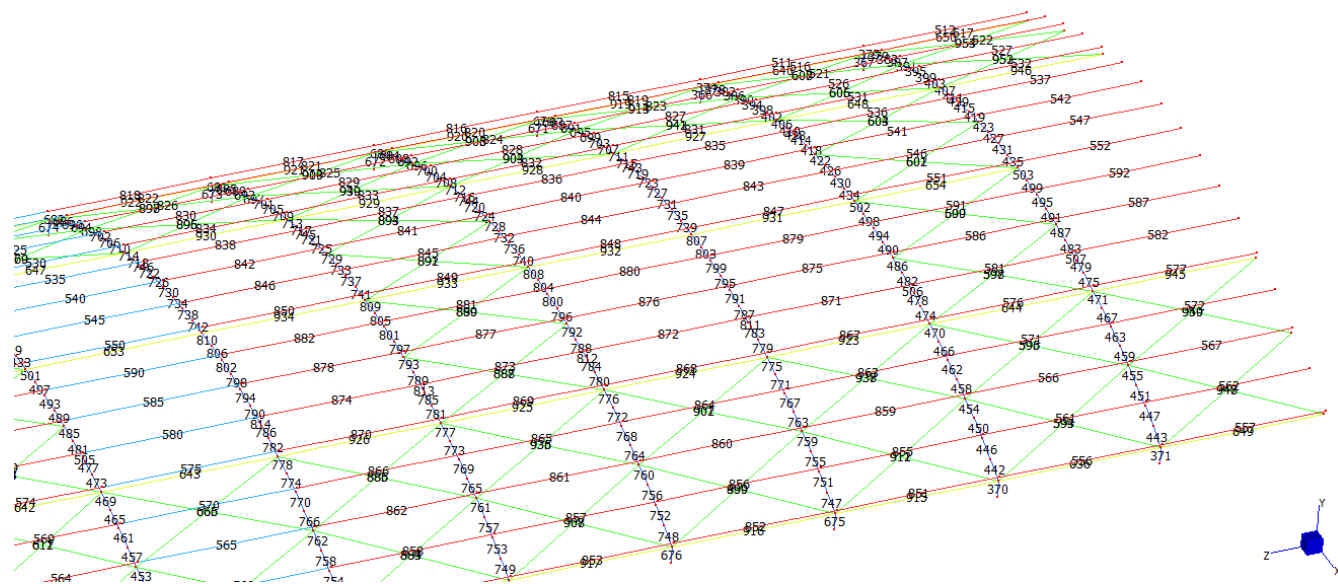
	X	Y	Z
	(cm)	(cm)	(cm)
Node 767	1343,38	1889,05	1620
Node 768	1396,35	1872,09	1620
Node 769	1402,12	1889,14	1620
Node 770	1448,73	1853,41	1620
Node 771	1500,48	1833,03	1620
Node 772	1507,34	1849,67	1620
Node 773	1551,53	1810,98	1620
Node 774	1601,84	1787,27	1620
Node 775	1700	1690	1620
Node 776	1609,78	1803,43	1620
Node 777	1651,35	1761,94	1620
Node 778	1700	1735	1620
Node 779	1708,97	1750,6	1620
Node 780	0	1735	2025
Node 781	-8,97	1750,6	2025
Node 782	90,22	1803,43	2025
Node 783	199,52	1833,03	2025
Node 784	192,66	1849,67	2025
Node 785	297,88	1889,14	2025
Node 786	410,11	1904,27	2025
Node 787	405,46	1921,66	2025
Node 788	514,93	1947,1	2025
Node 789	625,82	1965,35	2025
Node 790	737,67	1976,33	2025
Node 791	850	1980	2025
Node 792	962,33	1976,33	2025
Node 793	1074,18	1965,35	2025
Node 794	1185,07	1947,1	2025
Node 795	1289,89	1904,27	2025
Node 796	1294,54	1921,66	2025
Node 797	1402,12	1889,14	2025
Node 798	1500,48	1833,03	2025
Node 799	1507,34	1849,67	2025
Node 800	1609,78	1803,43	2025
Node 801	1700	1735	2025
Node 802	1708,97	1750,6	2025

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

INCIDENZA ELEMENTI BEAM



COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"



Numerazione elementi beam

	Length (cm)	Property	N1	N2
Beam 1	45	1: IPE240 trv	510	511
Beam 2	45	1: IPE240 trv	559	562
Beam 3	55,61	1: IPE240 trv	511	513
Beam 4	55,61	1: IPE240 trv	513	514
Beam 5	55,61	1: IPE240 trv	514	516
Beam 6	55,61	1: IPE240 trv	516	517
Beam 7	55,61	1: IPE240 trv	517	519
Beam 8	55,61	1: IPE240 trv	519	520
Beam 9	55,61	1: IPE240 trv	520	522
Beam 10	55,61	1: IPE240 trv	522	523
Beam 11	55,61	1: IPE240 trv	523	525
Beam 12	41,9	1: IPE240 trv	525	526
Beam 13	55,61	1: IPE240 trv	527	529
Beam 14	55,61	1: IPE240 trv	529	530
Beam 15	55,61	1: IPE240 trv	530	532
Beam 16	55,61	1: IPE240 trv	532	533
Beam 17	55,61	1: IPE240 trv	533	535
Beam 18	55,61	1: IPE240 trv	535	536
Beam 19	13,72	1: IPE240 trv	526	527
Beam 20	55,61	1: IPE240 trv	561	562
Beam 21	55,61	1: IPE240 trv	558	561
Beam 22	55,61	1: IPE240 trv	557	558
Beam 23	55,61	1: IPE240 trv	555	557
Beam 24	55,61	1: IPE240 trv	554	555
Beam 25	55,61	1: IPE240 trv	552	554
Beam 26	55,61	1: IPE240 trv	551	552
Beam 27	55,61	1: IPE240 trv	549	551
Beam 28	55,61	1: IPE240 trv	548	549
Beam 29	41,9	1: IPE240 trv	546	548
Beam 30	55,61	1: IPE240 trv	544	545
Beam 31	55,61	1: IPE240 trv	542	544
Beam 32	55,61	1: IPE240 trv	541	542
Beam 33	55,61	1: IPE240 trv	539	541
Beam 34	55,61	1: IPE240 trv	538	539
Beam 35	55,61	1: IPE240 trv	536	538
Beam 36	13,72	1: IPE240 trv	545	546
Beam 37	45	1: IPE240 trv	564	565
Beam 38	45	1: IPE240 trv	618	619
Beam 39	45	1: IPE240 trv	672	673
Beam 40	45	1: IPE240 trv	726	727
Beam 41	45	1: IPE240 trv	613	616
Beam 42	45	1: IPE240 trv	667	670

	Length (cm)	Property	N1	N2
Beam 43	45	1: IPE240 trv	721	724
Beam 44	45	1: IPE240 trv	775	778
Beam 45	55,61	1: IPE240 trv	565	567
Beam 46	55,61	1: IPE240 trv	619	621
Beam 47	55,61	1: IPE240 trv	673	675
Beam 48	55,61	1: IPE240 trv	727	729
Beam 49	55,61	1: IPE240 trv	567	568
Beam 50	55,61	1: IPE240 trv	621	622
Beam 51	55,61	1: IPE240 trv	675	676
Beam 52	55,61	1: IPE240 trv	729	730
Beam 53	55,61	1: IPE240 trv	568	570
Beam 54	55,61	1: IPE240 trv	622	624
Beam 55	55,61	1: IPE240 trv	676	678
Beam 56	55,61	1: IPE240 trv	730	732
Beam 57	55,61	1: IPE240 trv	570	571
Beam 58	55,61	1: IPE240 trv	624	625
Beam 59	55,61	1: IPE240 trv	678	679
Beam 60	55,61	1: IPE240 trv	732	733
Beam 61	55,61	1: IPE240 trv	571	573
Beam 62	55,61	1: IPE240 trv	625	627
Beam 63	55,61	1: IPE240 trv	679	681
Beam 64	55,61	1: IPE240 trv	733	735
Beam 65	55,61	1: IPE240 trv	573	574
Beam 66	55,61	1: IPE240 trv	627	628
Beam 67	55,61	1: IPE240 trv	681	682
Beam 68	55,61	1: IPE240 trv	735	736
Beam 69	55,61	1: IPE240 trv	574	576
Beam 70	55,61	1: IPE240 trv	628	630
Beam 71	55,61	1: IPE240 trv	682	684
Beam 72	55,61	1: IPE240 trv	736	738
Beam 73	55,61	1: IPE240 trv	576	577
Beam 74	55,61	1: IPE240 trv	630	631
Beam 75	55,61	1: IPE240 trv	684	685
Beam 76	55,61	1: IPE240 trv	738	739
Beam 77	55,61	1: IPE240 trv	577	579
Beam 78	55,61	1: IPE240 trv	631	633
Beam 79	55,61	1: IPE240 trv	685	687
Beam 80	55,61	1: IPE240 trv	739	741
Beam 81	41,9	1: IPE240 trv	579	580
Beam 82	41,9	1: IPE240 trv	633	634
Beam 83	41,9	1: IPE240 trv	687	688
Beam 84	41,9	1: IPE240 trv	741	742

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Length (cm)	Property	N1	N2
Beam 85	55,61	1: IPE240 trv	581	583
Beam 86	55,61	1: IPE240 trv	635	637
Beam 87	55,61	1: IPE240 trv	689	691
Beam 88	55,61	1: IPE240 trv	743	745
Beam 89	55,61	1: IPE240 trv	583	584
Beam 90	55,61	1: IPE240 trv	637	638
Beam 91	55,61	1: IPE240 trv	691	692
Beam 92	55,61	1: IPE240 trv	745	746
Beam 93	55,61	1: IPE240 trv	584	586
Beam 94	55,61	1: IPE240 trv	638	640
Beam 95	55,61	1: IPE240 trv	692	694
Beam 96	55,61	1: IPE240 trv	746	748
Beam 97	55,61	1: IPE240 trv	586	587
Beam 98	55,61	1: IPE240 trv	640	641
Beam 99	55,61	1: IPE240 trv	694	695
Beam 100	55,61	1: IPE240 trv	748	749
Beam 101	55,61	1: IPE240 trv	587	589
Beam 102	55,61	1: IPE240 trv	641	643
Beam 103	55,61	1: IPE240 trv	695	697
Beam 104	55,61	1: IPE240 trv	749	751
Beam 105	55,61	1: IPE240 trv	589	590
Beam 106	55,61	1: IPE240 trv	643	644
Beam 107	55,61	1: IPE240 trv	697	698
Beam 108	55,61	1: IPE240 trv	751	752
Beam 109	13,72	1: IPE240 trv	580	581
Beam 110	13,72	1: IPE240 trv	634	635
Beam 111	13,72	1: IPE240 trv	688	689
Beam 112	13,72	1: IPE240 trv	742	743
Beam 113	55,61	1: IPE240 trv	615	616
Beam 114	55,61	1: IPE240 trv	669	670
Beam 115	55,61	1: IPE240 trv	723	724
Beam 116	55,61	1: IPE240 trv	777	778
Beam 117	55,61	1: IPE240 trv	612	615
Beam 118	55,61	1: IPE240 trv	666	669
Beam 119	55,61	1: IPE240 trv	720	723
Beam 120	55,61	1: IPE240 trv	774	777
Beam 121	55,61	1: IPE240 trv	611	612
Beam 122	55,61	1: IPE240 trv	665	666
Beam 123	55,61	1: IPE240 trv	719	720
Beam 124	55,61	1: IPE240 trv	773	774
Beam 125	55,61	1: IPE240 trv	609	611
Beam 126	55,61	1: IPE240 trv	663	665
Beam 127	55,61	1: IPE240 trv	717	719
Beam 128	55,61	1: IPE240 trv	771	773
Beam 129	55,61	1: IPE240 trv	608	609
Beam 130	55,61	1: IPE240 trv	662	663
Beam 131	55,61	1: IPE240 trv	716	717
Beam 132	55,61	1: IPE240 trv	770	771
Beam 133	55,61	1: IPE240 trv	606	608
Beam 134	55,61	1: IPE240 trv	660	662
Beam 135	55,61	1: IPE240 trv	714	716
Beam 136	55,61	1: IPE240 trv	768	770
Beam 137	55,61	1: IPE240 trv	605	606
Beam 138	55,61	1: IPE240 trv	659	660
Beam 139	55,61	1: IPE240 trv	713	714
Beam 140	55,61	1: IPE240 trv	767	768
Beam 141	55,61	1: IPE240 trv	603	605
Beam 142	55,61	1: IPE240 trv	657	659
Beam 143	55,61	1: IPE240 trv	711	713
Beam 144	55,61	1: IPE240 trv	765	767
Beam 145	55,61	1: IPE240 trv	602	603
Beam 146	55,61	1: IPE240 trv	656	657
Beam 147	55,61	1: IPE240 trv	710	711
Beam 148	55,61	1: IPE240 trv	764	765
Beam 149	41,9	1: IPE240 trv	600	602
Beam 150	41,9	1: IPE240 trv	654	656
Beam 151	41,9	1: IPE240 trv	708	710
Beam 152	41,9	1: IPE240 trv	762	764
Beam 153	55,61	1: IPE240 trv	598	599

	Length (cm)	Property	N1	N2
Beam 154	55,61	1: IPE240 trv	652	653
Beam 155	55,61	1: IPE240 trv	706	707
Beam 156	55,61	1: IPE240 trv	760	761
Beam 157	55,61	1: IPE240 trv	596	598
Beam 158	55,61	1: IPE240 trv	650	652
Beam 159	55,61	1: IPE240 trv	704	706
Beam 160	55,61	1: IPE240 trv	758	760
Beam 161	55,61	1: IPE240 trv	595	596
Beam 162	55,61	1: IPE240 trv	649	650
Beam 163	55,61	1: IPE240 trv	703	704
Beam 164	55,61	1: IPE240 trv	757	758
Beam 165	55,61	1: IPE240 trv	593	595
Beam 166	55,61	1: IPE240 trv	647	649
Beam 167	55,61	1: IPE240 trv	701	703
Beam 168	55,61	1: IPE240 trv	755	757
Beam 169	55,61	1: IPE240 trv	592	593
Beam 170	55,61	1: IPE240 trv	646	647
Beam 171	55,61	1: IPE240 trv	700	701
Beam 172	55,61	1: IPE240 trv	754	755
Beam 173	55,61	1: IPE240 trv	590	592
Beam 174	55,61	1: IPE240 trv	644	646
Beam 175	55,61	1: IPE240 trv	698	700
Beam 176	55,61	1: IPE240 trv	752	754
Beam 177	13,72	1: IPE240 trv	599	600
Beam 178	13,72	1: IPE240 trv	653	654
Beam 179	13,72	1: IPE240 trv	707	708
Beam 180	13,72	1: IPE240 trv	761	762
Beam 181	405	2: Tubo 120x80x3 arc	512	566
Beam 182	405	2: Tubo 120x80x3 arc	566	620
Beam 183	405	2: Tubo 120x80x3 arc	620	674
Beam 184	405	2: Tubo 120x80x3 arc	674	728
Beam 185	405	2: Tubo 120x80x3 arc	728	781
Beam 186	405	2: Tubo 120x80x3 arc	515	569
Beam 187	405	2: Tubo 120x80x3 arc	569	623
Beam 188	405	2: Tubo 120x80x3 arc	623	677
Beam 189	405	2: Tubo 120x80x3 arc	677	731
Beam 190	405	2: Tubo 120x80x3 arc	731	782
Beam 191	405	2: Tubo 120x80x3 arc	518	572
Beam 192	405	2: Tubo 120x80x3 arc	572	626
Beam 193	405	2: Tubo 120x80x3 arc	626	680
Beam 194	405	2: Tubo 120x80x3 arc	680	734
Beam 195	405	2: Tubo 120x80x3 arc	734	784
Beam 196	405	2: Tubo 120x80x3 arc	521	575
Beam 197	405	2: Tubo 120x80x3 arc	575	629
Beam 198	405	2: Tubo 120x80x3 arc	629	683
Beam 199	405	2: Tubo 120x80x3 arc	683	737
Beam 200	405	2: Tubo 120x80x3 arc	737	785
Beam 201	405	2: Tubo 120x80x3 arc	524	578
Beam 202	405	2: Tubo 120x80x3 arc	578	632
Beam 203	405	2: Tubo 120x80x3 arc	632	686
Beam 204	405	2: Tubo 120x80x3 arc	686	740
Beam 205	405	2: Tubo 120x80x3 arc	740	787
Beam 206	405	2: Tubo 120x80x3 arc	528	582
Beam 207	405	2: Tubo 120x80x3 arc	582	636
Beam 208	405	2: Tubo 120x80x3 arc	636	690
Beam 209	405	2: Tubo 120x80x3 arc	690	744
Beam 210	405	2: Tubo 120x80x3 arc	744	788
Beam 211	405	2: Tubo 120x80x3 arc	531	585
Beam 212	405	2: Tubo 120x80x3 arc	585	639
Beam 213	405	2: Tubo 120x80x3 arc	639	693
Beam 214	405	2: Tubo 120x80x3 arc	693	747
Beam 215	405	2: Tubo 120x80x3 arc	747	789
Beam 216	405	2: Tubo 120x80x3 arc	534	588
Beam 217	405	2: Tubo 120x80x3 arc	588	642
Beam 218	405	2: Tubo 120x80x3 arc	642	696
Beam 219	405	2: Tubo 120x80x3 arc	696	750
Beam 220	405	2: Tubo 120x80x3 arc	750	790
Beam 221	405	2: Tubo 120x80x3 arc	537	591
Beam 222	405	2: Tubo 120x80x3 arc	591	645

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Length (cm)	Property	N1	N2
Beam 223	405	2: Tubo 120x80x3 arc	645	699
Beam 224	405	2: Tubo 120x80x3 arc	699	753
Beam 225	405	2: Tubo 120x80x3 arc	753	791
Beam 226	405	2: Tubo 120x80x3 arc	617	563
Beam 227	405	2: Tubo 120x80x3 arc	671	617
Beam 228	405	2: Tubo 120x80x3 arc	725	671
Beam 229	405	2: Tubo 120x80x3 arc	779	725
Beam 230	405	2: Tubo 120x80x3 arc	802	779
Beam 231	405	2: Tubo 120x80x3 arc	614	560
Beam 232	405	2: Tubo 120x80x3 arc	668	614
Beam 233	405	2: Tubo 120x80x3 arc	722	668
Beam 234	405	2: Tubo 120x80x3 arc	776	722
Beam 235	405	2: Tubo 120x80x3 arc	800	776
Beam 236	405	2: Tubo 120x80x3 arc	610	556
Beam 237	405	2: Tubo 120x80x3 arc	664	610
Beam 238	405	2: Tubo 120x80x3 arc	718	664
Beam 239	405	2: Tubo 120x80x3 arc	772	718
Beam 240	405	2: Tubo 120x80x3 arc	799	772
Beam 241	405	2: Tubo 120x80x3 arc	607	553
Beam 242	405	2: Tubo 120x80x3 arc	661	607
Beam 243	405	2: Tubo 120x80x3 arc	715	661
Beam 244	405	2: Tubo 120x80x3 arc	769	715
Beam 245	405	2: Tubo 120x80x3 arc	797	769
Beam 246	405	2: Tubo 120x80x3 arc	604	550
Beam 247	405	2: Tubo 120x80x3 arc	658	604
Beam 248	405	2: Tubo 120x80x3 arc	712	658
Beam 249	405	2: Tubo 120x80x3 arc	766	712
Beam 250	405	2: Tubo 120x80x3 arc	796	766
Beam 251	405	2: Tubo 120x80x3 arc	601	547
Beam 252	405	2: Tubo 120x80x3 arc	655	601
Beam 253	405	2: Tubo 120x80x3 arc	709	655
Beam 254	405	2: Tubo 120x80x3 arc	763	709
Beam 255	405	2: Tubo 120x80x3 arc	794	763
Beam 256	405	2: Tubo 120x80x3 arc	597	543
Beam 257	405	2: Tubo 120x80x3 arc	651	597
Beam 258	405	2: Tubo 120x80x3 arc	705	651
Beam 259	405	2: Tubo 120x80x3 arc	759	705
Beam 260	405	2: Tubo 120x80x3 arc	793	759
Beam 261	405	2: Tubo 120x80x3 arc	594	540
Beam 262	405	2: Tubo 120x80x3 arc	648	594
Beam 263	405	2: Tubo 120x80x3 arc	702	648
Beam 264	405	2: Tubo 120x80x3 arc	756	702
Beam 265	405	2: Tubo 120x80x3 arc	792	756
Beam 266	462	3: Tondo Ø16	778	717
Beam 267	462	3: Tondo Ø16	771	724
Beam 268	462	3: Tondo Ø16	771	711
Beam 269	462	3: Tondo Ø16	765	717
Beam 270	462	3: Tondo Ø16	765	704
Beam 271	462	3: Tondo Ø16	758	711
Beam 272	462	3: Tondo Ø16	758	698
Beam 273	462	3: Tondo Ø16	752	704
Beam 274	462	3: Tondo Ø16	752	692
Beam 275	462	3: Tondo Ø16	746	698
Beam 276	462	3: Tondo Ø16	746	685
Beam 277	462	3: Tondo Ø16	739	692
Beam 278	462	3: Tondo Ø16	739	679
Beam 279	462	3: Tondo Ø16	733	685
Beam 280	462	3: Tondo Ø16	733	673
Beam 281	462	3: Tondo Ø16	727	679
Beam 282	462	3: Tondo Ø16	670	609
Beam 283	462	3: Tondo Ø16	663	616
Beam 284	462	3: Tondo Ø16	663	603
Beam 285	462	3: Tondo Ø16	657	609
Beam 286	462	3: Tondo Ø16	657	596
Beam 287	462	3: Tondo Ø16	650	603
Beam 288	462	3: Tondo Ø16	650	590
Beam 289	462	3: Tondo Ø16	644	596
Beam 290	462	3: Tondo Ø16	644	584
Beam 291	462	3: Tondo Ø16	638	590

	Length (cm)	Property	N1	N2
Beam 292	462	3: Tondo Ø16	638	577
Beam 293	462	3: Tondo Ø16	631	584
Beam 294	462	3: Tondo Ø16	631	571
Beam 295	462	3: Tondo Ø16	625	577
Beam 296	462	3: Tondo Ø16	625	565
Beam 297	462	3: Tondo Ø16	619	571
Beam 298	462	3: Tondo Ø16	724	663
Beam 299	462	3: Tondo Ø16	717	670
Beam 300	462	3: Tondo Ø16	679	619
Beam 301	462	3: Tondo Ø16	673	625
Beam 302	462	3: Tondo Ø16	616	555
Beam 303	462	3: Tondo Ø16	609	562
Beam 304	462	3: Tondo Ø16	571	511
Beam 305	462	3: Tondo Ø16	565	517
Beam 306	405	4: Tubo Ø88.9x4	562	616
Beam 307	405	4: Tubo Ø88.9x4	616	670
Beam 308	405	4: Tubo Ø88.9x4	670	724
Beam 309	405	4: Tubo Ø88.9x4	724	778
Beam 310	405	4: Tubo Ø88.9x4	511	565
Beam 311	405	4: Tubo Ø88.9x4	565	619
Beam 312	405	4: Tubo Ø88.9x4	619	673
Beam 313	405	4: Tubo Ø88.9x4	673	727
Beam 314	405	4: Tubo Ø88.9x4	549	603
Beam 315	405	4: Tubo Ø88.9x4	603	657
Beam 316	405	4: Tubo Ø88.9x4	657	711
Beam 317	405	4: Tubo Ø88.9x4	711	765
Beam 318	405	4: Tubo Ø88.9x4	523	577
Beam 319	405	4: Tubo Ø88.9x4	577	631
Beam 320	405	4: Tubo Ø88.9x4	631	685
Beam 321	405	4: Tubo Ø88.9x4	685	739
Beam 322	405	4: Tubo Ø88.9x4	778	801
Beam 323	405	4: Tubo Ø88.9x4	727	780
Beam 324	405	4: Tubo Ø88.9x4	536	590
Beam 325	405	4: Tubo Ø88.9x4	590	644
Beam 326	405	4: Tubo Ø88.9x4	644	698
Beam 327	405	4: Tubo Ø88.9x4	698	752
Beam 328	45	1: IPE240 trv	457	456
Beam 329	45	1: IPE240 trv	508	505
Beam 330	55,61	1: IPE240 trv	459	457
Beam 331	55,61	1: IPE240 trv	460	459
Beam 332	55,61	1: IPE240 trv	462	460
Beam 333	55,61	1: IPE240 trv	463	462
Beam 334	55,61	1: IPE240 trv	465	463
Beam 335	55,61	1: IPE240 trv	466	465
Beam 336	55,61	1: IPE240 trv	468	466
Beam 337	55,61	1: IPE240 trv	469	468
Beam 338	55,61	1: IPE240 trv	471	469
Beam 339	41,9	1: IPE240 trv	472	471
Beam 340	55,61	1: IPE240 trv	475	473
Beam 341	55,61	1: IPE240 trv	476	475
Beam 342	55,61	1: IPE240 trv	478	476
Beam 343	55,61	1: IPE240 trv	479	478
Beam 344	55,61	1: IPE240 trv	481	479
Beam 345	55,61	1: IPE240 trv	482	481
Beam 346	13,72	1: IPE240 trv	473	472
Beam 347	55,61	1: IPE240 trv	508	507
Beam 348	55,61	1: IPE240 trv	507	504
Beam 349	55,61	1: IPE240 trv	504	503
Beam 350	55,61	1: IPE240 trv	503	501
Beam 351	55,61	1: IPE240 trv	501	500
Beam 352	55,61	1: IPE240 trv	500	498
Beam 353	55,61	1: IPE240 trv	498	497
Beam 354	55,61	1: IPE240 trv	497	495
Beam 355	55,61	1: IPE240 trv	495	494
Beam 356	41,9	1: IPE240 trv	494	492
Beam 357	55,61	1: IPE240 trv	491	490
Beam 358	55,61	1: IPE240 trv	490	488
Beam 359	55,61	1: IPE240 trv	488	487
Beam 360	55,61	1: IPE240 trv	487	485

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Length (cm)	Property	N1	N2
Beam 361	55,61	1: IPE240 trv	485	484
Beam 362	55,61	1: IPE240 trv	484	482
Beam 363	13,72	1: IPE240 trv	492	491
Beam 364	45	1: IPE240 trv	403	402
Beam 365	45	1: IPE240 trv	349	348
Beam 366	45	1: IPE240 trv	79	78
Beam 367	45	1: IPE240 trv	25	24
Beam 368	45	1: IPE240 trv	454	451
Beam 369	45	1: IPE240 trv	400	397
Beam 370	45	1: IPE240 trv	130	127
Beam 371	45	1: IPE240 trv	76	73
Beam 372	55,61	1: IPE240 trv	405	403
Beam 373	55,61	1: IPE240 trv	351	349
Beam 374	55,61	1: IPE240 trv	81	79
Beam 375	55,61	1: IPE240 trv	27	25
Beam 376	55,61	1: IPE240 trv	406	405
Beam 377	55,61	1: IPE240 trv	352	351
Beam 378	55,61	1: IPE240 trv	82	81
Beam 379	55,61	1: IPE240 trv	28	27
Beam 380	55,61	1: IPE240 trv	408	406
Beam 381	55,61	1: IPE240 trv	354	352
Beam 382	55,61	1: IPE240 trv	84	82
Beam 383	55,61	1: IPE240 trv	30	28
Beam 384	55,61	1: IPE240 trv	409	408
Beam 385	55,61	1: IPE240 trv	355	354
Beam 386	55,61	1: IPE240 trv	85	84
Beam 387	55,61	1: IPE240 trv	31	30
Beam 388	55,61	1: IPE240 trv	411	409
Beam 389	55,61	1: IPE240 trv	357	355
Beam 390	55,61	1: IPE240 trv	87	85
Beam 391	55,61	1: IPE240 trv	33	31
Beam 392	55,61	1: IPE240 trv	412	411
Beam 393	55,61	1: IPE240 trv	358	357
Beam 394	55,61	1: IPE240 trv	88	87
Beam 395	55,61	1: IPE240 trv	34	33
Beam 396	55,61	1: IPE240 trv	414	412
Beam 397	55,61	1: IPE240 trv	360	358
Beam 398	55,61	1: IPE240 trv	90	88
Beam 399	55,61	1: IPE240 trv	36	34
Beam 400	55,61	1: IPE240 trv	415	414
Beam 401	55,61	1: IPE240 trv	361	360
Beam 402	55,61	1: IPE240 trv	91	90
Beam 403	55,61	1: IPE240 trv	37	36
Beam 404	55,61	1: IPE240 trv	417	415
Beam 405	55,61	1: IPE240 trv	363	361
Beam 406	55,61	1: IPE240 trv	93	91
Beam 407	55,61	1: IPE240 trv	39	37
Beam 408	41,9	1: IPE240 trv	418	417
Beam 409	41,9	1: IPE240 trv	364	363
Beam 410	41,9	1: IPE240 trv	94	93
Beam 411	41,9	1: IPE240 trv	40	39
Beam 412	55,61	1: IPE240 trv	421	419
Beam 413	55,61	1: IPE240 trv	367	365
Beam 414	55,61	1: IPE240 trv	97	95
Beam 415	55,61	1: IPE240 trv	43	41
Beam 416	55,61	1: IPE240 trv	422	421
Beam 417	55,61	1: IPE240 trv	368	367
Beam 418	55,61	1: IPE240 trv	98	97
Beam 419	55,61	1: IPE240 trv	44	43
Beam 420	55,61	1: IPE240 trv	424	422
Beam 421	55,61	1: IPE240 trv	370	368
Beam 422	55,61	1: IPE240 trv	100	98
Beam 423	55,61	1: IPE240 trv	46	44
Beam 424	55,61	1: IPE240 trv	425	424
Beam 425	55,61	1: IPE240 trv	371	370
Beam 426	55,61	1: IPE240 trv	101	100
Beam 427	55,61	1: IPE240 trv	47	46
Beam 428	55,61	1: IPE240 trv	427	425
Beam 429	55,61	1: IPE240 trv	373	371

	Length (cm)	Property	N1	N2
Beam 430	55,61	1: IPE240 trv	103	101
Beam 431	55,61	1: IPE240 trv	49	47
Beam 432	55,61	1: IPE240 trv	428	427
Beam 433	55,61	1: IPE240 trv	374	373
Beam 434	55,61	1: IPE240 trv	104	103
Beam 435	55,61	1: IPE240 trv	50	49
Beam 436	13,72	1: IPE240 trv	419	418
Beam 437	13,72	1: IPE240 trv	365	364
Beam 438	13,72	1: IPE240 trv	95	94
Beam 439	13,72	1: IPE240 trv	41	40
Beam 440	55,61	1: IPE240 trv	454	453
Beam 441	55,61	1: IPE240 trv	400	399
Beam 442	55,61	1: IPE240 trv	130	129
Beam 443	55,61	1: IPE240 trv	76	75
Beam 444	55,61	1: IPE240 trv	453	450
Beam 445	55,61	1: IPE240 trv	399	396
Beam 446	55,61	1: IPE240 trv	129	126
Beam 447	55,61	1: IPE240 trv	75	72
Beam 448	55,61	1: IPE240 trv	450	449
Beam 449	55,61	1: IPE240 trv	396	395
Beam 450	55,61	1: IPE240 trv	126	125
Beam 451	55,61	1: IPE240 trv	72	71
Beam 452	55,61	1: IPE240 trv	449	447
Beam 453	55,61	1: IPE240 trv	395	393
Beam 454	55,61	1: IPE240 trv	125	123
Beam 455	55,61	1: IPE240 trv	71	69
Beam 456	55,61	1: IPE240 trv	447	446
Beam 457	55,61	1: IPE240 trv	393	392
Beam 458	55,61	1: IPE240 trv	123	122
Beam 459	55,61	1: IPE240 trv	69	68
Beam 460	55,61	1: IPE240 trv	446	444
Beam 461	55,61	1: IPE240 trv	392	390
Beam 462	55,61	1: IPE240 trv	122	120
Beam 463	55,61	1: IPE240 trv	68	66
Beam 464	55,61	1: IPE240 trv	444	443
Beam 465	55,61	1: IPE240 trv	390	389
Beam 466	55,61	1: IPE240 trv	120	119
Beam 467	55,61	1: IPE240 trv	66	65
Beam 468	55,61	1: IPE240 trv	443	441
Beam 469	55,61	1: IPE240 trv	389	387
Beam 470	55,61	1: IPE240 trv	119	117
Beam 471	55,61	1: IPE240 trv	65	63
Beam 472	55,61	1: IPE240 trv	441	440
Beam 473	55,61	1: IPE240 trv	387	386
Beam 474	55,61	1: IPE240 trv	117	116
Beam 475	55,61	1: IPE240 trv	63	62
Beam 476	41,9	1: IPE240 trv	440	438
Beam 477	41,9	1: IPE240 trv	386	384
Beam 478	41,9	1: IPE240 trv	116	114
Beam 479	41,9	1: IPE240 trv	62	60
Beam 480	55,61	1: IPE240 trv	437	436
Beam 481	55,61	1: IPE240 trv	383	382
Beam 482	55,61	1: IPE240 trv	113	112
Beam 483	55,61	1: IPE240 trv	59	58
Beam 484	55,61	1: IPE240 trv	436	434
Beam 485	55,61	1: IPE240 trv	382	380
Beam 486	55,61	1: IPE240 trv	112	110
Beam 487	55,61	1: IPE240 trv	58	56
Beam 488	55,61	1: IPE240 trv	434	433
Beam 489	55,61	1: IPE240 trv	380	379
Beam 490	55,61	1: IPE240 trv	110	109
Beam 491	55,61	1: IPE240 trv	56	55
Beam 492	55,61	1: IPE240 trv	433	431
Beam 493	55,61	1: IPE240 trv	379	377
Beam 494	55,61	1: IPE240 trv	109	107
Beam 495	55,61	1: IPE240 trv	55	53
Beam 496	55,61	1: IPE240 trv	431	430
Beam 497	55,61	1: IPE240 trv	377	376
Beam 498	55,61	1: IPE240 trv	107	106

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Length (cm)	Property	N1	N2
Beam 499	55,61	1: IPE240 trv	53	52
Beam 500	55,61	1: IPE240 trv	430	428
Beam 501	55,61	1: IPE240 trv	376	374
Beam 502	55,61	1: IPE240 trv	106	104
Beam 503	55,61	1: IPE240 trv	52	50
Beam 504	13,72	1: IPE240 trv	438	437
Beam 505	13,72	1: IPE240 trv	384	383
Beam 506	13,72	1: IPE240 trv	114	113
Beam 507	13,72	1: IPE240 trv	60	59
Beam 508	375	2: Tubo 120x80x3 arc	404	458
Beam 509	380	2: Tubo 120x80x3 arc	350	404
Beam 510	439	5: Tubo 120x80x4 arc	296	350
Beam 511	405	2: Tubo 120x80x3 arc	26	80
Beam 512	405	2: Tubo 120x80x3 arc	2	26
Beam 513	375	2: Tubo 120x80x3 arc	407	461
Beam 514	380	2: Tubo 120x80x3 arc	353	407
Beam 515	439	5: Tubo 120x80x4 arc	299	353
Beam 516	405	2: Tubo 120x80x3 arc	29	83
Beam 517	405	2: Tubo 120x80x3 arc	3	29
Beam 518	375	2: Tubo 120x80x3 arc	410	464
Beam 519	380	2: Tubo 120x80x3 arc	356	410
Beam 520	439	5: Tubo 120x80x4 arc	302	356
Beam 521	405	2: Tubo 120x80x3 arc	32	86
Beam 522	405	2: Tubo 120x80x3 arc	5	32
Beam 523	375	2: Tubo 120x80x3 arc	413	467
Beam 524	380	2: Tubo 120x80x3 arc	359	413
Beam 525	439	5: Tubo 120x80x4 arc	305	359
Beam 526	405	2: Tubo 120x80x3 arc	35	89
Beam 527	405	2: Tubo 120x80x3 arc	6	35
Beam 528	375	2: Tubo 120x80x3 arc	416	470
Beam 529	380	2: Tubo 120x80x3 arc	362	416
Beam 530	439	5: Tubo 120x80x4 arc	308	362
Beam 531	405	2: Tubo 120x80x3 arc	38	92
Beam 532	405	2: Tubo 120x80x3 arc	8	38
Beam 533	375	2: Tubo 120x80x3 arc	420	474
Beam 534	380	2: Tubo 120x80x3 arc	366	420
Beam 535	439	5: Tubo 120x80x4 arc	312	366
Beam 536	405	2: Tubo 120x80x3 arc	42	96
Beam 537	405	2: Tubo 120x80x3 arc	9	42
Beam 538	375	2: Tubo 120x80x3 arc	423	477
Beam 539	380	2: Tubo 120x80x3 arc	369	423
Beam 540	439	5: Tubo 120x80x4 arc	315	369
Beam 541	405	2: Tubo 120x80x3 arc	45	99
Beam 542	405	2: Tubo 120x80x3 arc	10	45
Beam 543	375	2: Tubo 120x80x3 arc	426	480
Beam 544	380	2: Tubo 120x80x3 arc	372	426
Beam 545	439	5: Tubo 120x80x4 arc	318	372
Beam 546	405	2: Tubo 120x80x3 arc	48	102
Beam 547	405	2: Tubo 120x80x3 arc	11	48
Beam 548	375	2: Tubo 120x80x3 arc	429	483
Beam 549	380	2: Tubo 120x80x3 arc	375	429
Beam 550	439	5: Tubo 120x80x4 arc	321	375
Beam 551	405	2: Tubo 120x80x3 arc	51	105
Beam 552	405	2: Tubo 120x80x3 arc	12	51
Beam 553	375	2: Tubo 120x80x3 arc	509	455
Beam 554	380	2: Tubo 120x80x3 arc	455	401
Beam 555	439	5: Tubo 120x80x4 arc	401	347
Beam 556	405	2: Tubo 120x80x3 arc	131	77
Beam 557	405	2: Tubo 120x80x3 arc	77	23
Beam 558	375	2: Tubo 120x80x3 arc	506	452
Beam 559	380	2: Tubo 120x80x3 arc	452	398
Beam 560	439	5: Tubo 120x80x4 arc	398	344
Beam 561	405	2: Tubo 120x80x3 arc	128	74
Beam 562	405	2: Tubo 120x80x3 arc	74	21
Beam 563	375	2: Tubo 120x80x3 arc	502	448
Beam 564	380	2: Tubo 120x80x3 arc	448	394
Beam 565	439	5: Tubo 120x80x4 arc	394	340
Beam 566	405	2: Tubo 120x80x3 arc	124	70
Beam 567	405	2: Tubo 120x80x3 arc	70	20

	Length (cm)	Property	N1	N2
Beam 568	375	2: Tubo 120x80x3 arc	499	445
Beam 569	380	2: Tubo 120x80x3 arc	445	391
Beam 570	439	5: Tubo 120x80x4 arc	391	337
Beam 571	405	2: Tubo 120x80x3 arc	121	67
Beam 572	405	2: Tubo 120x80x3 arc	67	18
Beam 573	375	2: Tubo 120x80x3 arc	496	442
Beam 574	380	2: Tubo 120x80x3 arc	442	388
Beam 575	439	5: Tubo 120x80x4 arc	388	334
Beam 576	405	2: Tubo 120x80x3 arc	118	64
Beam 577	405	2: Tubo 120x80x3 arc	64	17
Beam 578	375	2: Tubo 120x80x3 arc	493	439
Beam 579	380	2: Tubo 120x80x3 arc	439	385
Beam 580	439	5: Tubo 120x80x4 arc	385	331
Beam 581	405	2: Tubo 120x80x3 arc	115	61
Beam 582	405	2: Tubo 120x80x3 arc	61	15
Beam 583	375	2: Tubo 120x80x3 arc	489	435
Beam 584	380	2: Tubo 120x80x3 arc	435	381
Beam 585	439	5: Tubo 120x80x4 arc	381	327
Beam 586	405	2: Tubo 120x80x3 arc	111	57
Beam 587	405	2: Tubo 120x80x3 arc	57	14
Beam 588	375	2: Tubo 120x80x3 arc	486	432
Beam 589	380	2: Tubo 120x80x3 arc	432	378
Beam 590	439	5: Tubo 120x80x4 arc	378	324
Beam 591	405	2: Tubo 120x80x3 arc	108	54
Beam 592	405	2: Tubo 120x80x3 arc	54	13
Beam 593	462	3: Tondo Ø16	123	76
Beam 594	462	3: Tondo Ø16	130	69
Beam 595	462	3: Tondo Ø16	117	69
Beam 596	462	3: Tondo Ø16	123	63
Beam 597	462	3: Tondo Ø16	110	63
Beam 598	462	3: Tondo Ø16	117	56
Beam 599	462	3: Tondo Ø16	104	56
Beam 600	462	3: Tondo Ø16	110	50
Beam 601	462	3: Tondo Ø16	98	50
Beam 602	462	3: Tondo Ø16	104	44
Beam 603	462	3: Tondo Ø16	91	44
Beam 604	462	3: Tondo Ø16	98	37
Beam 605	462	3: Tondo Ø16	85	37
Beam 606	462	3: Tondo Ø16	91	31
Beam 607	462	3: Tondo Ø16	79	31
Beam 608	462	3: Tondo Ø16	85	25
Beam 609	440,25	3: Tondo Ø16	447	400
Beam 610	440,25	3: Tondo Ø16	454	393
Beam 611	440,25	3: Tondo Ø16	441	393
Beam 612	440,25	3: Tondo Ø16	447	387
Beam 613	440,25	3: Tondo Ø16	434	387
Beam 614	440,25	3: Tondo Ø16	441	380
Beam 615	440,25	3: Tondo Ø16	428	380
Beam 616	440,25	3: Tondo Ø16	434	374
Beam 617	440,25	3: Tondo Ø16	422	374
Beam 618	440,25	3: Tondo Ø16	428	368
Beam 619	440,25	3: Tondo Ø16	415	368
Beam 620	440,25	3: Tondo Ø16	422	361
Beam 621	440,25	3: Tondo Ø16	409	361
Beam 622	440,25	3: Tondo Ø16	415	355
Beam 623	440,25	3: Tondo Ø16	403	355
Beam 624	440,25	3: Tondo Ø16	409	349
Beam 625	492,08	3: Tondo Ø16	393	346
Beam 626	492,08	3: Tondo Ø16	400	339
Beam 627	492,08	3: Tondo Ø16	349	301
Beam 628	492,08	3: Tondo Ø16	355	295
Beam 629	435,94	3: Tondo Ø16	501	454
Beam 630	435,94	3: Tondo Ø16	508	447
Beam 631	435,94	3: Tondo Ø16	457	409
Beam 632	435,94	3: Tondo Ø16	463	403
Beam 633	375	4: Tubo Ø88.9x4	454	508
Beam 634	380	4: Tubo Ø88.9x4	400	454
Beam 635	439	4: Tubo Ø88.9x4	346	400
Beam 636	405	4: Tubo Ø88.9x4	76	130

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Length (cm)	Property	N1	N2
Beam 637	375	4: Tubo Ø88.9x4	403	457
Beam 638	380	4: Tubo Ø88.9x4	349	403
Beam 639	439	4: Tubo Ø88.9x4	295	349
Beam 640	405	4: Tubo Ø88.9x4	25	79
Beam 641	375	4: Tubo Ø88.9x4	441	495
Beam 642	380	4: Tubo Ø88.9x4	387	441
Beam 643	439	4: Tubo Ø88.9x4	333	387
Beam 644	405	4: Tubo Ø88.9x4	63	117
Beam 645	375	4: Tubo Ø88.9x4	415	469
Beam 646	380	4: Tubo Ø88.9x4	361	415
Beam 647	439	4: Tubo Ø88.9x4	307	361
Beam 648	405	4: Tubo Ø88.9x4	37	91
Beam 649	405	4: Tubo Ø88.9x4	22	76
Beam 650	405	4: Tubo Ø88.9x4	1	25
Beam 651	375	4: Tubo Ø88.9x4	428	482
Beam 652	380	4: Tubo Ø88.9x4	374	428
Beam 653	439	4: Tubo Ø88.9x4	320	374
Beam 654	405	4: Tubo Ø88.9x4	50	104
Beam 655	462	3: Tondo Ø16	711	663
Beam 656	462	3: Tondo Ø16	717	657
Beam 657	462	3: Tondo Ø16	609	549
Beam 658	462	3: Tondo Ø16	603	555
Beam 659	462	3: Tondo Ø16	685	625
Beam 660	462	3: Tondo Ø16	679	631
Beam 661	462	3: Tondo Ø16	577	517
Beam 662	462	3: Tondo Ø16	571	523
Beam 663	435,94	3: Tondo Ø16	501	441
Beam 664	435,94	3: Tondo Ø16	495	447
Beam 665	492,08	3: Tondo Ø16	393	333
Beam 666	492,08	3: Tondo Ø16	387	339
Beam 667	435,94	3: Tondo Ø16	469	409
Beam 668	435,94	3: Tondo Ø16	463	415
Beam 669	492,08	3: Tondo Ø16	361	301
Beam 670	492,08	3: Tondo Ø16	355	307
Beam 671	45	1: IPE240 trv	132	133
Beam 672	45	1: IPE240 trv	186	187
Beam 673	45	1: IPE240 trv	240	241
Beam 674	45	1: IPE240 trv	294	295
Beam 675	45	1: IPE240 trv	181	184
Beam 676	45	1: IPE240 trv	235	238
Beam 677	45	1: IPE240 trv	289	292
Beam 678	45	1: IPE240 trv	343	346
Beam 679	55,61	1: IPE240 trv	133	135
Beam 680	55,61	1: IPE240 trv	187	189
Beam 681	55,61	1: IPE240 trv	241	243
Beam 682	55,61	1: IPE240 trv	295	297
Beam 683	55,61	1: IPE240 trv	135	136
Beam 684	55,61	1: IPE240 trv	189	190
Beam 685	55,61	1: IPE240 trv	243	244
Beam 686	55,61	1: IPE240 trv	297	298
Beam 687	55,61	1: IPE240 trv	136	138
Beam 688	55,61	1: IPE240 trv	190	192
Beam 689	55,61	1: IPE240 trv	244	246
Beam 690	55,61	1: IPE240 trv	298	300
Beam 691	55,61	1: IPE240 trv	138	139
Beam 692	55,61	1: IPE240 trv	192	193
Beam 693	55,61	1: IPE240 trv	246	247
Beam 694	55,61	1: IPE240 trv	300	301
Beam 695	55,61	1: IPE240 trv	139	141
Beam 696	55,61	1: IPE240 trv	193	195
Beam 697	55,61	1: IPE240 trv	247	249
Beam 698	55,61	1: IPE240 trv	301	303
Beam 699	55,61	1: IPE240 trv	141	142
Beam 700	55,61	1: IPE240 trv	195	196
Beam 701	55,61	1: IPE240 trv	249	250
Beam 702	55,61	1: IPE240 trv	303	304
Beam 703	55,61	1: IPE240 trv	142	144
Beam 704	55,61	1: IPE240 trv	196	198
Beam 705	55,61	1: IPE240 trv	250	252

	Length (cm)	Property	N1	N2
Beam 706	55,61	1: IPE240 trv	304	306
Beam 707	55,61	1: IPE240 trv	144	145
Beam 708	55,61	1: IPE240 trv	198	199
Beam 709	55,61	1: IPE240 trv	252	253
Beam 710	55,61	1: IPE240 trv	306	307
Beam 711	55,61	1: IPE240 trv	145	147
Beam 712	55,61	1: IPE240 trv	199	201
Beam 713	55,61	1: IPE240 trv	253	255
Beam 714	55,61	1: IPE240 trv	307	309
Beam 715	41,9	1: IPE240 trv	147	148
Beam 716	41,9	1: IPE240 trv	201	202
Beam 717	41,9	1: IPE240 trv	255	256
Beam 718	41,9	1: IPE240 trv	309	310
Beam 719	55,61	1: IPE240 trv	149	151
Beam 720	55,61	1: IPE240 trv	203	205
Beam 721	55,61	1: IPE240 trv	257	259
Beam 722	55,61	1: IPE240 trv	311	313
Beam 723	55,61	1: IPE240 trv	151	152
Beam 724	55,61	1: IPE240 trv	205	206
Beam 725	55,61	1: IPE240 trv	259	260
Beam 726	55,61	1: IPE240 trv	313	314
Beam 727	55,61	1: IPE240 trv	152	154
Beam 728	55,61	1: IPE240 trv	206	208
Beam 729	55,61	1: IPE240 trv	260	262
Beam 730	55,61	1: IPE240 trv	314	316
Beam 731	55,61	1: IPE240 trv	154	155
Beam 732	55,61	1: IPE240 trv	208	209
Beam 733	55,61	1: IPE240 trv	262	263
Beam 734	55,61	1: IPE240 trv	316	317
Beam 735	55,61	1: IPE240 trv	155	157
Beam 736	55,61	1: IPE240 trv	209	211
Beam 737	55,61	1: IPE240 trv	263	265
Beam 738	55,61	1: IPE240 trv	317	319
Beam 739	55,61	1: IPE240 trv	157	158
Beam 740	55,61	1: IPE240 trv	211	212
Beam 741	55,61	1: IPE240 trv	265	266
Beam 742	55,61	1: IPE240 trv	319	320
Beam 743	13,72	1: IPE240 trv	148	149
Beam 744	13,72	1: IPE240 trv	202	203
Beam 745	13,72	1: IPE240 trv	256	257
Beam 746	13,72	1: IPE240 trv	310	311
Beam 747	55,61	1: IPE240 trv	183	184
Beam 748	55,61	1: IPE240 trv	237	238
Beam 749	55,61	1: IPE240 trv	291	292
Beam 750	55,61	1: IPE240 trv	345	346
Beam 751	55,61	1: IPE240 trv	180	183
Beam 752	55,61	1: IPE240 trv	234	237
Beam 753	55,61	1: IPE240 trv	288	291
Beam 754	55,61	1: IPE240 trv	342	345
Beam 755	55,61	1: IPE240 trv	179	180
Beam 756	55,61	1: IPE240 trv	233	234
Beam 757	55,61	1: IPE240 trv	287	288
Beam 758	55,61	1: IPE240 trv	341	342
Beam 759	55,61	1: IPE240 trv	177	179
Beam 760	55,61	1: IPE240 trv	231	233
Beam 761	55,61	1: IPE240 trv	285	287
Beam 762	55,61	1: IPE240 trv	339	341
Beam 763	55,61	1: IPE240 trv	176	177
Beam 764	55,61	1: IPE240 trv	230	231
Beam 765	55,61	1: IPE240 trv	284	285
Beam 766	55,61	1: IPE240 trv	338	339
Beam 767	55,61	1: IPE240 trv	174	176
Beam 768	55,61	1: IPE240 trv	228	230
Beam 769	55,61	1: IPE240 trv	282	284
Beam 770	55,61	1: IPE240 trv	336	338
Beam 771	55,61	1: IPE240 trv	173	174
Beam 772	55,61	1: IPE240 trv	227	228
Beam 773	55,61	1: IPE240 trv	281	282
Beam 774	55,61	1: IPE240 trv	335	336

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Length (cm)	Property	N1	N2
Beam 775	55,61	1: IPE240 trv	171	173
Beam 776	55,61	1: IPE240 trv	225	227
Beam 777	55,61	1: IPE240 trv	279	281
Beam 778	55,61	1: IPE240 trv	333	335
Beam 779	55,61	1: IPE240 trv	170	171
Beam 780	55,61	1: IPE240 trv	224	225
Beam 781	55,61	1: IPE240 trv	278	279
Beam 782	55,61	1: IPE240 trv	332	333
Beam 783	41,9	1: IPE240 trv	168	170
Beam 784	41,9	1: IPE240 trv	222	224
Beam 785	41,9	1: IPE240 trv	276	278
Beam 786	41,9	1: IPE240 trv	330	332
Beam 787	55,61	1: IPE240 trv	166	167
Beam 788	55,61	1: IPE240 trv	220	221
Beam 789	55,61	1: IPE240 trv	274	275
Beam 790	55,61	1: IPE240 trv	328	329
Beam 791	55,61	1: IPE240 trv	164	166
Beam 792	55,61	1: IPE240 trv	218	220
Beam 793	55,61	1: IPE240 trv	272	274
Beam 794	55,61	1: IPE240 trv	326	328
Beam 795	55,61	1: IPE240 trv	163	164
Beam 796	55,61	1: IPE240 trv	217	218
Beam 797	55,61	1: IPE240 trv	271	272
Beam 798	55,61	1: IPE240 trv	325	326
Beam 799	55,61	1: IPE240 trv	161	163
Beam 800	55,61	1: IPE240 trv	215	217
Beam 801	55,61	1: IPE240 trv	269	271
Beam 802	55,61	1: IPE240 trv	323	325
Beam 803	55,61	1: IPE240 trv	160	161
Beam 804	55,61	1: IPE240 trv	214	215
Beam 805	55,61	1: IPE240 trv	268	269
Beam 806	55,61	1: IPE240 trv	322	323
Beam 807	55,61	1: IPE240 trv	158	160
Beam 808	55,61	1: IPE240 trv	212	214
Beam 809	55,61	1: IPE240 trv	266	268
Beam 810	55,61	1: IPE240 trv	320	322
Beam 811	13,72	1: IPE240 trv	167	168
Beam 812	13,72	1: IPE240 trv	221	222
Beam 813	13,72	1: IPE240 trv	275	276
Beam 814	13,72	1: IPE240 trv	329	330
Beam 815	405	2: Tubo 120x80x3 arc	80	134
Beam 816	405	2: Tubo 120x80x3 arc	134	188
Beam 817	405	2: Tubo 120x80x3 arc	188	242
Beam 818	405	2: Tubo 120x80x3 arc	242	296
Beam 819	405	2: Tubo 120x80x3 arc	83	137
Beam 820	405	2: Tubo 120x80x3 arc	137	191
Beam 821	405	2: Tubo 120x80x3 arc	191	245
Beam 822	405	2: Tubo 120x80x3 arc	245	299
Beam 823	405	2: Tubo 120x80x3 arc	86	140
Beam 824	405	2: Tubo 120x80x3 arc	140	194
Beam 825	405	2: Tubo 120x80x3 arc	194	248
Beam 826	405	2: Tubo 120x80x3 arc	248	302
Beam 827	405	2: Tubo 120x80x3 arc	89	143
Beam 828	405	2: Tubo 120x80x3 arc	143	197
Beam 829	405	2: Tubo 120x80x3 arc	197	251
Beam 830	405	2: Tubo 120x80x3 arc	251	305
Beam 831	405	2: Tubo 120x80x3 arc	92	146
Beam 832	405	2: Tubo 120x80x3 arc	146	200
Beam 833	405	2: Tubo 120x80x3 arc	200	254
Beam 834	405	2: Tubo 120x80x3 arc	254	308
Beam 835	405	2: Tubo 120x80x3 arc	96	150
Beam 836	405	2: Tubo 120x80x3 arc	150	204
Beam 837	405	2: Tubo 120x80x3 arc	204	258
Beam 838	405	2: Tubo 120x80x3 arc	258	312
Beam 839	405	2: Tubo 120x80x3 arc	99	153
Beam 840	405	2: Tubo 120x80x3 arc	153	207
Beam 841	405	2: Tubo 120x80x3 arc	207	261
Beam 842	405	2: Tubo 120x80x3 arc	261	315
Beam 843	405	2: Tubo 120x80x3 arc	102	156

	Length (cm)	Property	N1	N2
Beam 844	405	2: Tubo 120x80x3 arc	156	210
Beam 845	405	2: Tubo 120x80x3 arc	210	264
Beam 846	405	2: Tubo 120x80x3 arc	264	318
Beam 847	405	2: Tubo 120x80x3 arc	105	159
Beam 848	405	2: Tubo 120x80x3 arc	159	213
Beam 849	405	2: Tubo 120x80x3 arc	213	267
Beam 850	405	2: Tubo 120x80x3 arc	267	321
Beam 851	405	2: Tubo 120x80x3 arc	185	131
Beam 852	405	2: Tubo 120x80x3 arc	239	185
Beam 853	405	2: Tubo 120x80x3 arc	293	239
Beam 854	405	2: Tubo 120x80x3 arc	347	293
Beam 855	405	2: Tubo 120x80x3 arc	182	128
Beam 856	405	2: Tubo 120x80x3 arc	236	182
Beam 857	405	2: Tubo 120x80x3 arc	290	236
Beam 858	405	2: Tubo 120x80x3 arc	344	290
Beam 859	405	2: Tubo 120x80x3 arc	178	124
Beam 860	405	2: Tubo 120x80x3 arc	232	178
Beam 861	405	2: Tubo 120x80x3 arc	286	232
Beam 862	405	2: Tubo 120x80x3 arc	340	286
Beam 863	405	2: Tubo 120x80x3 arc	175	121
Beam 864	405	2: Tubo 120x80x3 arc	229	175
Beam 865	405	2: Tubo 120x80x3 arc	283	229
Beam 866	405	2: Tubo 120x80x3 arc	337	283
Beam 867	405	2: Tubo 120x80x3 arc	172	118
Beam 868	405	2: Tubo 120x80x3 arc	226	172
Beam 869	405	2: Tubo 120x80x3 arc	280	226
Beam 870	405	2: Tubo 120x80x3 arc	334	280
Beam 871	405	2: Tubo 120x80x3 arc	169	115
Beam 872	405	2: Tubo 120x80x3 arc	223	169
Beam 873	405	2: Tubo 120x80x3 arc	277	223
Beam 874	405	2: Tubo 120x80x3 arc	331	277
Beam 875	405	2: Tubo 120x80x3 arc	165	111
Beam 876	405	2: Tubo 120x80x3 arc	219	165
Beam 877	405	2: Tubo 120x80x3 arc	273	219
Beam 878	405	2: Tubo 120x80x3 arc	327	273
Beam 879	405	2: Tubo 120x80x3 arc	162	108
Beam 880	405	2: Tubo 120x80x3 arc	216	162
Beam 881	405	2: Tubo 120x80x3 arc	270	216
Beam 882	405	2: Tubo 120x80x3 arc	324	270
Beam 883	462	3: Tondo Ø16	346	285
Beam 884	462	3: Tondo Ø16	339	292
Beam 885	462	3: Tondo Ø16	339	279
Beam 886	462	3: Tondo Ø16	333	285
Beam 887	462	3: Tondo Ø16	279	218
Beam 888	462	3: Tondo Ø16	272	225
Beam 889	462	3: Tondo Ø16	272	212
Beam 890	462	3: Tondo Ø16	266	218
Beam 891	462	3: Tondo Ø16	266	206
Beam 892	462	3: Tondo Ø16	260	212
Beam 893	462	3: Tondo Ø16	260	199
Beam 894	462	3: Tondo Ø16	253	206
Beam 895	462	3: Tondo Ø16	307	247
Beam 896	462	3: Tondo Ø16	301	253
Beam 897	462	3: Tondo Ø16	301	241
Beam 898	462	3: Tondo Ø16	295	247
Beam 899	462	3: Tondo Ø16	238	177
Beam 900	462	3: Tondo Ø16	231	184
Beam 901	462	3: Tondo Ø16	231	171
Beam 902	462	3: Tondo Ø16	225	177
Beam 903	462	3: Tondo Ø16	199	139
Beam 904	462	3: Tondo Ø16	193	145
Beam 905	462	3: Tondo Ø16	193	133
Beam 906	462	3: Tondo Ø16	187	139
Beam 907	462	3: Tondo Ø16	292	231
Beam 908	462	3: Tondo Ø16	285	238
Beam 909	462	3: Tondo Ø16	247	187
Beam 910	462	3: Tondo Ø16	241	193
Beam 911	462	3: Tondo Ø16	184	123
Beam 912	462	3: Tondo Ø16	177	130

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	Length (cm)	Property	N1	N2
Beam 913	462	3: Tondo Ø16	139	79
Beam 914	462	3: Tondo Ø16	133	85
Beam 915	405	4: Tubo Ø88.9x4	130	184
Beam 916	405	4: Tubo Ø88.9x4	184	238
Beam 917	405	4: Tubo Ø88.9x4	238	292
Beam 918	405	4: Tubo Ø88.9x4	292	346
Beam 919	405	4: Tubo Ø88.9x4	79	133
Beam 920	405	4: Tubo Ø88.9x4	133	187
Beam 921	405	4: Tubo Ø88.9x4	187	241
Beam 922	405	4: Tubo Ø88.9x4	241	295
Beam 923	405	4: Tubo Ø88.9x4	117	171
Beam 924	405	4: Tubo Ø88.9x4	171	225
Beam 925	405	4: Tubo Ø88.9x4	225	279
Beam 926	405	4: Tubo Ø88.9x4	279	333
Beam 927	405	4: Tubo Ø88.9x4	91	145
Beam 928	405	4: Tubo Ø88.9x4	145	199
Beam 929	405	4: Tubo Ø88.9x4	199	253
Beam 930	405	4: Tubo Ø88.9x4	253	307
Beam 931	405	4: Tubo Ø88.9x4	104	158
Beam 932	405	4: Tubo Ø88.9x4	158	212
Beam 933	405	4: Tubo Ø88.9x4	212	266
Beam 934	405	4: Tubo Ø88.9x4	266	320
Beam 935	462	3: Tondo Ø16	279	231
Beam 936	462	3: Tondo Ø16	285	225
Beam 937	462	3: Tondo Ø16	177	117

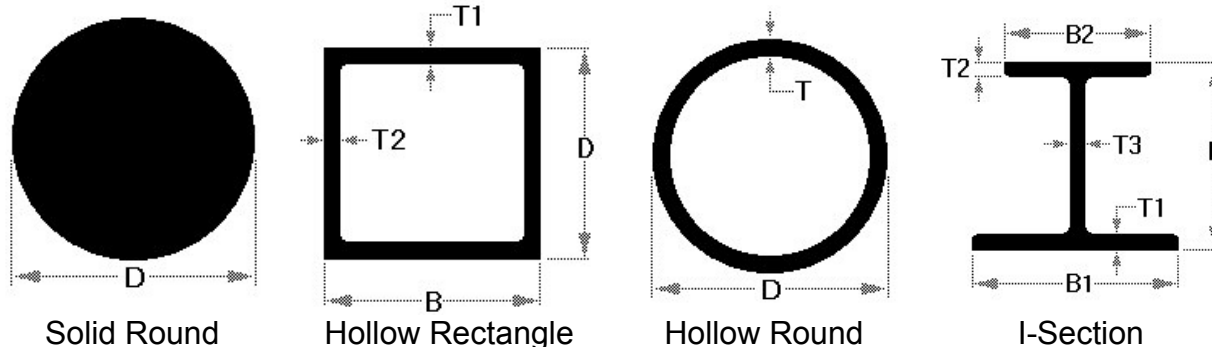
	Length (cm)	Property	N1	N2
Beam 938	462	3: Tondo Ø16	171	123
Beam 939	462	3: Tondo Ø16	253	193
Beam 940	462	3: Tondo Ø16	247	199
Beam 941	462	3: Tondo Ø16	145	85
Beam 942	462	3: Tondo Ø16	139	91
Beam 943	405	4: Tubo Ø88.9x4	765	795
Beam 944	405	4: Tubo Ø88.9x4	739	786
Beam 945	405	4: Tubo Ø88.9x4	16	63
Beam 946	405	4: Tubo Ø88.9x4	7	37
Beam 947	462	3: Tondo Ø16	69	22
Beam 948	462	3: Tondo Ø16	76	19
Beam 949	462	3: Tondo Ø16	63	19
Beam 950	462	3: Tondo Ø16	69	16
Beam 951	462	3: Tondo Ø16	31	7
Beam 952	462	3: Tondo Ø16	37	4
Beam 953	462	3: Tondo Ø16	25	4
Beam 954	462	3: Tondo Ø16	31	1
Beam 955	462	3: Tondo Ø16	801	771
Beam 956	462	3: Tondo Ø16	798	778
Beam 957	462	3: Tondo Ø16	798	765
Beam 958	462	3: Tondo Ø16	795	771
Beam 959	462	3: Tondo Ø16	786	733
Beam 960	462	3: Tondo Ø16	783	739
Beam 961	462	3: Tondo Ø16	783	727
Beam 962	462	3: Tondo Ø16	780	733

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

CARATTERISTICHE GEOMETRICHE DEGLI ELEMENTI



	Section Type	D	B1	B2	T1	T2	T3
		cm	cm	cm	cm	cm	cm
1: IPE240 trv	I-Section	24	12	12	0,98	0,98	0,62
2: Tubo 120x80x3 arc	Hollow Rectangle	12	8		0,3	0,3	
3: Tondo Ø16	Solid Round	1,6					
4: Tubo Ø88.9x4	Hollow Round	8,89			0,4		
5: Tubo 120x80x4 arc	Hollow Rectangle	12	8		0,4	0,4	

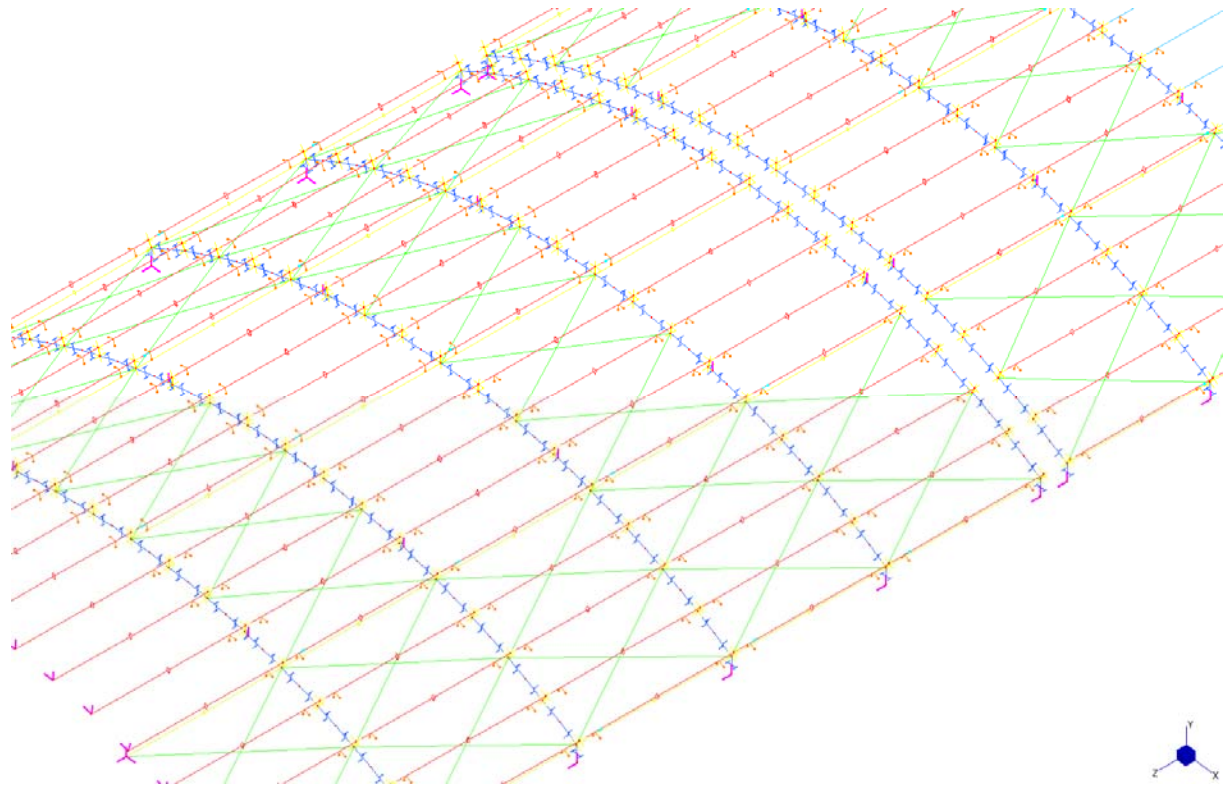
	Section Type	Area	I11	I22	J
		cm ²	cm ⁴	cm ⁴	cm ⁴
1: IPE240 trv	I-Section	39,1	3892	284	9,28
2: Tubo 120x80x3 arc	Hollow Rectangle	11,64	238,38	127,04	251,02
3: Tondo Ø16	Solid Round	2,01			
4: Tubo Ø88.9x4	Hollow Round	10,67			
5: Tubo 120x80x4 arc	Hollow Rectangle	15,36	309,04	163,64	323,84

Le diagonali di controvento sono assimilate a bielle non reagenti a compressione. Il comportamento è modellato considerando per le aste un materiale fittizio con modulo elastico dimezzato: in tal modo la rigidezza globale del campo di controvento è effettivamente pari a quella della singola diagonale attiva e si evita di sottostimare il peso proprio della struttura. Lo stato di sollecitazione negli elementi è stimato a posteriori sommando le azioni assiali all'interno di ciascun campo, in quanto evidentemente tutta l'azione è assorbita dalla sola diagonale tesa.

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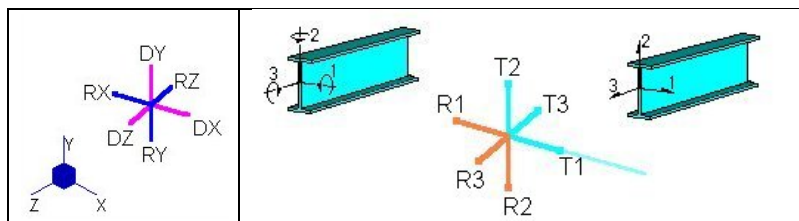
2.7.4. MODELLAZIONE DEI VINCOLI INTERNI ED ESTERNI

Vengono riportate le informazioni necessarie alla comprensione ed alla ricostruzione dei vincoli esterni ed interni (vincoli e/o sconnessioni tra elementi) adottati nel modello numerico.



Modello di calcolo della struttura- vincoli e svincolamenti

Gli arcarecci sono incernierati alle travi principali ad arco che hanno uno schema statico di trave continua su 4 appoggi.
Controventi diagonali e puntoni sono incernierati.

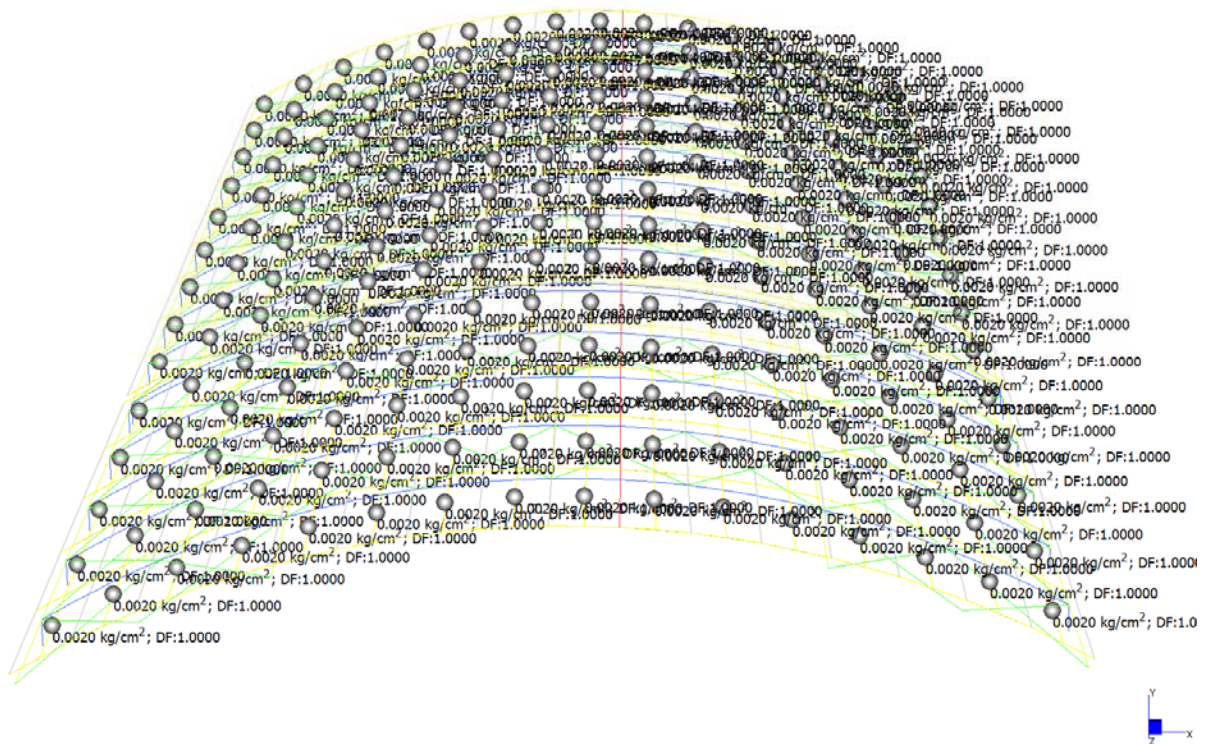


Simbologia vincoli esterni e svincolamenti interni

2.7.5. MODELLAZIONE DELLE AZIONI

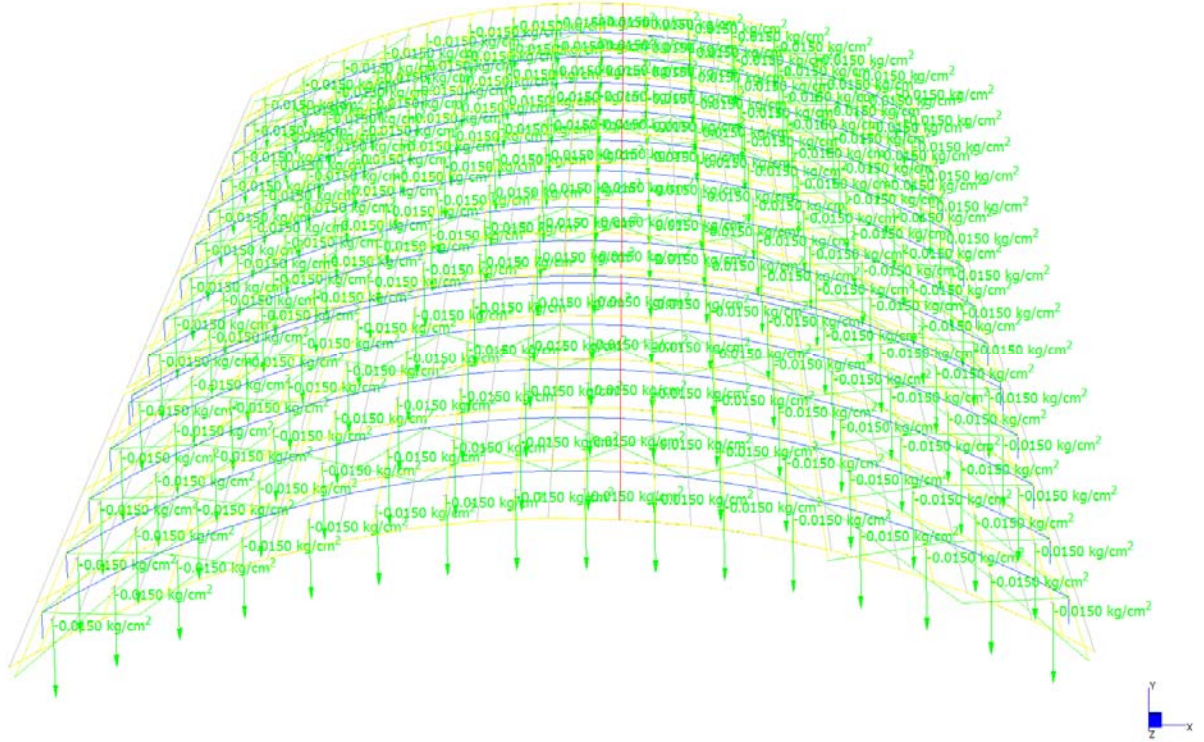
Vengono riportate le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte "2.6. Azioni di progetto sulla costruzione".

Nei diagrammi tridimensionali seguenti viene riportata la configurazione dei carichi per tamponamento e struttura portante per ogni condizione di carico statica: Il peso proprio della struttura è conteggiato in automatico dal programma di calcolo. I carichi permanenti ed i sovraccarichi variabili in copertura sono assegnati al modello per mezzo degli elementi di tipo "Load Patch". Questi sono in grado di ripartire l'azione di superficie sugli elementi di tipo Beam in ragione della relativa area d'influenza. L'azione del vento è imposta al modello assegnando agli elementi di tipo Load Patch i coefficienti di pressione per ciascuna delle direzioni d'ingresso del vento. Gli effetti del sisma sono considerati mediante un'analisi statica come specificato al §1.1 e §2.6.4. Le masse considerate sono solo quelle dovute ai carichi permanenti, in quanto tutte le altre azioni hanno coefficiente di combinazione per le situazioni di progetto quasi permanenti nullo ($\psi_2 = 0$).



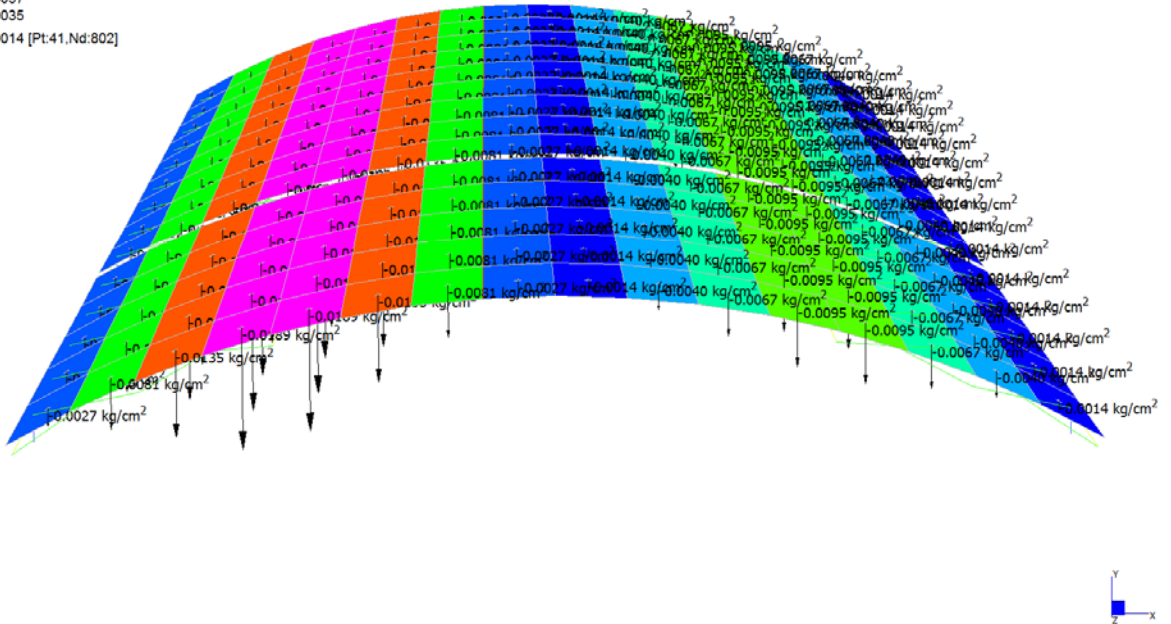
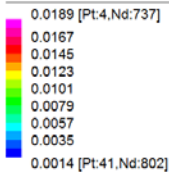
Carichi permanenti, g 20 daN/m²

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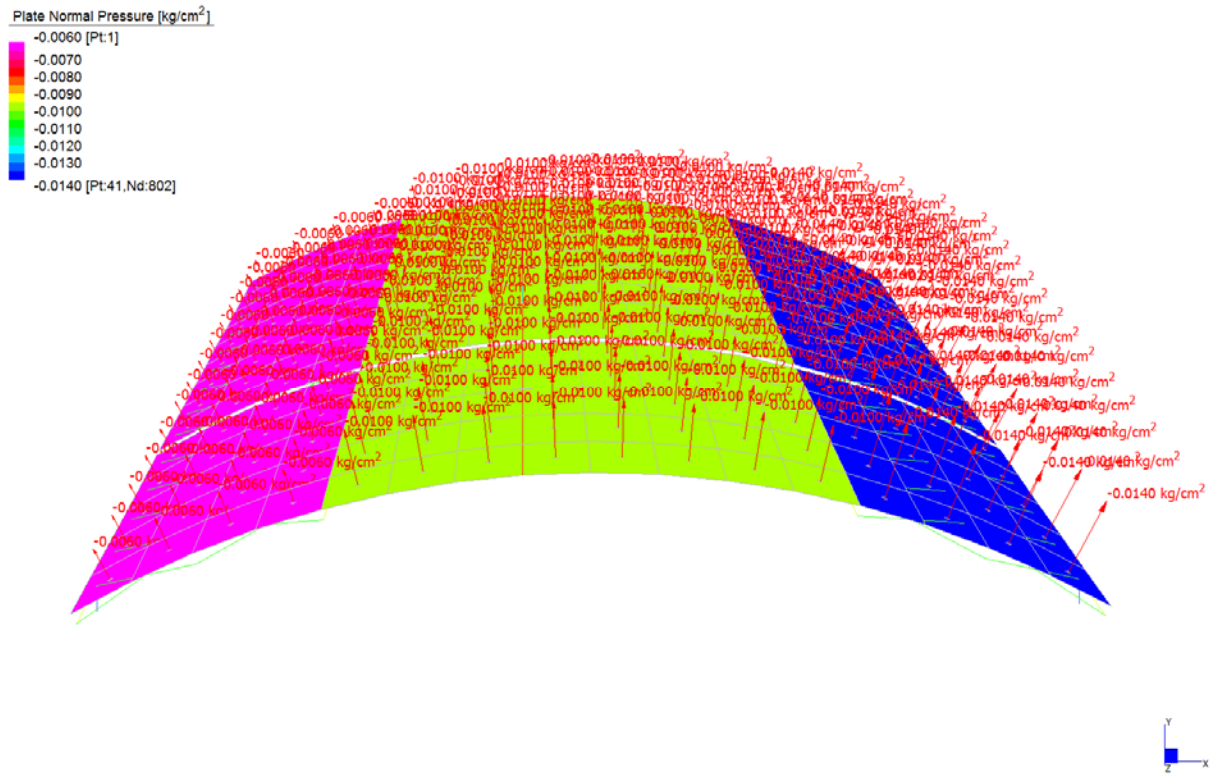
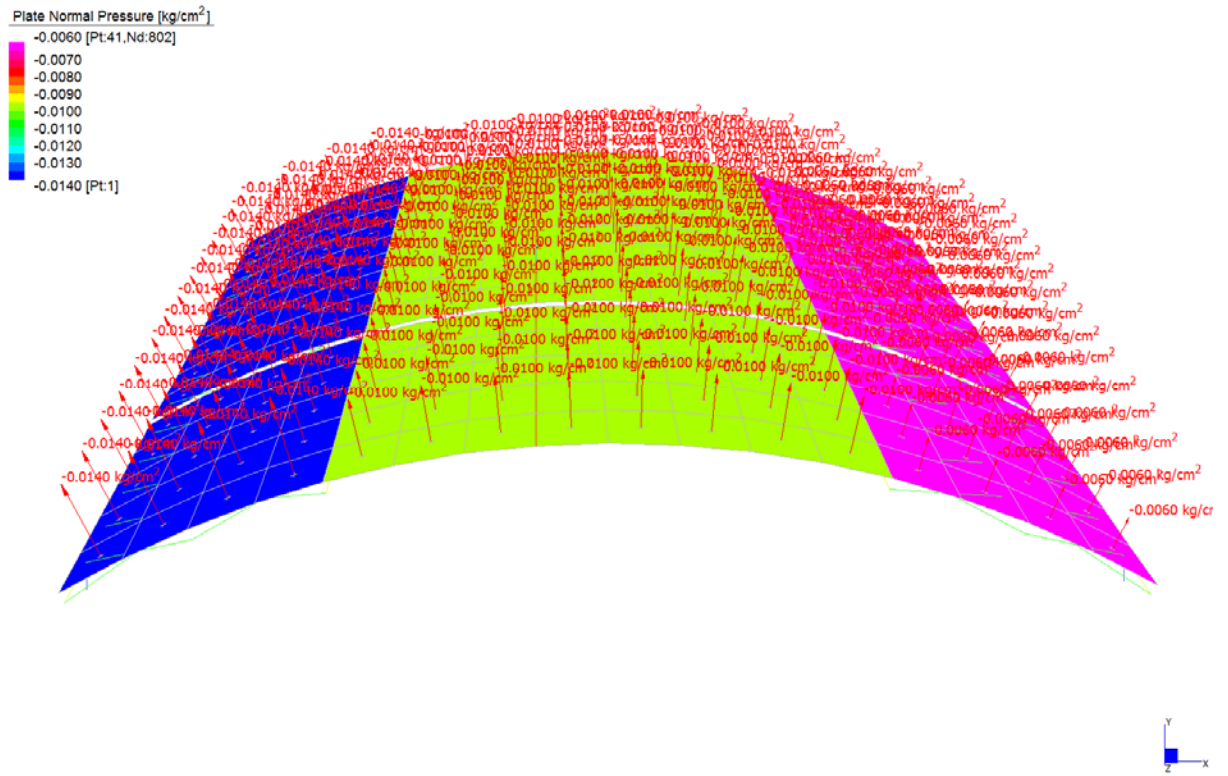
Neve, q_s 150 daN/m²

Plate Global Pressure Mag [kg/cm²]



Neve, q_s 0-216-0 0-108-0 daN/m²

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Azione del vento $q_{w\pm X} - 60 \div -140 \text{ daN/m}^2$

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2.7.6. COMBINAZIONI E/O PERCORSI DI CARICO

Vengono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti. In ogni caso viene motivato l'impiego delle combinazioni o dei percorsi di carico adottati, in special modo con riguardo alla effettiva esaustività delle configurazioni studiate per la struttura in esame.

Nelle verifiche vengono prese in considerazione le seguenti combinazioni dei carichi al fine di massimizzare le azioni sulla struttura.

Combinazioni allo Stato Limite Ultimo

Nelle verifiche si considerano le seguenti combinazioni dei carichi allo s.l.u.:

CASES	1	2	3	4	5	6	7	8	9
	Comb. SLU A1 1	Comb. SLU A1 2	Comb. SLU A1 3	Comb. SLU A1 4	Comb. SLU A1 5	Comb. SLU A1 6	Comb. SLU A1 7	Comb. SLU A1 8	Comb. SLU A1 9
1: pp	1.3	1	1.3	1	1.3	1	1.3	1	1.3
2: g	1.3	1	1.3	1	1.3	1	1.3	1	1.3
3: qs_1									
4: qs_2	1.5	1.5	0.75	0.75			1.5	1.5	0.75
5: Vento +X							0.9	0.9	1.5
6: Vento -X	0.9	0.9	1.5	1.5	1.5	1.5			
7: SLV X									
8: SLV Z									
9: SLD X									
10: SLD Z									

CASES	10	11	12	13	14	15	16	17	18
	Comb. SLU A1 10	Comb. SLU A1 11	Comb. SLU A1 12	Comb. SLU A1 13	Comb. SLU A1 14	Comb. SLU A1 15	Comb. SLU A1 16	Comb. SLU A1 17	Comb. SLU A1 18
1: pp	1	1.3	1	1.3	1	1.3	1	1.3	1
2: g	1	1.3	1	1.3	1	1.3	1	1.3	1
3: qs_1						1.5	1.5		
4: qs_2	0.75			1.5	1.5				
5: Vento +X	1.5	1.5	1.5						
6: Vento -X									
7: SLV X									
8: SLV Z									
9: SLD X									
10: SLD Z									

CASES	19	20	21	22	23	24	25	26
	Comb. SLV sism. 19	Comb. SLV sism. 20	Comb. SLV sism. 21	Comb. SLV sism. 22	Comb. SLV sism. 23	Comb. SLV sism. 24	Comb. SLV sism. 25	Comb. SLV sism. 26
1: pp	1	1	1	1	1	1	1	1
2: g	1	1	1	1	1	1	1	1
3: qs_1								
4: qs_2								
5: Vento +X								
6: Vento -X								
7: SLV X	-1	-1	1	1	-0.3	-0.3	0.3	0.3
8: SLV Z	-0.3	0.3	-0.3	0.3	-1	1	-1	1
9: SLD X								
10: SLD Z								

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Combinazioni allo Stato Limite di Danno

Nelle verifiche si considerano le seguenti combinazioni dei carichi allo s.l.d.:

CASES	27	28	29	30	31	32	33	34
	Comb. SLD Danno 27	Comb. SLD Danno 28	Comb. SLD Danno 29	Comb. SLD Danno 30	Comb. SLD Danno 31	Comb. SLD Danno 32	Comb. SLD Danno 33	Comb. SLD Danno 34
1: pp	1	1	1	1	1	1	1	1
2: g	1	1	1	1	1	1	1	1
3: qs_1								
4: qs_2								
5: Vento +X								
6: Vento - X								
7: SLV X								
8: SLV Z								
9: SLD X	-1	-1	1	1	-0.3	-0.3	0.3	0.3
10: SLD Z	-0.3	0.3	-0.3	0.3	-1	1	-1	1

Combinazioni allo Stato Limite di Esercizio

Nelle verifiche si considerano le seguenti combinazioni dei carichi allo s.l.e. al fine di valutare la deformabilità della struttura:

CASES	35	36	37	38	39	40	41	42	43
	Comb. SLE(rara) 35	Comb. SLE(rara) 36	Comb. SLE(rara) 37	Comb. SLE(rara) 38	Comb. SLE(rara) 39	Comb. SLE(rara) 40	Comb. SLE(rara) 41	Comb. SLE(rara) 42	Comb. SLE(rara) 43
1: pp	1	1	1	1	1	1	1	1	1
2: g	1	1	1	1	1	1	1	1	1
3: qs_1								1	
4: qs_2	1	0.5		1	0.5		1		
5: Vento +X				0.6	1	1			
6: Vento -X	0.6	1	1						
7: SLV X									
8: SLV Z									
9: SLD X									
10: SLD Z									

2.8.PRINCIPALI RISULTATI

I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.

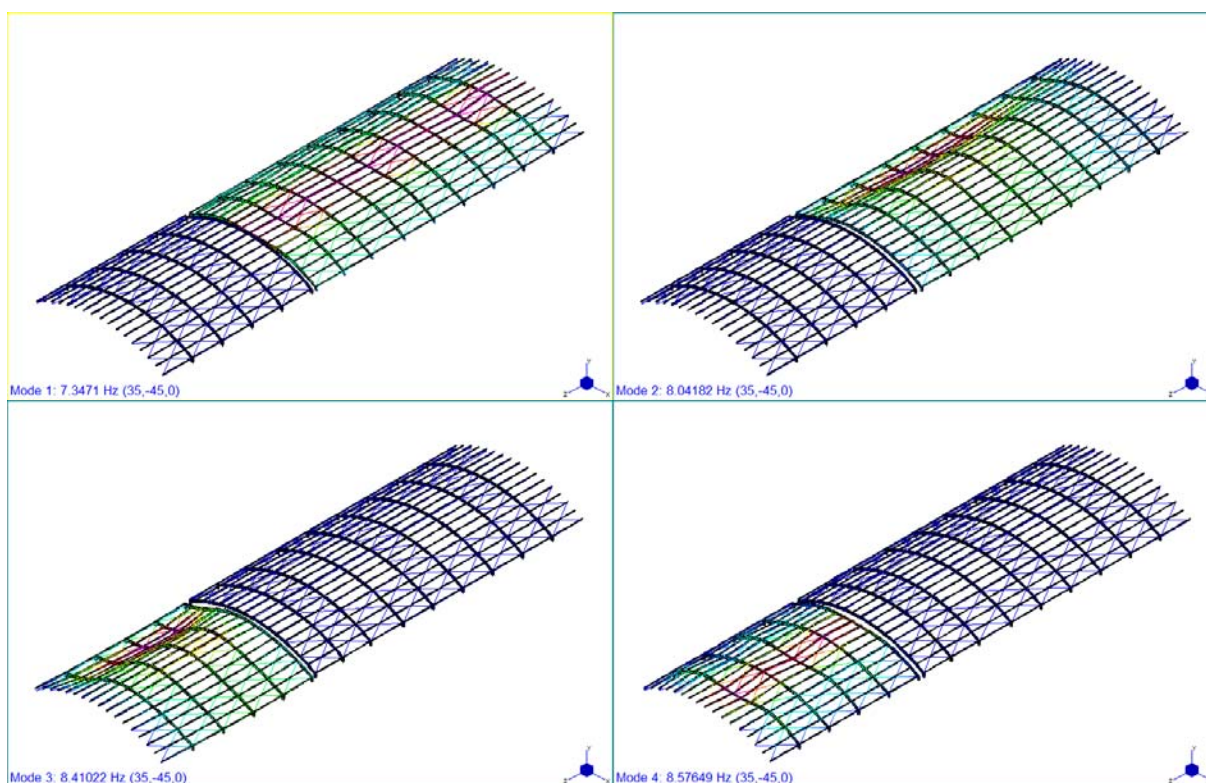
2.8.1. RISULTATI DELL'ANALISI MODALE

Viene riportato il tipo di analisi modale condotta, restituiti i risultati della stessa e valutate le informazioni desumibili in merito al comportamento della struttura.

E' stata condotta una analisi delle frequenze proprie della struttura al fine di determinare il periodo di oscillazione.

I primi modi significativi hanno una frequenza pari a circa 8 Hz e un conseguente periodo pari a 0.125 sec.

MODE PARTICIPATION FOR TRANSLATIONAL EXCITATION						
Mode	Frequency (Hz)	Modal Mass (Eng)	Modal Stiff (Eng)	PF-X (%)	PF-Y (%)	PF-Z (%)
1	7.3471E+00	9.3454E+00	1.9915E+04	0.000	0.000	44.006
2	8.0418E+00	8.4268E+00	2.1515E+04	37.616	0.575	0.005
3	8.4102E+00	5.9481E+00	1.6609E+04	19.773	0.210	0.038
4	8.5765E+00	5.7659E+00	1.6744E+04	0.092	0.001	12.537
5	8.5816E+00	8.6277E+00	2.5084E+04	0.285	0.001	0.017
6	9.0788E+00	5.4207E+00	1.7639E+04	2.120	0.004	0.026
7	9.3168E+00	2.3702E+00	8.1222E+03	0.002	0.031	0.243
8	9.3722E+00	1.0418E+00	3.6127E+03	2.326	0.622	0.003
9	9.5621E+00	2.1511E+00	7.7647E+03	4.370	1.353	0.416
10	9.6728E+00	2.5018E+00	9.2408E+03	0.503	0.281	0.080
TOTAL MASS PARTICIPATION FACTORS				67.089	3.079	57.370

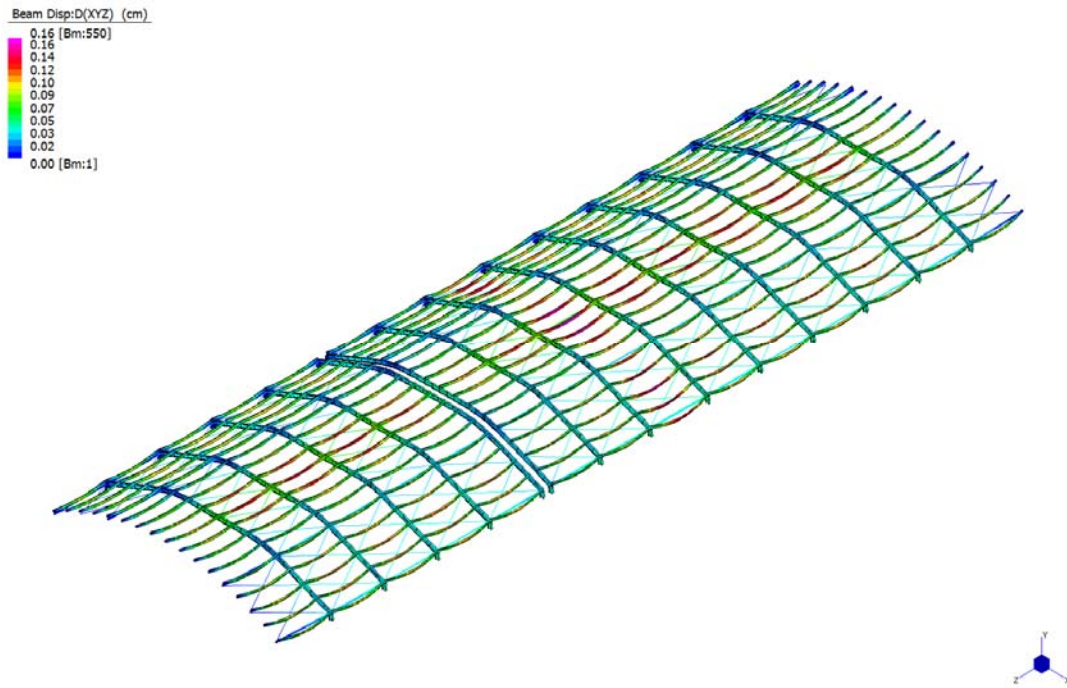


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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

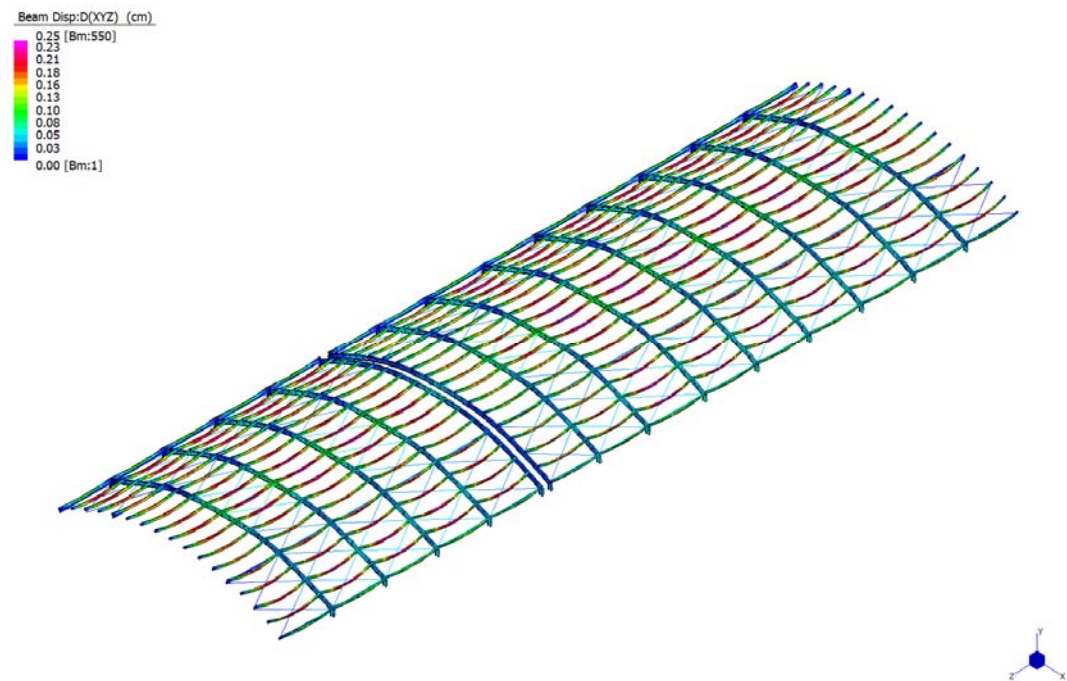
2.8.2. DEFORMATE E SOLLECITAZIONI PER CONDIZIONI DI CARICO

Vengono riportati i principali risultati atti a descrivere il comportamento della struttura, in termini di stati di sollecitazione e di deformazione generalizzata, distinti per condizione elementare di carico o per combinazioni omogenee delle stesse.

DEFORMATE PER CONDIZIONI DI CARICO ELEMENTARI



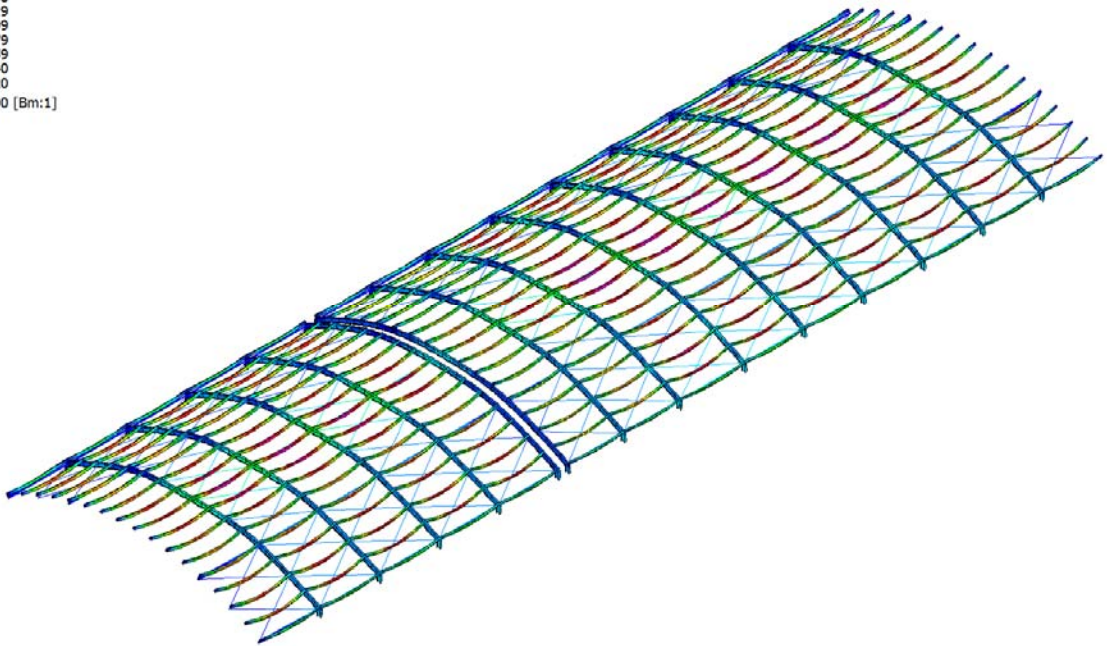
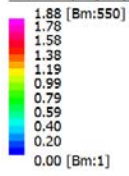
Peso proprio - Configurazione deformata



Carico permanente - Configurazione deformata

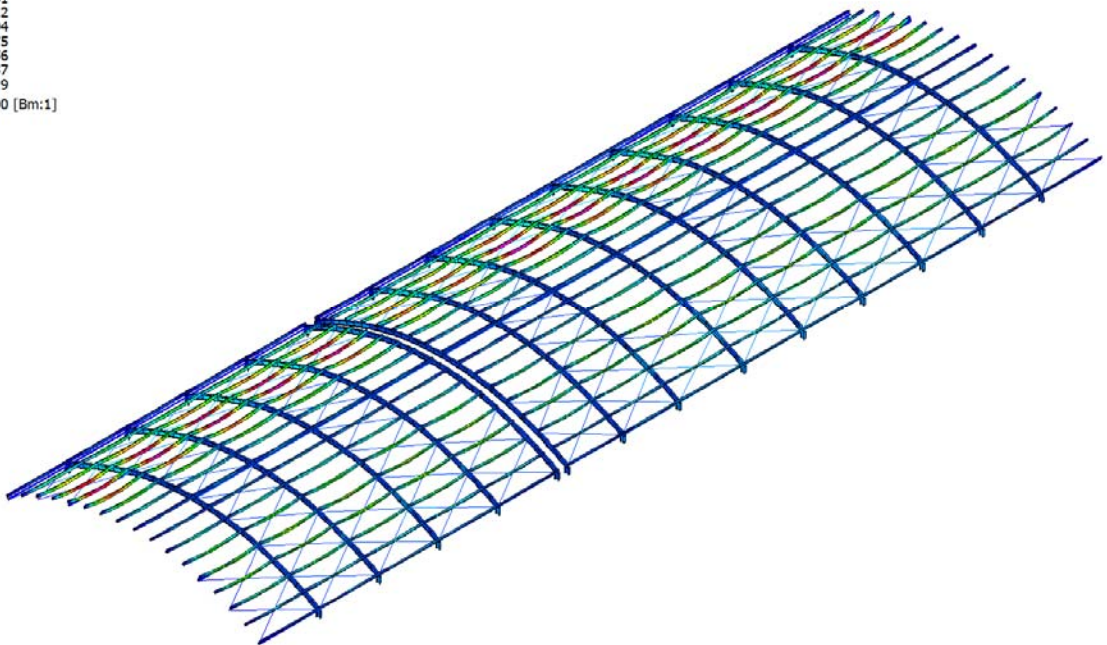
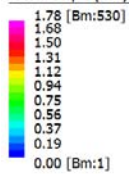
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Beam Disp:D(XYZ) (cm)



Carico neve uniforme - Configurazione deformata

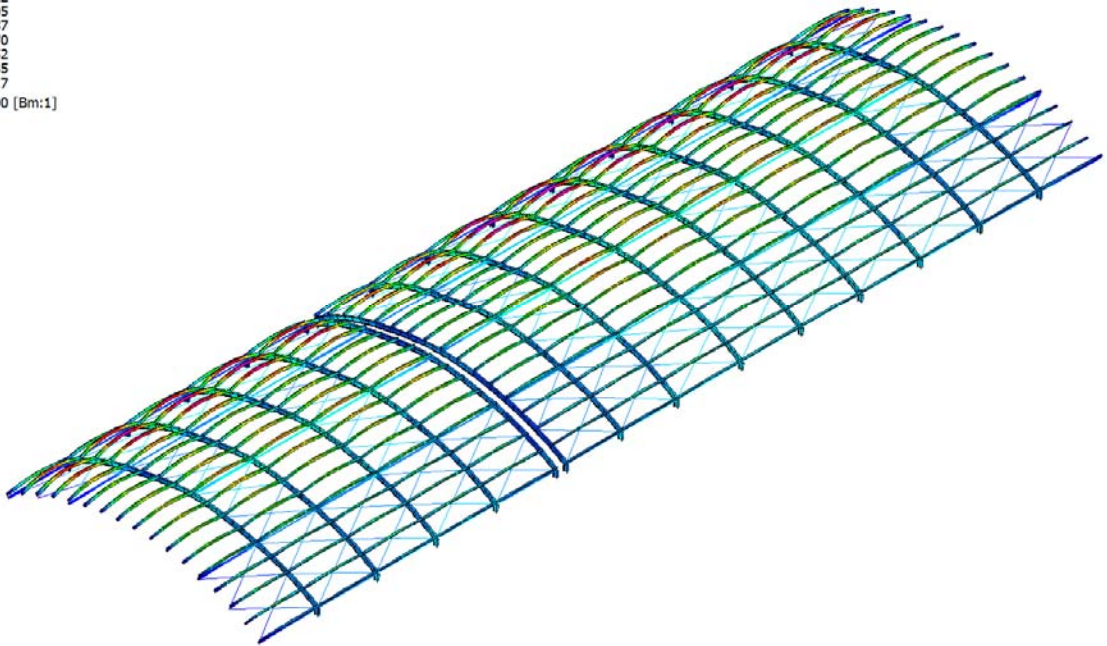
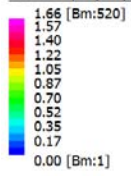
Beam Disp:D(XYZ) (cm)



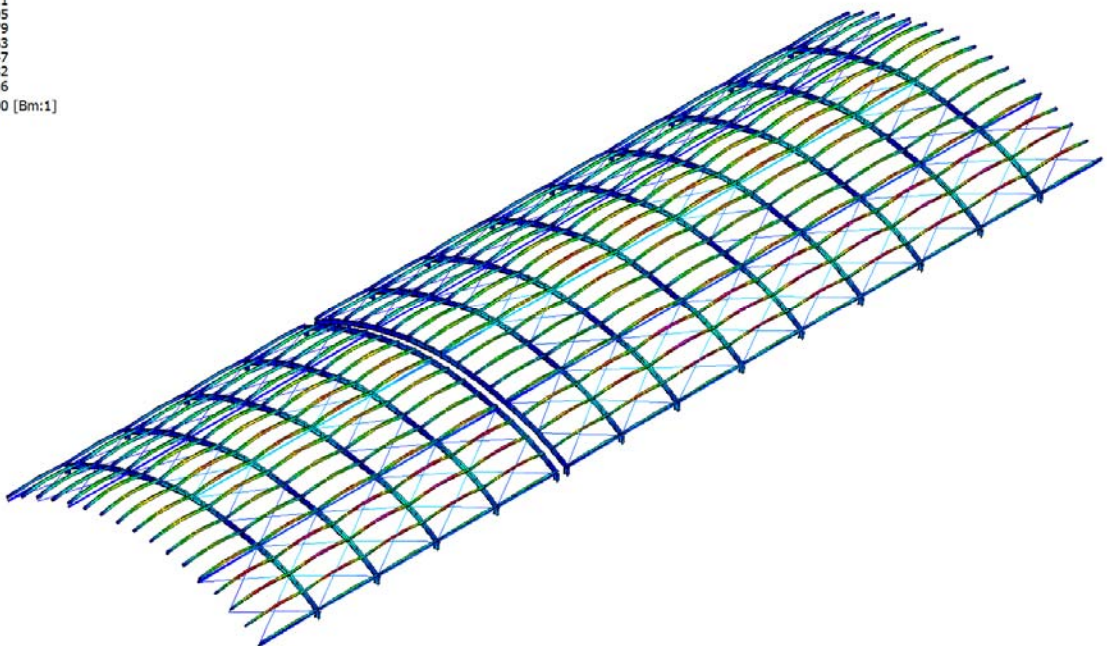
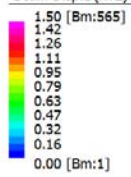
Carico neve con accumulo - Configurazione deformata

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Beam Disp:D(XYZ) (cm)



Beam Disp:D(XYZ) (cm)

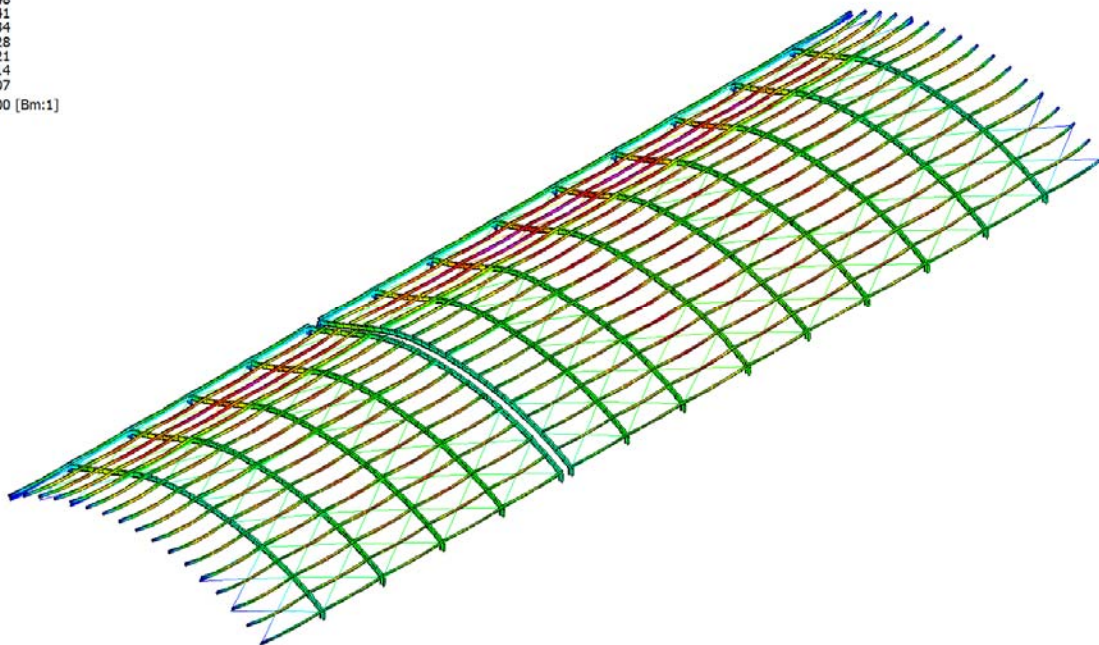
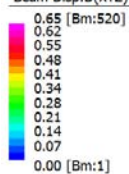


Vento in direzione $\pm X$ - Configurazione deformata

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

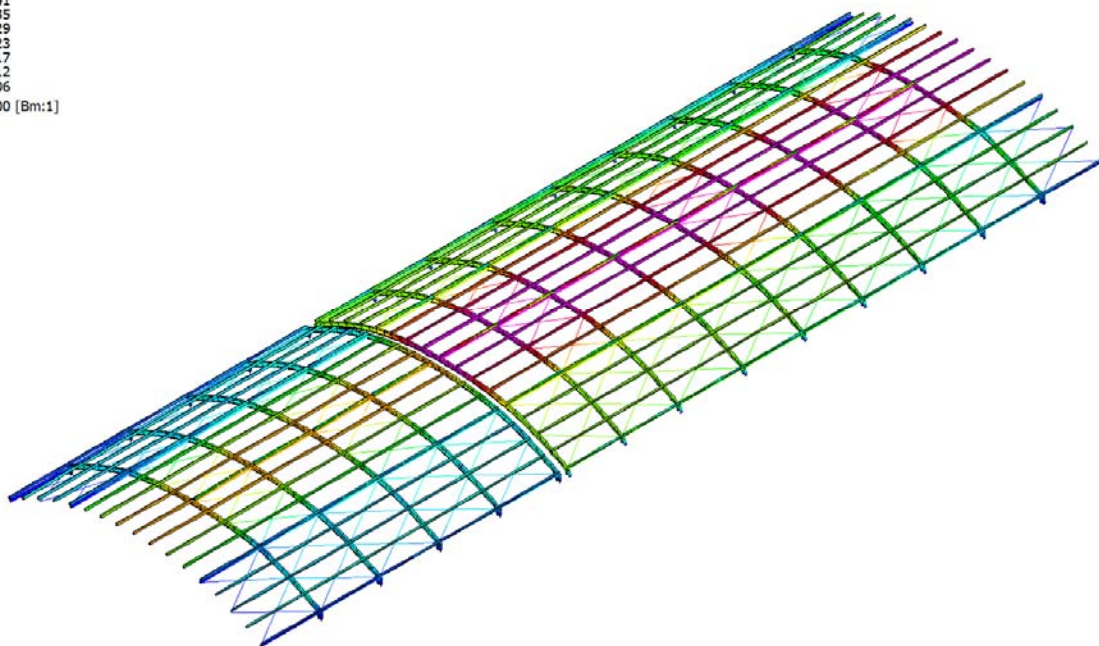
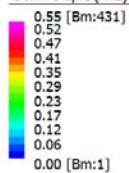
SPOSTAMENTI ALLO SLV

Beam Disp:D(XYZ) (cm)



SLV - Spostamenti in direzione X

Beam Disp:D(XYZ) (cm)

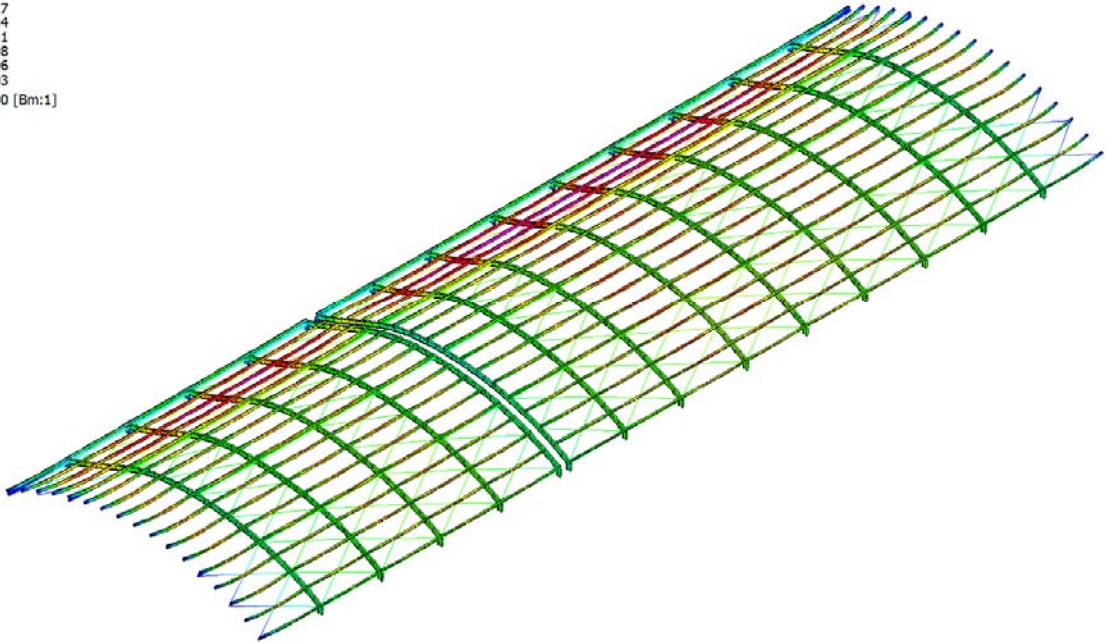
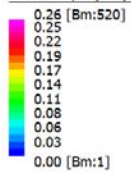


SLV - Spostamenti in direzione Z

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

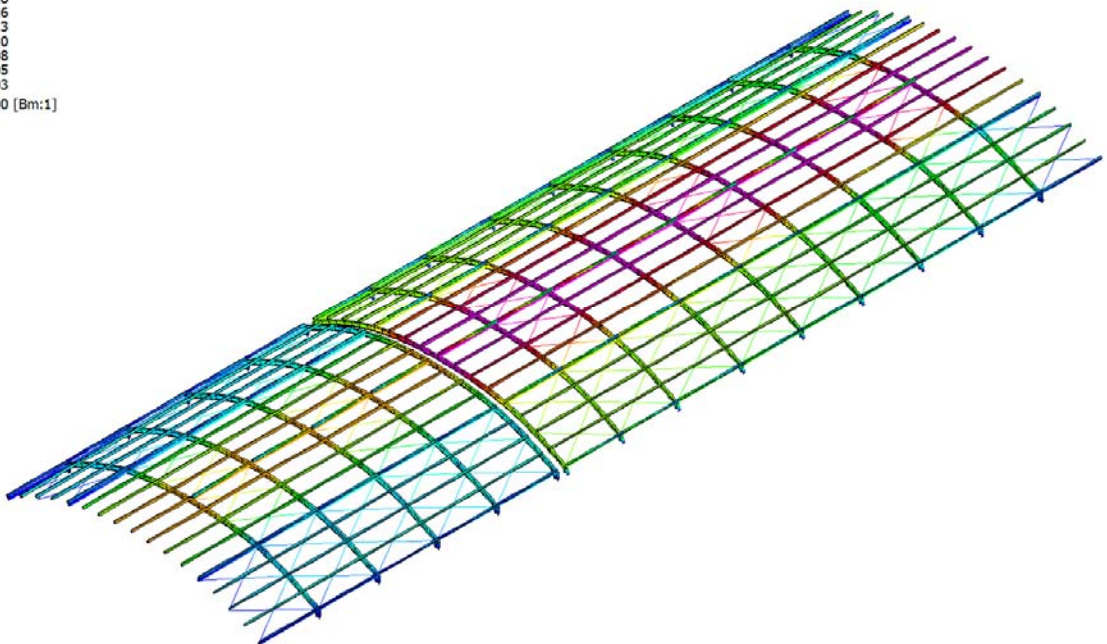
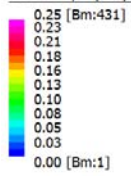
SPOSTAMENTI ALLO SLD

Beam Disp:D(XYZ) (cm)



SLD - Spostamenti in direzione X

Beam Disp:D(XYZ) (cm)

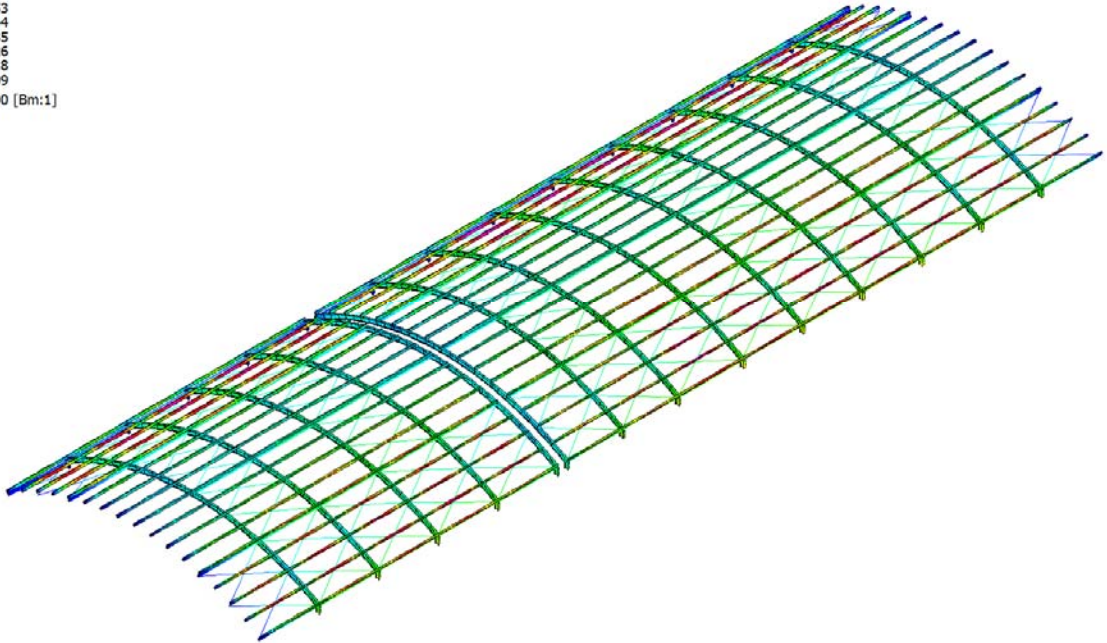
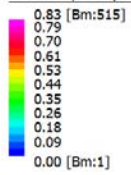


SLD - Spostamenti in direzione Z

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

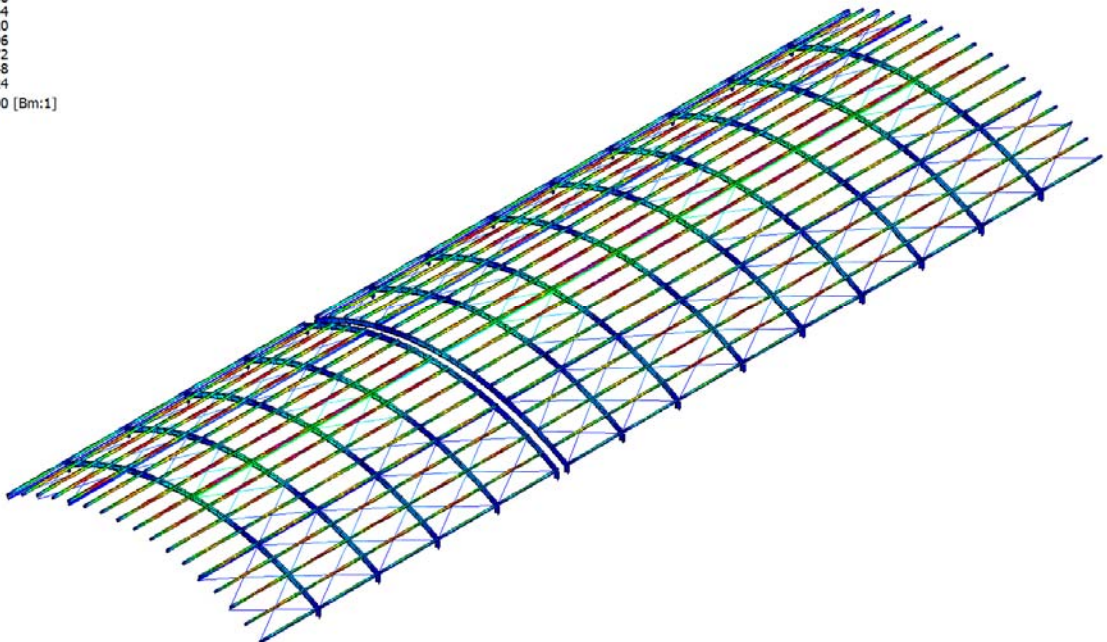
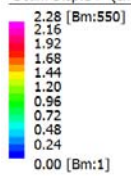
SPOSTAMENTI ALLO SLE

Beam Disp:DX (cm)



SLE - Spostamenti in direzione X

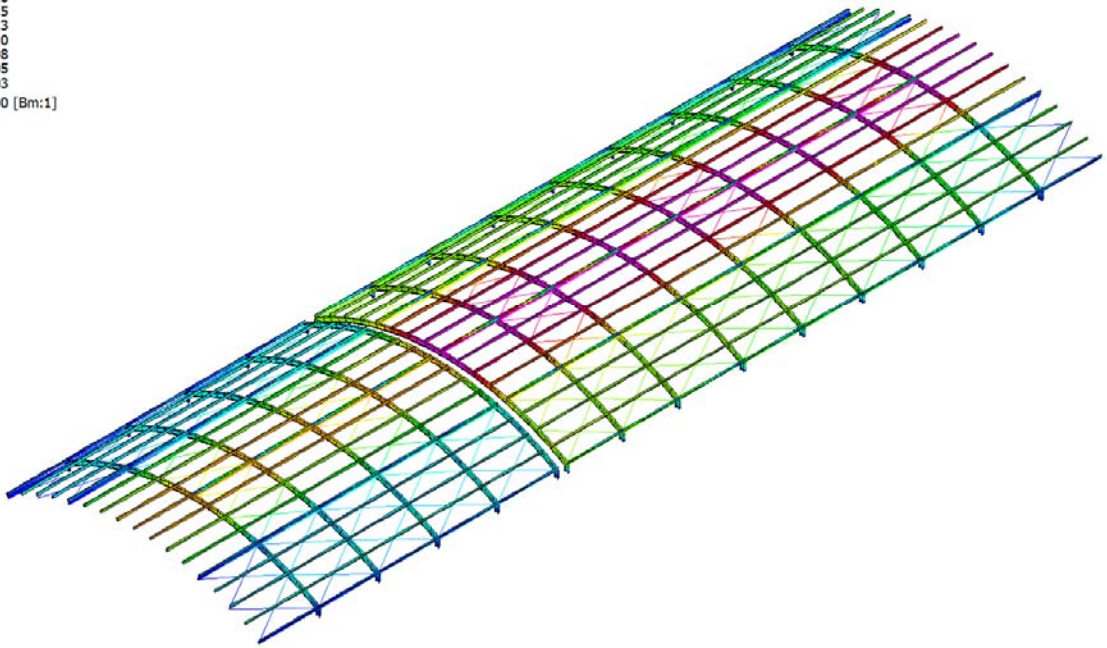
Beam Disp:DY (cm)



SLE - Spostamenti in direzione Y

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Beam Disp:DZ (cm)
0.25 [Bm:344]
0.23
0.21
0.18
0.15
0.13
0.10
0.08
0.05
0.03
0.00 [Bm:1]



SLE - Spostamenti in direzione Z

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

2.8.3. INVILUPPO DELLE SOLLECITAZIONI MAGGIORMENTE SIGNIFICATIVE

L'analisi e la restituzione degli involuppi (nelle combinazioni considerate agli SLU e agli SLE) delle caratteristiche di sollecitazione devono essere finalizzate alla valutazione dello stato di sollecitazione nei diversi elementi della struttura.

	MIN	MAX
AxForce(kgf)	-3016	2721
	[Bm:682]	[Bm:686]

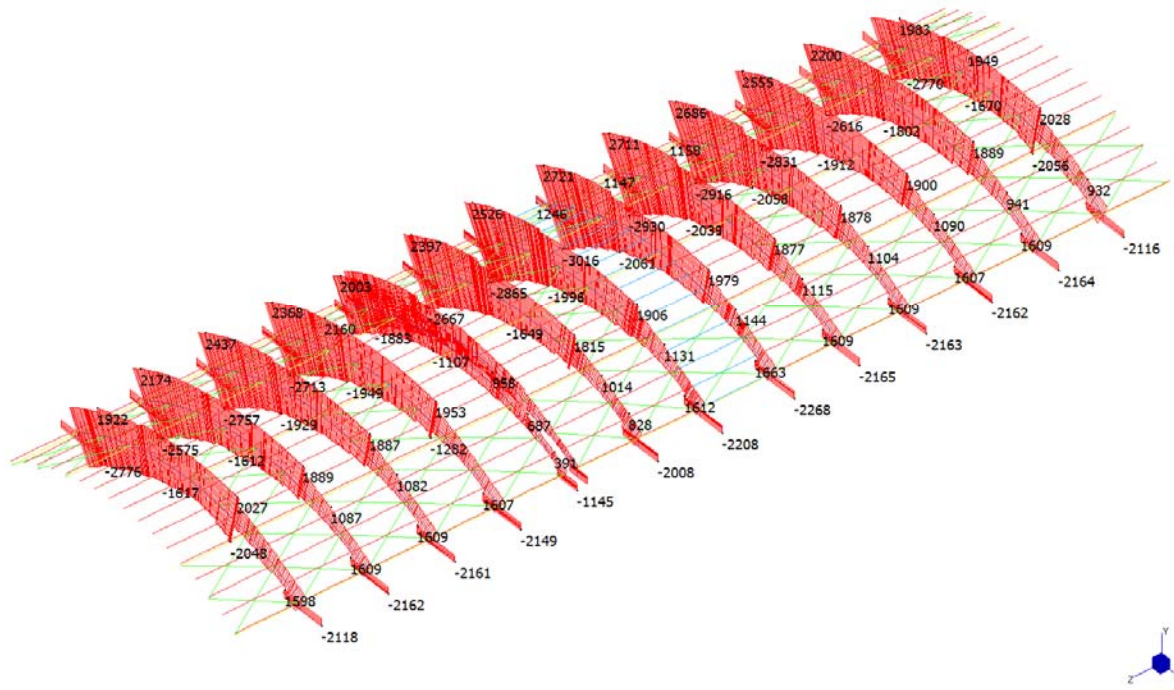


Diagramma dell'azione assiale travi (involuppo)

	MIN	MAX
AxForce(kgf)	-6204	6259
	[Bm:946]	[Bm:945]

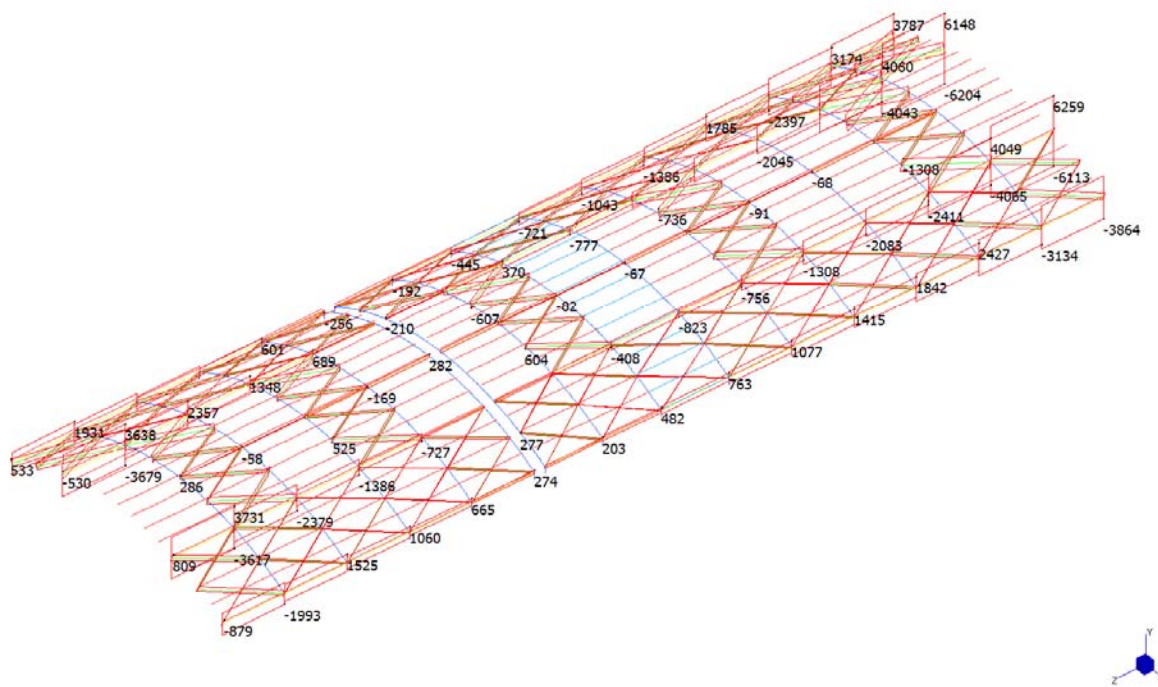


Diagramma dell'azione assiale controventamento (involuppo)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	MIN	MAX
AxForce(kgf)	-1183	1165
	[Bm:823]	[Bm:823]

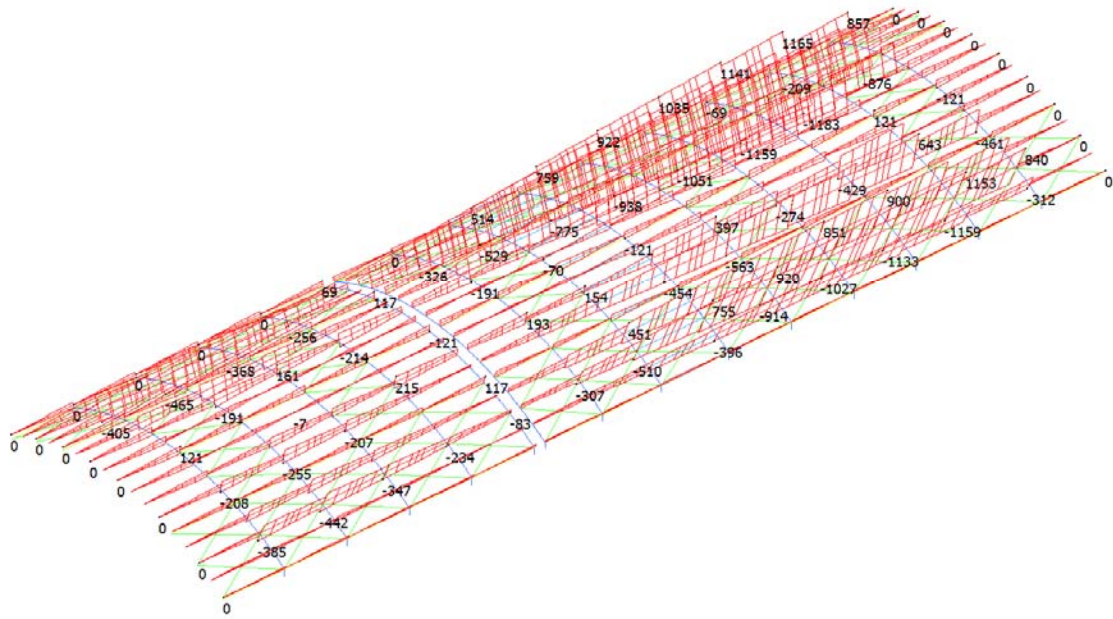


Diagramma dell'azione assiale arcarecci (inviluppo)

	MIN	MAX
BM1(kgf.cm)	-28964	28827
	[Bm:471]	[Bm:403]
BM2(kgf.cm)	-429811	275531
	[Bm:814]	[Bm:742]

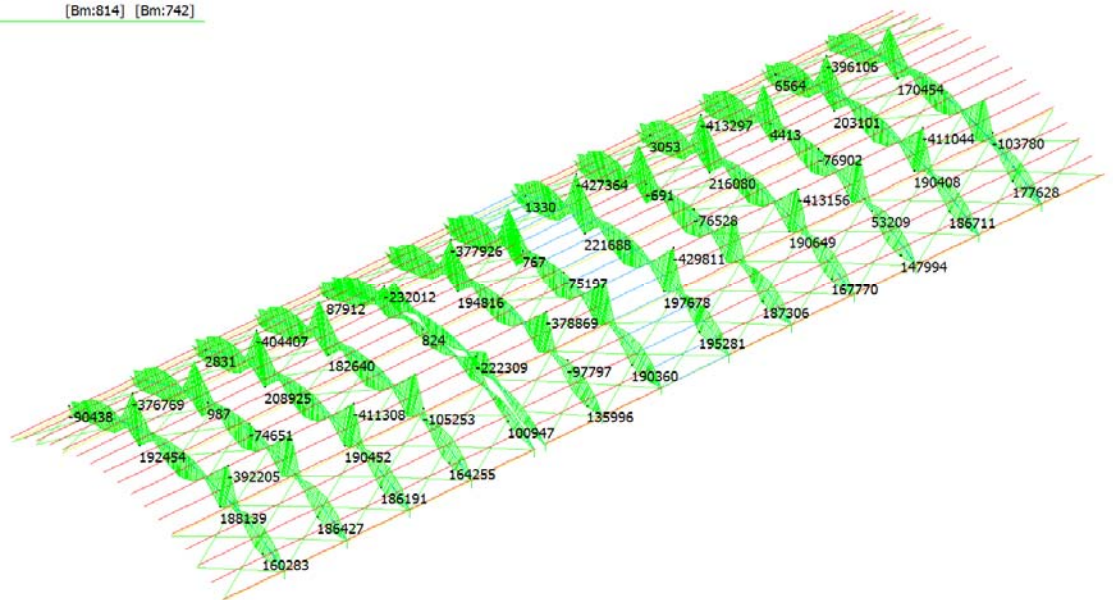


Diagramma del momento flettente travi(inviluppo)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	MIN	MAX
BM1(kgf.cm)	-7844	28869
	[Bm:550]	[Bm:560]
BM2(kgf.cm)	-49355	82061
	[Bm:560]	[Bm:530]

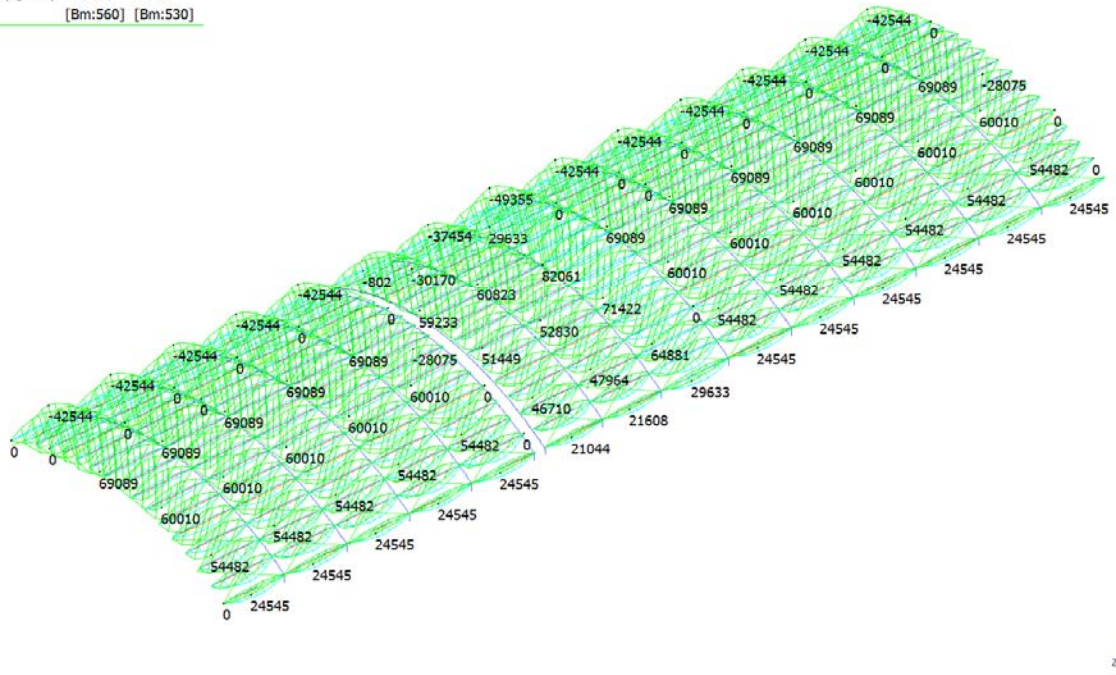


Diagramma del momento flettente arcarecci (involuppo)

	MIN	MAX
SF1(kgf)	-439	435
	[Bm:471]	[Bm:403]
SF2(kgf)	-4390	4383
	[Bm:814]	[Bm:746]

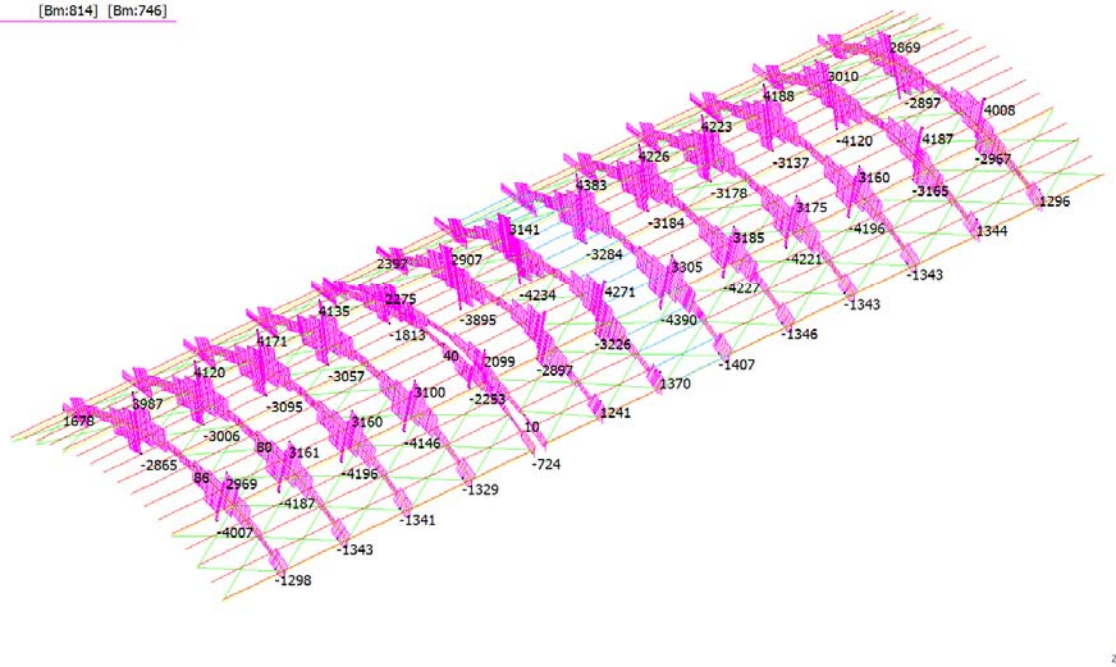


Diagramma del taglio travi (involuppo)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	MIN	MAX
SF1(kgf)	-263	263
	[Bm:560]	[Bm:560]
SF2(kgf)	-748	748
	[Bm:530]	[Bm:530]

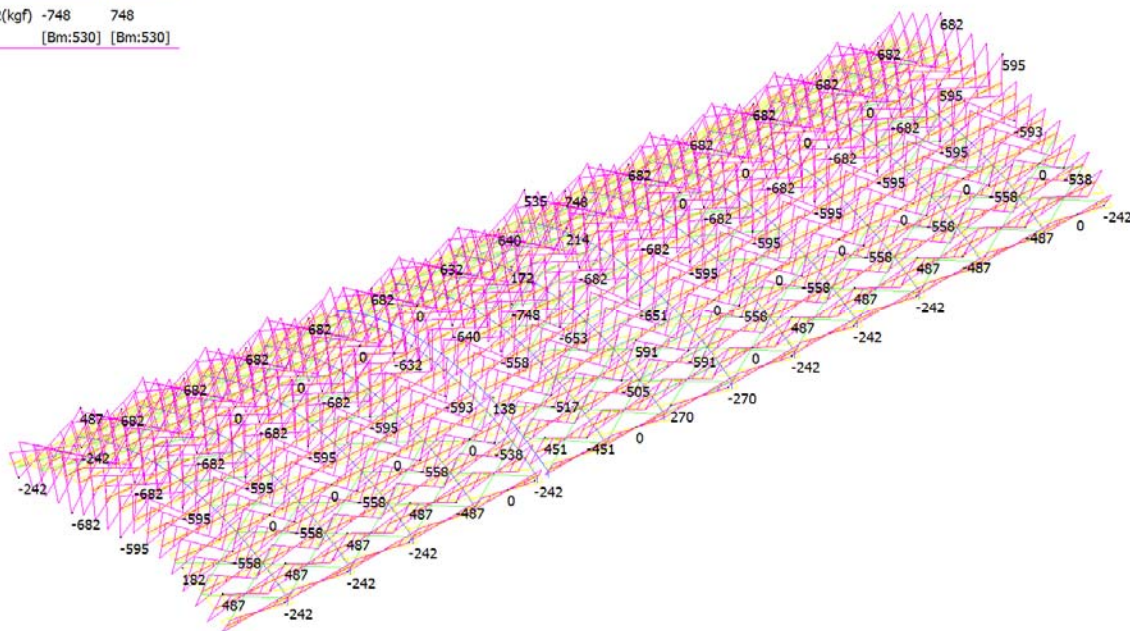
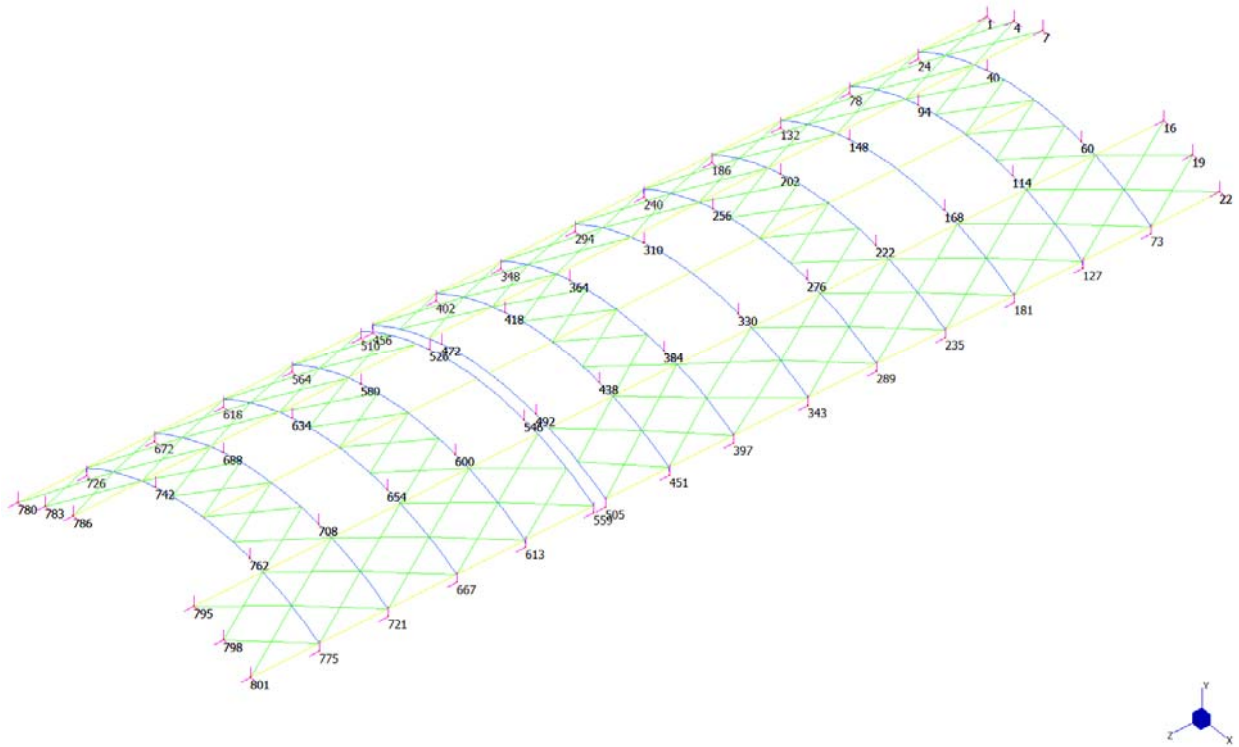


Diagramma del taglio arcarecci (inviluppo)

2.8.4. REAZIONI VINCOLARI

Vengono riportate le reazioni dei vincoli nelle singole condizioni di carico e/o nelle combinazioni considerate.



Numerazione nodi vincolati

Le quantità indicate sono da intendere come reazioni esercitate dal vincolo sulla struttura e rispondono alle seguenti convenzioni di segno:

- le forze sono positive se dirette nel verso positivo dell'asse di riferimento;
- le azioni flettenti sono positive se il vettore momento è diretto nel verso positivo dell'asse di riferimento, se cioè induce una rotazione intorno a tale asse concorde con la regola della mano destra.

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 1: 1: pp	-7	17	-33
Node 1: 2: g	-7	-3	-33
Node 1: 3: qs_1	-43	-21	-214
Node 1: 4: qs_2	-61	-30	-254
Node 1: 5: Vento +X	-92	45	381
Node 1: 6: Vento -X	-10	-5	-11
Node 1: 7: SLV X	-141	-61	-484
Node 1: 8: SLV Z	-334	-164	-4374
Node 1: 11: Comb. SLU A1 1 [C.1]	-119	-32	-477
Node 1: 12: Comb. SLU A1 2 [C.2]	-115	-36	-457
Node 1: 13: Comb. SLU A1 3 [C.3]	-79	-12	-293
Node 1: 14: Comb. SLU A1 4 [C.4]	-75	-16	-273
Node 1: 15: Comb. SLU A1 5 [C.5]	-33	11	-102
Node 1: 16: Comb. SLU A1 6 [C.6]	-29	6	-82
Node 1: 17: Comb. SLU A1 7 [C.7]	-27	14	-124
Node 1: 18: Comb. SLU A1 8 [C.8]	-23	9	-104
Node 1: 19: Comb. SLU A1 9 [C.9]	74	63	296
Node 1: 20: Comb. SLU A1 10 [C.10]	78	59	315
Node 1: 21: Comb. SLU A1 11 [C.11]	120	86	486
Node 1: 22: Comb. SLU A1 12 [C.12]	124	82	506
Node 1: 23: Comb. SLU A1 13 [C.13]	-110	-27	-467
Node 1: 24: Comb. SLU A1 14 [C.14]	-105	-31	-447
Node 1: 25: Comb. SLU A1 15 [C.15]	-82	-14	-406
Node 1: 26: Comb. SLU A1 16 [C.16]	-78	-18	-387
Node 1: 27: Comb. SLU A1 17 [C.17]	-18	18	-86
Node 1: 28: Comb. SLU A1 18 [C.18]	-14	14	-66
Node 1: 29: Comb.SLV sism. 19 [C.19]	228	124	1731
Node 1: 30: Comb.SLV sism. 20 [C.20]	28	26	-894
Node 1: 31: Comb.SLV sism. 21 [C.21]	-55	2	762
Node 1: 32: Comb.SLV sism. 22 [C.22]	-255	-96	-1862
Node 1: 33: Comb.SLV sism. 23 [C.23]	363	196	4453
Node 1: 34: Comb.SLV sism. 24 [C.24]	-305	-132	-4294
Node 1: 35: Comb.SLV sism. 25 [C.25]	278	160	4163
Node 1: 36: Comb.SLV sism. 26 [C.26]	-390	-168	-4585
Node 1: 54: Env SLU [Absolute Envelope 1]	390	196	4585
Node 4: 1: pp	-16	1	-9
Node 4: 2: g	-16	-6	-9
Node 4: 3: qs_1	-101	-39	-58
Node 4: 4: qs_2	-154	-60	-91
Node 4: 5: Vento +X	215	84	110
Node 4: 6: Vento -X	-22	-9	-8
Node 4: 7: SLV X	-277	-107	-122
Node 4: 8: SLV Z	-109	-20	-637
Node 4: 11: Comb. SLU A1 1 [C.1]	-292	-105	-167
Node 4: 12: Comb. SLU A1 2 [C.2]	-283	-103	-161
Node 4: 13: Comb. SLU A1 3 [C.3]	-190	-65	-103
Node 4: 14: Comb. SLU A1 4 [C.4]	-181	-63	-98
Node 4: 15: Comb. SLU A1 5 [C.5]	-75	-20	-35
Node 4: 16: Comb. SLU A1 6 [C.6]	-65	-18	-30
Node 4: 17: Comb. SLU A1 7 [C.7]	-79	-21	-61
Node 4: 18: Comb. SLU A1 8 [C.8]	-69	-19	-56
Node 4: 19: Comb. SLU A1 9 [C.9]	165	75	72
Node 4: 20: Comb. SLU A1 10 [C.10]	175	77	78
Node 4: 21: Comb. SLU A1 11 [C.11]	281	120	141
Node 4: 22: Comb. SLU A1 12 [C.12]	290	122	146
Node 4: 23: Comb. SLU A1 13 [C.13]	-272	-97	-160
Node 4: 24: Comb. SLU A1 14 [C.14]	-263	-95	-154
Node 4: 25: Comb. SLU A1 15 [C.15]	-193	-66	-110
Node 4: 26: Comb. SLU A1 16 [C.16]	-183	-64	-105
Node 4: 27: Comb. SLU A1 17 [C.17]	-41	-7	-24
Node 4: 28: Comb. SLU A1 18 [C.18]	-32	-5	-18
Node 4: 29: Comb.SLV sism. 19 [C.19]	278	108	294
Node 4: 30: Comb.SLV sism. 20 [C.20]	213	96	-88
Node 4: 31: Comb.SLV sism. 21 [C.21]	-277	-106	51
Node 4: 32: Comb.SLV sism. 22 [C.22]	-342	-118	-331
Node 4: 33: Comb.SLV sism. 23 [C.23]	160	48	655
Node 4: 34: Comb.SLV sism. 24 [C.24]	-57	7	-618
Node 4: 35: Comb.SLV sism. 25 [C.25]	-6	-17	582
Node 4: 36: Comb.SLV sism. 26 [C.26]	-224	-58	-691
Node 4: 54: Env SLU [Absolute Envelope 1]	342	122	691
Node 7: 1: pp	-10	17	32
Node 7: 2: g	-10	-3	34
Node 7: 3: qs_1	-64	-22	217
Node 7: 4: qs_2	-96	-33	306
Node 7: 5: Vento +X	134	45	-431
Node 7: 6: Vento -X	-12	-4	34

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 7: 7: SLV X	-182	-55	533
Node 7: 8: SLV Z	330	112	-6764
Node 7: 11: Comb. SLU A1 1 [C.1]	-181	-34	576
Node 7: 12: Comb. SLU A1 2 [C.2]	-175	-39	556
Node 7: 13: Comb. SLU A1 3 [C.3]	-116	-12	367
Node 7: 14: Comb. SLU A1 4 [C.4]	-110	-17	347
Node 7: 15: Comb. SLU A1 5 [C.5]	-44	12	138
Node 7: 16: Comb. SLU A1 6 [C.6]	-38	8	118
Node 7: 17: Comb. SLU A1 7 [C.7]	-50	10	157
Node 7: 18: Comb. SLU A1 8 [C.8]	-44	6	137
Node 7: 19: Comb. SLU A1 9 [C.9]	103	62	-331
Node 7: 20: Comb. SLU A1 10 [C.10]	109	57	-351
Node 7: 21: Comb. SLU A1 11 [C.11]	175	86	-561
Node 7: 22: Comb. SLU A1 12 [C.12]	181	82	-581
Node 7: 23: Comb. SLU A1 13 [C.13]	-171	-31	545
Node 7: 24: Comb. SLU A1 14 [C.14]	-165	-35	525
Node 7: 25: Comb. SLU A1 15 [C.15]	-121	-14	411
Node 7: 26: Comb. SLU A1 16 [C.16]	-115	-18	391
Node 7: 27: Comb. SLU A1 17 [C.17]	-26	18	86
Node 7: 28: Comb. SLU A1 18 [C.18]	-20	14	66
Node 7: 29: Comb.SLV sism. 19 [C.19]	63	36	1563
Node 7: 30: Comb.SLV sism. 20 [C.20]	261	103	-2496
Node 7: 31: Comb.SLV sism. 21 [C.21]	-301	-75	2628
Node 7: 32: Comb.SLV sism. 22 [C.22]	-103	-8	-1430
Node 7: 33: Comb.SLV sism. 23 [C.23]	-296	-81	6671
Node 7: 34: Comb.SLV sism. 24 [C.24]	365	142	-6858
Node 7: 35: Comb.SLV sism. 25 [C.25]	-405	-114	6990
Node 7: 36: Comb.SLV sism. 26 [C.26]	256	109	-6538
Node 7: 54: Env SLU [Absolute Envelope 1]	405	142	6990
Node 16: 1: pp	-25	29	-84
Node 16: 2: g	-28	10	-92
Node 16: 3: qs_1	-203	69	-652
Node 16: 4: qs_2	-123	42	-408
Node 16: 5: Vento +X	203	-69	665
Node 16: 6: Vento -X	49	-17	160
Node 16: 7: SLV X	-207	64	-625
Node 16: 8: SLV Z	-325	110	-6751
Node 16: 11: Comb. SLU A1 1 [C.1]	-210	98	-696
Node 16: 12: Comb. SLU A1 2 [C.2]	-194	86	-643
Node 16: 13: Comb. SLU A1 3 [C.3]	-88	57	-294
Node 16: 14: Comb. SLU A1 4 [C.4]	-72	45	-241
Node 16: 15: Comb. SLU A1 5 [C.5]	4	25	12
Node 16: 16: Comb. SLU A1 6 [C.6]	20	14	64
Node 16: 17: Comb. SLU A1 7 [C.7]	-72	51	-242
Node 16: 18: Comb. SLU A1 8 [C.8]	-55	39	-189
Node 16: 19: Comb. SLU A1 9 [C.9]	143	-21	463
Node 16: 20: Comb. SLU A1 10 [C.10]	159	-33	516
Node 16: 21: Comb. SLU A1 11 [C.11]	235	-53	769
Node 16: 22: Comb. SLU A1 12 [C.12]	251	-64	822
Node 16: 23: Comb. SLU A1 13 [C.13]	-255	113	-840
Node 16: 24: Comb. SLU A1 14 [C.14]	-238	101	-787
Node 16: 25: Comb. SLU A1 15 [C.15]	-374	153	-1208
Node 16: 26: Comb. SLU A1 16 [C.16]	-358	142	-1155
Node 16: 27: Comb. SLU A1 17 [C.17]	-70	50	-229
Node 16: 28: Comb. SLU A1 18 [C.18]	-54	39	-176
Node 16: 29: Comb.SLV sism. 19 [C.19]	251	-58	2474
Node 16: 30: Comb.SLV sism. 20 [C.20]	56	8	-1576
Node 16: 31: Comb.SLV sism. 21 [C.21]	-163	70	1224
Node 16: 32: Comb.SLV sism. 22 [C.22]	-358	135	-2826
Node 16: 33: Comb.SLV sism. 23 [C.23]	333	-90	6762
Node 16: 34: Comb.SLV sism. 24 [C.24]	-316	130	-6739
Node 16: 35: Comb.SLV sism. 25 [C.25]	209	-52	6387
Node 16: 36: Comb.SLV sism. 26 [C.26]	-441	168	-7114
Node 16: 54: Env SLU [Absolute Envelope 1]	441	168	7114
Node 19: 1: pp	-49	28	-7
Node 19: 2: g	-55	23	-7
Node 19: 3: qs_1	-388	162	-43
Node 19: 4: qs_2	-235	98	-29
Node 19: 5: Vento +X	375	-154	-6
Node 19: 6: Vento -X	121	-53	88
Node 19: 7: SLV X	-342	137	35
Node 19: 8: SLV Z	119	-25	-635
Node 19: 11: Comb. SLU A1 1 [C.1]	-378	165	18
Node 19: 12: Comb. SLU A1 2 [C.2]	-347	150	22
Node 19: 13: Comb. SLU A1 3 [C.3]	-129	59	92
Node 19: 14: Comb. SLU A1 4 [C.4]	-98	44	96

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 19: 15: Comb. SLU A1 5 [C.5]	47	-14	113
Node 19: 16: Comb. SLU A1 6 [C.6]	78	-30	118
Node 19: 17: Comb. SLU A1 7 [C.7]	-150	74	-67
Node 19: 18: Comb. SLU A1 8 [C.8]	-119	59	-63
Node 19: 19: Comb. SLU A1 9 [C.9]	251	-92	-49
Node 19: 20: Comb. SLU A1 10 [C.10]	282	-108	-45
Node 19: 21: Comb. SLU A1 11 [C.11]	428	-166	-28
Node 19: 22: Comb. SLU A1 12 [C.12]	459	-181	-24
Node 19: 23: Comb. SLU A1 13 [C.13]	-487	213	-61
Node 19: 24: Comb. SLU A1 14 [C.14]	-456	198	-57
Node 19: 25: Comb. SLU A1 15 [C.15]	-717	308	-82
Node 19: 26: Comb. SLU A1 16 [C.16]	-686	293	-78
Node 19: 27: Comb. SLU A1 17 [C.17]	-135	66	-18
Node 19: 28: Comb. SLU A1 18 [C.18]	-104	51	-14
Node 19: 29: Comb.SLV sism. 19 [C.19]	202	-79	142
Node 19: 30: Comb.SLV sism. 20 [C.20]	274	-94	-239
Node 19: 31: Comb.SLV sism. 21 [C.21]	-481	195	211
Node 19: 32: Comb.SLV sism. 22 [C.22]	-409	180	-169
Node 19: 33: Comb.SLV sism. 23 [C.23]	-120	34	610
Node 19: 34: Comb.SLV sism. 24 [C.24]	118	-15	-659
Node 19: 35: Comb.SLV sism. 25 [C.25]	-325	117	631
Node 19: 36: Comb.SLV sism. 26 [C.26]	-87	67	-638
Node 19: 54: Env SLU [Absolute Envelope 1]	717	308	659
Node 22: 1: pp	-26	34	101
Node 22: 2: g	-29	14	107
Node 22: 3: qs_1	-204	100	751
Node 22: 4: qs_2	-125	62	476
Node 22: 5: Vento +X	189	-93	-719
Node 22: 6: Vento -X	77	-38	-265
Node 22: 7: SLV X	-183	81	663
Node 22: 8: SLV Z	339	-167	-4375
Node 22: 11: Comb. SLU A1 1 [C.1]	-190	120	746
Node 22: 12: Comb. SLU A1 2 [C.2]	-174	106	683
Node 22: 13: Comb. SLU A1 3 [C.3]	-50	52	230
Node 22: 14: Comb. SLU A1 4 [C.4]	-34	37	168
Node 22: 15: Comb. SLU A1 5 [C.5]	44	5	-126
Node 22: 16: Comb. SLU A1 6 [C.6]	60	-9	-189
Node 22: 17: Comb. SLU A1 7 [C.7]	-89	71	337
Node 22: 18: Comb. SLU A1 8 [C.8]	-73	56	275
Node 22: 19: Comb. SLU A1 9 [C.9]	118	-31	-451
Node 22: 20: Comb. SLU A1 10 [C.10]	135	-45	-513
Node 22: 21: Comb. SLU A1 11 [C.11]	212	-77	-808
Node 22: 22: Comb. SLU A1 12 [C.12]	228	-92	-870
Node 22: 23: Comb. SLU A1 13 [C.13]	-260	154	984
Node 22: 24: Comb. SLU A1 14 [C.14]	-243	140	922
Node 22: 25: Comb. SLU A1 15 [C.15]	-377	212	1396
Node 22: 26: Comb. SLU A1 16 [C.16]	-360	198	1334
Node 22: 27: Comb. SLU A1 17 [C.17]	-72	62	271
Node 22: 28: Comb. SLU A1 18 [C.18]	-55	48	208
Node 22: 29: Comb.SLV sism. 19 [C.19]	26	16	858
Node 22: 30: Comb.SLV sism. 20 [C.20]	229	-84	-1767
Node 22: 31: Comb.SLV sism. 21 [C.21]	-339	179	2184
Node 22: 32: Comb.SLV sism. 22 [C.22]	-136	79	-441
Node 22: 33: Comb.SLV sism. 23 [C.23]	-339	190	4384
Node 22: 34: Comb.SLV sism. 24 [C.24]	339	-143	-4366
Node 22: 35: Comb.SLV sism. 25 [C.25]	-449	239	4782
Node 22: 36: Comb.SLV sism. 26 [C.26]	229	-94	-3968
Node 22: 54: Env SLU [Absolute Envelope 1]	449	239	4782
Node 24: 1: pp	80	258	
Node 24: 2: g	87	214	
Node 24: 3: qs_1	597	1438	
Node 24: 4: qs_2	485	954	
Node 24: 5: Vento +X	-181	-1425	
Node 24: 6: Vento -X	-668	-863	
Node 24: 7: SLV X	-1843	-822	
Node 24: 8: SLV Z	-44	11	7
Node 24: 11: Comb. SLU A1 1 [C.1]	344	1267	
Node 24: 12: Comb. SLU A1 2 [C.2]	294	1125	
Node 24: 13: Comb. SLU A1 3 [C.3]	-421	34	
Node 24: 14: Comb. SLU A1 4 [C.4]	-471	-108	
Node 24: 15: Comb. SLU A1 5 [C.5]	-785	-681	
Node 24: 16: Comb. SLU A1 6 [C.6]	-835	-823	
Node 24: 17: Comb. SLU A1 7 [C.7]	782	761	
Node 24: 18: Comb. SLU A1 8 [C.8]	731	620	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 24: 19: Comb. SLU A1 9 [C.9]	309	-809	
Node 24: 20: Comb. SLU A1 10 [C.10]	259	-950	
Node 24: 21: Comb. SLU A1 11 [C.11]	-55	-1524	
Node 24: 22: Comb. SLU A1 12 [C.12]	-105	-1666	
Node 24: 23: Comb. SLU A1 13 [C.13]	945	2043	
Node 24: 24: Comb. SLU A1 14 [C.14]	895	1902	
Node 24: 25: Comb. SLU A1 15 [C.15]	1113	2770	
Node 24: 26: Comb. SLU A1 16 [C.16]	1063	2628	
Node 24: 27: Comb. SLU A1 17 [C.17]	217	613	
Node 24: 28: Comb. SLU A1 18 [C.18]	167	472	
Node 24: 29: Comb.SLV sism. 19 [C.19]	2024	1290	-2
Node 24: 30: Comb.SLV sism. 20 [C.20]	1997	1297	3
Node 24: 31: Comb.SLV sism. 21 [C.21]	-1663	-353	-3
Node 24: 32: Comb.SLV sism. 22 [C.22]	-1690	-347	2
Node 24: 33: Comb.SLV sism. 23 [C.23]	764	708	-7
Node 24: 34: Comb.SLV sism. 24 [C.24]	676	729	7
Node 24: 35: Comb.SLV sism. 25 [C.25]	-342	214	-8
Node 24: 36: Comb.SLV sism. 26 [C.26]	-430	236	7
Node 24: 54: Env SLU [Absolute Envelope 1]	2024	2770	8
Node 40: 1: pp		471	
Node 40: 2: g		520	
Node 40: 3: qs_1		3810	
Node 40: 4: qs_2		2886	
Node 40: 5: Vento +X		-2939	
Node 40: 6: Vento -X		-1813	
Node 40: 7: SLV X		1063	
Node 40: 8: SLV Z		-240	
Node 40: 11: Comb. SLU A1 1 [C.1]		3987	
Node 40: 12: Comb. SLU A1 2 [C.2]		3689	
Node 40: 13: Comb. SLU A1 3 [C.3]		734	
Node 40: 14: Comb. SLU A1 4 [C.4]		437	
Node 40: 15: Comb. SLU A1 5 [C.5]		-1431	
Node 40: 16: Comb. SLU A1 6 [C.6]		-1728	
Node 40: 17: Comb. SLU A1 7 [C.7]		2973	
Node 40: 18: Comb. SLU A1 8 [C.8]		2676	
Node 40: 19: Comb. SLU A1 9 [C.9]		-955	
Node 40: 20: Comb. SLU A1 10 [C.10]		-1252	
Node 40: 21: Comb. SLU A1 11 [C.11]		-3119	
Node 40: 22: Comb. SLU A1 12 [C.12]		-3417	
Node 40: 23: Comb. SLU A1 13 [C.13]		5618	
Node 40: 24: Comb. SLU A1 14 [C.14]		5321	
Node 40: 25: Comb. SLU A1 15 [C.15]		7003	
Node 40: 26: Comb. SLU A1 16 [C.16]		6706	
Node 40: 27: Comb. SLU A1 17 [C.17]		1289	
Node 40: 28: Comb. SLU A1 18 [C.18]		991	
Node 40: 29: Comb.SLV sism. 19 [C.19]			
Node 40: 30: Comb.SLV sism. 20 [C.20]		-144	
Node 40: 31: Comb.SLV sism. 21 [C.21]		2126	
Node 40: 32: Comb.SLV sism. 22 [C.22]		1982	
Node 40: 33: Comb.SLV sism. 23 [C.23]		912	
Node 40: 34: Comb.SLV sism. 24 [C.24]		432	
Node 40: 35: Comb.SLV sism. 25 [C.25]		1550	
Node 40: 36: Comb.SLV sism. 26 [C.26]		1070	
Node 40: 54: Env SLU [Absolute Envelope 1]		7003	
Node 60: 1: pp		480	
Node 60: 2: g		529	
Node 60: 3: qs_1		3871	
Node 60: 4: qs_2		1432	
Node 60: 5: Vento +X		-1984	
Node 60: 6: Vento -X		-2856	
Node 60: 7: SLV X		-127	
Node 60: 8: SLV Z		-252	
Node 60: 11: Comb. SLU A1 1 [C.1]		888	
Node 60: 12: Comb. SLU A1 2 [C.2]		585	
Node 60: 13: Comb. SLU A1 3 [C.3]		-1900	
Node 60: 14: Comb. SLU A1 4 [C.4]		-2202	
Node 60: 15: Comb. SLU A1 5 [C.5]		-2974	
Node 60: 16: Comb. SLU A1 6 [C.6]		-3276	
Node 60: 17: Comb. SLU A1 7 [C.7]		1673	
Node 60: 18: Comb. SLU A1 8 [C.8]		1371	
Node 60: 19: Comb. SLU A1 9 [C.9]		-591	
Node 60: 20: Comb. SLU A1 10 [C.10]		-893	
Node 60: 21: Comb. SLU A1 11 [C.11]		-1664	
Node 60: 22: Comb. SLU A1 12 [C.12]		-1967	

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 60: 23: Comb. SLU A1 13 [C.13]		3459	
Node 60: 24: Comb. SLU A1 14 [C.14]		3156	
Node 60: 25: Comb. SLU A1 15 [C.15]		7118	
Node 60: 26: Comb. SLU A1 16 [C.16]		6815	
Node 60: 27: Comb. SLU A1 17 [C.17]		1311	
Node 60: 28: Comb. SLU A1 18 [C.18]		1008	
Node 60: 29: Comb.SLV sism. 19 [C.19]		1211	
Node 60: 30: Comb.SLV sism. 20 [C.20]		1060	
Node 60: 31: Comb.SLV sism. 21 [C.21]		957	
Node 60: 32: Comb.SLV sism. 22 [C.22]		806	
Node 60: 33: Comb.SLV sism. 23 [C.23]		1298	
Node 60: 34: Comb.SLV sism. 24 [C.24]		795	
Node 60: 35: Comb.SLV sism. 25 [C.25]		1222	
Node 60: 36: Comb.SLV sism. 26 [C.26]		719	
Node 60: 54: Env SLU [Absolute Envelope 1]		7118	
Node 73: 1: pp		211	
Node 73: 2: g		163	
Node 73: 3: qs_1		1087	1
Node 73: 4: qs_2		324	
Node 73: 5: Vento +X		-484	-1
Node 73: 6: Vento -X		-1305	
Node 73: 7: SLV X		-160	1
Node 73: 8: SLV Z		35	7
Node 73: 11: Comb. SLU A1 1 [C.1]		-203	1
Node 73: 12: Comb. SLU A1 2 [C.2]		-315	1
Node 73: 13: Comb. SLU A1 3 [C.3]		-1229	
Node 73: 14: Comb. SLU A1 4 [C.4]		-1341	
Node 73: 15: Comb. SLU A1 5 [C.5]		-1472	
Node 73: 16: Comb. SLU A1 6 [C.6]		-1584	
Node 73: 17: Comb. SLU A1 7 [C.7]		535	
Node 73: 18: Comb. SLU A1 8 [C.8]		423	
Node 73: 19: Comb. SLU A1 9 [C.9]		2	
Node 73: 20: Comb. SLU A1 10 [C.10]		-110	-1
Node 73: 21: Comb. SLU A1 11 [C.11]		-241	-1
Node 73: 22: Comb. SLU A1 12 [C.12]		-353	-1
Node 73: 23: Comb. SLU A1 13 [C.13]		971	1
Node 73: 24: Comb. SLU A1 14 [C.14]		859	1
Node 73: 25: Comb. SLU A1 15 [C.15]		2116	1
Node 73: 26: Comb. SLU A1 16 [C.16]		2004	1
Node 73: 27: Comb. SLU A1 17 [C.17]		486	
Node 73: 28: Comb. SLU A1 18 [C.18]		374	
Node 73: 29: Comb.SLV sism. 19 [C.19]		523	-3
Node 73: 30: Comb.SLV sism. 20 [C.20]		544	2
Node 73: 31: Comb.SLV sism. 21 [C.21]		203	-2
Node 73: 32: Comb.SLV sism. 22 [C.22]		224	3
Node 73: 33: Comb.SLV sism. 23 [C.23]		386	-7
Node 73: 34: Comb.SLV sism. 24 [C.24]		457	7
Node 73: 35: Comb.SLV sism. 25 [C.25]		290	-7
Node 73: 36: Comb.SLV sism. 26 [C.26]		361	8
Node 73: 54: Env SLU [Absolute Envelope 1]		2116	8
Node 78: 1: pp	39	233	
Node 78: 2: g	43	190	
Node 78: 3: qs_1	298	1272	
Node 78: 4: qs_2	228	810	
Node 78: 5: Vento +X	206	-1207	
Node 78: 6: Vento -X	-620	-838	
Node 78: 7: SLV X	-2264	-1060	
Node 78: 8: SLV Z	18	-23	2
Node 78: 11: Comb. SLU A1 1 [C.1]	-109	1010	
Node 78: 12: Comb. SLU A1 2 [C.2]	-133	883	
Node 78: 13: Comb. SLU A1 3 [C.3]	-652	-100	
Node 78: 14: Comb. SLU A1 4 [C.4]	-676	-227	
Node 78: 15: Comb. SLU A1 5 [C.5]	-823	-707	
Node 78: 16: Comb. SLU A1 6 [C.6]	-848	-834	
Node 78: 17: Comb. SLU A1 7 [C.7]	635	677	
Node 78: 18: Comb. SLU A1 8 [C.8]	610	551	
Node 78: 19: Comb. SLU A1 9 [C.9]	588	-654	
Node 78: 20: Comb. SLU A1 10 [C.10]	563	-781	
Node 78: 21: Comb. SLU A1 11 [C.11]	416	-1261	
Node 78: 22: Comb. SLU A1 12 [C.12]	392	-1388	
Node 78: 23: Comb. SLU A1 13 [C.13]	449	1764	
Node 78: 24: Comb. SLU A1 14 [C.14]	425	1637	
Node 78: 25: Comb. SLU A1 15 [C.15]	553	2457	
Node 78: 26: Comb. SLU A1 16 [C.16]	528	2330	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 78: 27: Comb. SLU A1 17 [C.17]	107	549	
Node 78: 28: Comb. SLU A1 18 [C.18]	82	423	
Node 78: 29: Comb.SLV sism. 19 [C.19]	2340	1490	
Node 78: 30: Comb.SLV sism. 20 [C.20]	2351	1476	1
Node 78: 31: Comb.SLV sism. 21 [C.21]	-2187	-631	-1
Node 78: 32: Comb.SLV sism. 22 [C.22]	-2176	-644	
Node 78: 33: Comb.SLV sism. 23 [C.23]	743	763	-2
Node 78: 34: Comb.SLV sism. 24 [C.24]	779	718	2
Node 78: 35: Comb.SLV sism. 25 [C.25]	-615	127	-2
Node 78: 36: Comb.SLV sism. 26 [C.26]	-579	82	2
Node 78: 54: Env SLU [Absolute Envelope 1]	2351	2457	2
Node 94: 1: pp		498	
Node 94: 2: g		540	
Node 94: 3: qs_1		3956	
Node 94: 4: qs_2		2962	
Node 94: 5: Vento +X		-3062	
Node 94: 6: Vento -X		-1866	
Node 94: 7: SLV X		1164	
Node 94: 8: SLV Z		203	
Node 94: 11: Comb. SLU A1 1 [C.1]		4113	
Node 94: 12: Comb. SLU A1 2 [C.2]		3801	
Node 94: 13: Comb. SLU A1 3 [C.3]		772	
Node 94: 14: Comb. SLU A1 4 [C.4]		460	
Node 94: 15: Comb. SLU A1 5 [C.5]		-1450	
Node 94: 16: Comb. SLU A1 6 [C.6]		-1761	
Node 94: 17: Comb. SLU A1 7 [C.7]		3036	
Node 94: 18: Comb. SLU A1 8 [C.8]		2725	
Node 94: 19: Comb. SLU A1 9 [C.9]		-1022	
Node 94: 20: Comb. SLU A1 10 [C.10]		-1333	
Node 94: 21: Comb. SLU A1 11 [C.11]		-3243	
Node 94: 22: Comb. SLU A1 12 [C.12]		-3555	
Node 94: 23: Comb. SLU A1 13 [C.13]		5792	
Node 94: 24: Comb. SLU A1 14 [C.14]		5481	
Node 94: 25: Comb. SLU A1 15 [C.15]		7283	
Node 94: 26: Comb. SLU A1 16 [C.16]		6972	
Node 94: 27: Comb. SLU A1 17 [C.17]		1349	
Node 94: 28: Comb. SLU A1 18 [C.18]		1038	
Node 94: 29: Comb.SLV sism. 19 [C.19]		-186	
Node 94: 30: Comb.SLV sism. 20 [C.20]		-65	
Node 94: 31: Comb.SLV sism. 21 [C.21]		2141	
Node 94: 32: Comb.SLV sism. 22 [C.22]		2263	
Node 94: 33: Comb.SLV sism. 23 [C.23]		486	
Node 94: 34: Comb.SLV sism. 24 [C.24]		892	
Node 94: 35: Comb.SLV sism. 25 [C.25]		1184	
Node 94: 36: Comb.SLV sism. 26 [C.26]		1590	
Node 94: 54: Env SLU [Absolute Envelope 1]		7283	
Node 114: 1: pp		514	
Node 114: 2: g		558	
Node 114: 3: qs_1		4080	
Node 114: 4: qs_2		1548	
Node 114: 5: Vento +X		-2169	
Node 114: 6: Vento -X		-2932	
Node 114: 7: SLV X		27	
Node 114: 8: SLV Z		209	
Node 114: 11: Comb. SLU A1 1 [C.1]		1077	
Node 114: 12: Comb. SLU A1 2 [C.2]		756	
Node 114: 13: Comb. SLU A1 3 [C.3]		-1843	
Node 114: 14: Comb. SLU A1 4 [C.4]		-2164	
Node 114: 15: Comb. SLU A1 5 [C.5]		-3004	
Node 114: 16: Comb. SLU A1 6 [C.6]		-3325	
Node 114: 17: Comb. SLU A1 7 [C.7]		1764	
Node 114: 18: Comb. SLU A1 8 [C.8]		1442	
Node 114: 19: Comb. SLU A1 9 [C.9]		-698	
Node 114: 20: Comb. SLU A1 10 [C.10]		-1020	
Node 114: 21: Comb. SLU A1 11 [C.11]		-1860	
Node 114: 22: Comb. SLU A1 12 [C.12]		-2181	
Node 114: 23: Comb. SLU A1 13 [C.13]		3716	
Node 114: 24: Comb. SLU A1 14 [C.14]		3394	
Node 114: 25: Comb. SLU A1 15 [C.15]		7514	
Node 114: 26: Comb. SLU A1 16 [C.16]		7193	
Node 114: 27: Comb. SLU A1 17 [C.17]		1394	
Node 114: 28: Comb. SLU A1 18 [C.18]		1072	
Node 114: 29: Comb.SLV sism. 19 [C.19]		982	
Node 114: 30: Comb.SLV sism. 20 [C.20]		1108	

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	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 114: 31: Comb.SLV sism. 21 [C.21]		1037	
Node 114: 32: Comb.SLV sism. 22 [C.22]		1163	
Node 114: 33: Comb.SLV sism. 23 [C.23]		855	
Node 114: 34: Comb.SLV sism. 24 [C.24]		1273	
Node 114: 35: Comb.SLV sism. 25 [C.25]		871	
Node 114: 36: Comb.SLV sism. 26 [C.26]		1290	
Node 114: 54: Env SLU [Absolute Envelope 1]		7514	
Node 127: 1: pp		212	
Node 127: 2: g		167	
Node 127: 3: qs_1		1114	1
Node 127: 4: qs_2		341	
Node 127: 5: Vento +X		-509	-1
Node 127: 6: Vento -X		-1316	
Node 127: 7: SLV X		-138	
Node 127: 8: SLV Z		-32	2
Node 127: 11: Comb. SLU A1 1 [C.1]		-180	1
Node 127: 12: Comb. SLU A1 2 [C.2]		-294	1
Node 127: 13: Comb. SLU A1 3 [C.3]		-1226	
Node 127: 14: Comb. SLU A1 4 [C.4]		-1339	
Node 127: 15: Comb. SLU A1 5 [C.5]		-1481	
Node 127: 16: Comb. SLU A1 6 [C.6]		-1595	
Node 127: 17: Comb. SLU A1 7 [C.7]		546	
Node 127: 18: Comb. SLU A1 8 [C.8]		432	
Node 127: 19: Comb. SLU A1 9 [C.9]		-16	
Node 127: 20: Comb. SLU A1 10 [C.10]		-129	
Node 127: 21: Comb. SLU A1 11 [C.11]		-271	-1
Node 127: 22: Comb. SLU A1 12 [C.12]		-385	-1
Node 127: 23: Comb. SLU A1 13 [C.13]		1004	1
Node 127: 24: Comb. SLU A1 14 [C.14]		891	1
Node 127: 25: Comb. SLU A1 15 [C.15]		2164	1
Node 127: 26: Comb. SLU A1 16 [C.16]		2050	1
Node 127: 27: Comb. SLU A1 17 [C.17]		493	
Node 127: 28: Comb. SLU A1 18 [C.18]		379	
Node 127: 29: Comb.SLV sism. 19 [C.19]		527	-1
Node 127: 30: Comb.SLV sism. 20 [C.20]		508	
Node 127: 31: Comb.SLV sism. 21 [C.21]		250	
Node 127: 32: Comb.SLV sism. 22 [C.22]		231	1
Node 127: 33: Comb.SLV sism. 23 [C.23]		453	-2
Node 127: 34: Comb.SLV sism. 24 [C.24]		388	2
Node 127: 35: Comb.SLV sism. 25 [C.25]		370	-2
Node 127: 36: Comb.SLV sism. 26 [C.26]		305	2
Node 127: 54: Env SLU [Absolute Envelope 1]		2164	2
Node 132: 1: pp	10	219	
Node 132: 2: g	11	173	
Node 132: 3: qs_1	78	1157	
Node 132: 4: qs_2	60	721	
Node 132: 5: Vento +X	464	-1072	
Node 132: 6: Vento -X	-572	-812	
Node 132: 7: SLV X	-2520	-1195	
Node 132: 8: SLV Z	7	10	-2
Node 132: 11: Comb. SLU A1 1 [C.1]	-397	860	
Node 132: 12: Comb. SLU A1 2 [C.2]	-404	742	
Node 132: 13: Comb. SLU A1 3 [C.3]	-785	-168	
Node 132: 14: Comb. SLU A1 4 [C.4]	-791	-286	
Node 132: 15: Comb. SLU A1 5 [C.5]	-829	-709	
Node 132: 16: Comb. SLU A1 6 [C.6]	-836	-827	
Node 132: 17: Comb. SLU A1 7 [C.7]	535	626	
Node 132: 18: Comb. SLU A1 8 [C.8]	528	509	
Node 132: 19: Comb. SLU A1 9 [C.9]	768	-558	
Node 132: 20: Comb. SLU A1 10 [C.10]	762	-675	
Node 132: 21: Comb. SLU A1 11 [C.11]	723	-1098	
Node 132: 22: Comb. SLU A1 12 [C.12]	717	-1216	
Node 132: 23: Comb. SLU A1 13 [C.13]	117	1591	
Node 132: 24: Comb. SLU A1 14 [C.14]	111	1474	
Node 132: 25: Comb. SLU A1 15 [C.15]	145	2245	
Node 132: 26: Comb. SLU A1 16 [C.16]	139	2127	
Node 132: 27: Comb. SLU A1 17 [C.17]	28	510	
Node 132: 28: Comb. SLU A1 18 [C.18]	22	392	
Node 132: 29: Comb.SLV sism. 19 [C.19]	2540	1584	1
Node 132: 30: Comb.SLV sism. 20 [C.20]	2544	1590	
Node 132: 31: Comb.SLV sism. 21 [C.21]	-2500	-806	
Node 132: 32: Comb.SLV sism. 22 [C.22]	-2496	-800	-1
Node 132: 33: Comb.SLV sism. 23 [C.23]	771	741	2
Node 132: 34: Comb.SLV sism. 24 [C.24]	784	760	-2

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 132: 35: Comb.SLV sism. 25 [C.25]	-741	24	2
Node 132: 36: Comb.SLV sism. 26 [C.26]	-728	43	-2
Node 132: 54: Env SLU [Absolute Envelope 1]	2544	2245	2
Node 148: 1: pp		500	
Node 148: 2: g		557	
Node 148: 3: qs_1		4075	
Node 148: 4: qs_2		3050	
Node 148: 5: Vento +X		-3197	
Node 148: 6: Vento -X		-1894	
Node 148: 7: SLV X		1293	
Node 148: 8: SLV Z		2	
Node 148: 11: Comb. SLU A1 1 [C.1]		4244	
Node 148: 12: Comb. SLU A1 2 [C.2]		3927	
Node 148: 13: Comb. SLU A1 3 [C.3]		820	
Node 148: 14: Comb. SLU A1 4 [C.4]		503	
Node 148: 15: Comb. SLU A1 5 [C.5]		-1467	
Node 148: 16: Comb. SLU A1 6 [C.6]		-1784	
Node 148: 17: Comb. SLU A1 7 [C.7]		3072	
Node 148: 18: Comb. SLU A1 8 [C.8]		2754	
Node 148: 19: Comb. SLU A1 9 [C.9]		-1134	
Node 148: 20: Comb. SLU A1 10 [C.10]		-1451	
Node 148: 21: Comb. SLU A1 11 [C.11]		-3421	
Node 148: 22: Comb. SLU A1 12 [C.12]		-3738	
Node 148: 23: Comb. SLU A1 13 [C.13]		5949	
Node 148: 24: Comb. SLU A1 14 [C.14]		5632	
Node 148: 25: Comb. SLU A1 15 [C.15]		7487	
Node 148: 26: Comb. SLU A1 16 [C.16]		7169	
Node 148: 27: Comb. SLU A1 17 [C.17]		1374	
Node 148: 28: Comb. SLU A1 18 [C.18]		1057	
Node 148: 29: Comb.SLV sism. 19 [C.19]		-236	
Node 148: 30: Comb.SLV sism. 20 [C.20]		-235	
Node 148: 31: Comb.SLV sism. 21 [C.21]		2349	
Node 148: 32: Comb.SLV sism. 22 [C.22]		2350	
Node 148: 33: Comb.SLV sism. 23 [C.23]		667	
Node 148: 34: Comb.SLV sism. 24 [C.24]		671	
Node 148: 35: Comb.SLV sism. 25 [C.25]		1443	
Node 148: 36: Comb.SLV sism. 26 [C.26]		1447	
Node 148: 54: Env SLU [Absolute Envelope 1]		7487	
Node 168: 1: pp		502	
Node 168: 2: g		560	
Node 168: 3: qs_1		4092	
Node 168: 4: qs_2		1553	
Node 168: 5: Vento +X		-2178	
Node 168: 6: Vento -X		-2937	
Node 168: 7: SLV X		38	
Node 168: 8: SLV Z		3	
Node 168: 11: Comb. SLU A1 1 [C.1]		1068	
Node 168: 12: Comb. SLU A1 2 [C.2]		749	
Node 168: 13: Comb. SLU A1 3 [C.3]		-1859	
Node 168: 14: Comb. SLU A1 4 [C.4]		-2178	
Node 168: 15: Comb. SLU A1 5 [C.5]		-3025	
Node 168: 16: Comb. SLU A1 6 [C.6]		-3343	
Node 168: 17: Comb. SLU A1 7 [C.7]		1750	
Node 168: 18: Comb. SLU A1 8 [C.8]		1432	
Node 168: 19: Comb. SLU A1 9 [C.9]		-722	
Node 168: 20: Comb. SLU A1 10 [C.10]		-1041	
Node 168: 21: Comb. SLU A1 11 [C.11]		-1887	
Node 168: 22: Comb. SLU A1 12 [C.12]		-2206	
Node 168: 23: Comb. SLU A1 13 [C.13]		3711	
Node 168: 24: Comb. SLU A1 14 [C.14]		3392	
Node 168: 25: Comb. SLU A1 15 [C.15]		7519	
Node 168: 26: Comb. SLU A1 16 [C.16]		7200	
Node 168: 27: Comb. SLU A1 17 [C.17]		1380	
Node 168: 28: Comb. SLU A1 18 [C.18]		1062	
Node 168: 29: Comb.SLV sism. 19 [C.19]		1023	
Node 168: 30: Comb.SLV sism. 20 [C.20]		1025	
Node 168: 31: Comb.SLV sism. 21 [C.21]		1099	
Node 168: 32: Comb.SLV sism. 22 [C.22]		1101	
Node 168: 33: Comb.SLV sism. 23 [C.23]		1047	
Node 168: 34: Comb.SLV sism. 24 [C.24]		1054	
Node 168: 35: Comb.SLV sism. 25 [C.25]		1070	
Node 168: 36: Comb.SLV sism. 26 [C.26]		1077	
Node 168: 54: Env SLU [Absolute Envelope 1]		7519	
Node 181: 1: pp		213	

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	FX (kgf)	FY (kgf)	FZ (kgf)
Node 181: 2: g		167	
Node 181: 3: qs_1		1112	
Node 181: 4: qs_2		340	
Node 181: 5: Vento +X		-508	
Node 181: 6: Vento -X		-1316	
Node 181: 7: SLV X		-139	
Node 181: 8: SLV Z		6	-2
Node 181: 11: Comb. SLU A1 1 [C.1]		-180	
Node 181: 12: Comb. SLU A1 2 [C.2]		-294	
Node 181: 13: Comb. SLU A1 3 [C.3]		-1225	
Node 181: 14: Comb. SLU A1 4 [C.4]		-1339	
Node 181: 15: Comb. SLU A1 5 [C.5]		-1480	
Node 181: 16: Comb. SLU A1 6 [C.6]		-1594	
Node 181: 17: Comb. SLU A1 7 [C.7]		547	
Node 181: 18: Comb. SLU A1 8 [C.8]		433	
Node 181: 19: Comb. SLU A1 9 [C.9]		-13	
Node 181: 20: Comb. SLU A1 10 [C.10]		-127	
Node 181: 21: Comb. SLU A1 11 [C.11]		-268	
Node 181: 22: Comb. SLU A1 12 [C.12]		-382	-1
Node 181: 23: Comb. SLU A1 13 [C.13]		1004	1
Node 181: 24: Comb. SLU A1 14 [C.14]		890	
Node 181: 25: Comb. SLU A1 15 [C.15]		2162	1
Node 181: 26: Comb. SLU A1 16 [C.16]		2048	1
Node 181: 27: Comb. SLU A1 17 [C.17]		494	
Node 181: 28: Comb. SLU A1 18 [C.18]		380	
Node 181: 29: Comb.SLV sism. 19 [C.19]		517	
Node 181: 30: Comb.SLV sism. 20 [C.20]		521	-1
Node 181: 31: Comb.SLV sism. 21 [C.21]		239	1
Node 181: 32: Comb.SLV sism. 22 [C.22]		242	
Node 181: 33: Comb.SLV sism. 23 [C.23]		416	2
Node 181: 34: Comb.SLV sism. 24 [C.24]		428	-2
Node 181: 35: Comb.SLV sism. 25 [C.25]		332	2
Node 181: 36: Comb.SLV sism. 26 [C.26]		344	-2
Node 181: 54: Env SLU [Absolute Envelope 1]		2162	2
Node 186: 1: pp	-1	212	
Node 186: 2: g		167	
Node 186: 3: qs_1	3	1116	
Node 186: 4: qs_2	2	690	
Node 186: 5: Vento +X	551	-1024	
Node 186: 6: Vento -X	-555	-803	
Node 186: 7: SLV X	-2625	-1251	
Node 186: 8: SLV Z	1	32	-5
Node 186: 11: Comb. SLU A1 1 [C.1]	-497	804	
Node 186: 12: Comb. SLU A1 2 [C.2]	-497	690	
Node 186: 13: Comb. SLU A1 3 [C.3]	-832	-195	
Node 186: 14: Comb. SLU A1 4 [C.4]	-832	-309	
Node 186: 15: Comb. SLU A1 5 [C.5]	-833	-713	
Node 186: 16: Comb. SLU A1 6 [C.6]	-833	-826	
Node 186: 17: Comb. SLU A1 7 [C.7]	498	605	
Node 186: 18: Comb. SLU A1 8 [C.8]	499	492	
Node 186: 19: Comb. SLU A1 9 [C.9]	827	-527	
Node 186: 20: Comb. SLU A1 10 [C.10]	827	-641	
Node 186: 21: Comb. SLU A1 11 [C.11]	826	-1044	
Node 186: 22: Comb. SLU A1 12 [C.12]	826	-1158	
Node 186: 23: Comb. SLU A1 13 [C.13]	2	1527	
Node 186: 24: Comb. SLU A1 14 [C.14]	3	1414	
Node 186: 25: Comb. SLU A1 15 [C.15]	4	2166	
Node 186: 26: Comb. SLU A1 16 [C.16]	4	2052	
Node 186: 27: Comb. SLU A1 17 [C.17]	-1	492	
Node 186: 28: Comb. SLU A1 18 [C.18]	-1	379	
Node 186: 29: Comb.SLV sism. 19 [C.19]	2624	1620	2
Node 186: 30: Comb.SLV sism. 20 [C.20]	2624	1640	-1
Node 186: 31: Comb.SLV sism. 21 [C.21]	-2626	-882	1
Node 186: 32: Comb.SLV sism. 22 [C.22]	-2625	-863	-2
Node 186: 33: Comb.SLV sism. 23 [C.23]	785	722	5
Node 186: 34: Comb.SLV sism. 24 [C.24]	788	786	-5
Node 186: 35: Comb.SLV sism. 25 [C.25]	-789	-29	5
Node 186: 36: Comb.SLV sism. 26 [C.26]	-787	36	-5
Node 186: 54: Env SLU [Absolute Envelope 1]	2626	2166	5
Node 202: 1: pp		519	
Node 202: 2: g		562	
Node 202: 3: qs_1		4107	
Node 202: 4: qs_2		3073	
Node 202: 5: Vento +X		-3233	

	FX (kgf)	FY (kgf)	FZ (kgf)
Node 202: 6: Vento -X		-1901	
Node 202: 7: SLV X		1341	
Node 202: 8: SLV Z		-139	
Node 202: 11: Comb. SLU A1 1 [C.1]		4304	
Node 202: 12: Comb. SLU A1 2 [C.2]		3979	
Node 202: 13: Comb. SLU A1 3 [C.3]		858	
Node 202: 14: Comb. SLU A1 4 [C.4]		534	
Node 202: 15: Comb. SLU A1 5 [C.5]		-1447	
Node 202: 16: Comb. SLU A1 6 [C.6]		-1771	
Node 202: 17: Comb. SLU A1 7 [C.7]		3105	
Node 202: 18: Comb. SLU A1 8 [C.8]		2781	
Node 202: 19: Comb. SLU A1 9 [C.9]		-1140	
Node 202: 20: Comb. SLU A1 10 [C.10]		-1464	
Node 202: 21: Comb. SLU A1 11 [C.11]		-3444	
Node 202: 22: Comb. SLU A1 12 [C.12]		-3769	
Node 202: 23: Comb. SLU A1 13 [C.13]		6015	
Node 202: 24: Comb. SLU A1 14 [C.14]		5691	
Node 202: 25: Comb. SLU A1 15 [C.15]		7566	
Node 202: 26: Comb. SLU A1 16 [C.16]		7241	
Node 202: 27: Comb. SLU A1 17 [C.17]		1405	
Node 202: 28: Comb. SLU A1 18 [C.18]		1081	
Node 202: 29: Comb.SLV sism. 19 [C.19]		-218	
Node 202: 30: Comb.SLV sism. 20 [C.20]		-301	
Node 202: 31: Comb.SLV sism. 21 [C.21]		2463	
Node 202: 32: Comb.SLV sism. 22 [C.22]		2380	
Node 202: 33: Comb.SLV sism. 23 [C.23]		818	
Node 202: 34: Comb.SLV sism. 24 [C.24]		540	
Node 202: 35: Comb.SLV sism. 25 [C.25]		1622	
Node 202: 36: Comb.SLV sism. 26 [C.26]		1344	
Node 202: 54: Env SLU [Absolute Envelope 1]		7566	
Node 222: 1: pp		518	
Node 222: 2: g		562	
Node 222: 3: qs_1		4105	
Node 222: 4: qs_2		1562	
Node 222: 5: Vento +X		-2192	
Node 222: 6: Vento -X		-2940	
Node 222: 7: SLV X		48	
Node 222: 8: SLV Z		-139	
Node 222: 11: Comb. SLU A1 1 [C.1]		1101	
Node 222: 12: Comb. SLU A1 2 [C.2]		777	
Node 222: 13: Comb. SLU A1 3 [C.3]		-1834	
Node 222: 14: Comb. SLU A1 4 [C.4]		-2158	
Node 222: 15: Comb. SLU A1 5 [C.5]		-3006	
Node 222: 16: Comb. SLU A1 6 [C.6]		-3330	
Node 222: 17: Comb. SLU A1 7 [C.7]		1774	
Node 222: 18: Comb. SLU A1 8 [C.8]		1450	
Node 222: 19: Comb. SLU A1 9 [C.9]		-713	
Node 222: 20: Comb. SLU A1 10 [C.10]		-1037	
Node 222: 21: Comb. SLU A1 11 [C.11]		-1885	
Node 222: 22: Comb. SLU A1 12 [C.12]		-2209	
Node 222: 23: Comb. SLU A1 13 [C.13]		3747	
Node 222: 24: Comb. SLU A1 14 [C.14]		3423	
Node 222: 25: Comb. SLU A1 15 [C.15]		7561	
Node 222: 26: Comb. SLU A1 16 [C.16]		7237	
Node 222: 27: Comb. SLU A1 17 [C.17]		1404	
Node 222: 28: Comb. SLU A1 18 [C.18]		1080	
Node 222: 29: Comb.SLV sism. 19 [C.19]		1073	
Node 222: 30: Comb.SLV sism. 20 [C.20]		990	
Node 222: 31: Comb.SLV sism. 21 [C.21]		1169	
Node 222: 32: Comb.SLV sism. 22 [C.22]		1086	
Node 222: 33: Comb.SLV sism. 23 [C.23]		1204	
Node 222: 34: Comb.SLV sism. 24 [C.24]		926	
Node 222: 35: Comb.SLV sism. 25 [C.25]		1233	
Node 222: 36: Comb.SLV sism. 26 [C.26]		955	
Node 222: 54: Env SLU [Absolute Envelope 1]		7561	
Node 235: 1: pp		212	
Node 235: 2: g		167	
Node 235: 3: qs_1		1113	
Node 235: 4: qs_2		341	
Node 235: 5: Vento +X		-509	
Node 235: 6: Vento -X		-1316	
Node 235: 7: SLV X		-138	
Node 235: 8: SLV Z		31	-5
Node 235: 11: Comb. SLU A1 1 [C.1]		-180	

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 235: 12: Comb. SLU A1 2 [C.2]		-294	
Node 235: 13: Comb. SLU A1 3 [C.3]		-1225	
Node 235: 14: Comb. SLU A1 4 [C.4]		-1339	
Node 235: 15: Comb. SLU A1 5 [C.5]		-1481	
Node 235: 16: Comb. SLU A1 6 [C.6]		-1595	
Node 235: 17: Comb. SLU A1 7 [C.7]		546	
Node 235: 18: Comb. SLU A1 8 [C.8]		432	
Node 235: 19: Comb. SLU A1 9 [C.9]		-15	
Node 235: 20: Comb. SLU A1 10 [C.10]		-129	
Node 235: 21: Comb. SLU A1 11 [C.11]		-271	
Node 235: 22: Comb. SLU A1 12 [C.12]		-385	
Node 235: 23: Comb. SLU A1 13 [C.13]		1004	
Node 235: 24: Comb. SLU A1 14 [C.14]		890	
Node 235: 25: Comb. SLU A1 15 [C.15]		2163	
Node 235: 26: Comb. SLU A1 16 [C.16]		2049	
Node 235: 27: Comb. SLU A1 17 [C.17]		492	
Node 235: 28: Comb. SLU A1 18 [C.18]		379	
Node 235: 29: Comb.SLV sism. 19 [C.19]		508	1
Node 235: 30: Comb.SLV sism. 20 [C.20]		527	-2
Node 235: 31: Comb.SLV sism. 21 [C.21]		231	2
Node 235: 32: Comb.SLV sism. 22 [C.22]		250	-1
Node 235: 33: Comb.SLV sism. 23 [C.23]		389	5
Node 235: 34: Comb.SLV sism. 24 [C.24]		452	-5
Node 235: 35: Comb.SLV sism. 25 [C.25]		306	5
Node 235: 36: Comb.SLV sism. 26 [C.26]		369	-5
Node 235: 54: Env SLU [Absolute Envelope 1]		2163	5
Node 240: 1: pp	-4	210	
Node 240: 2: g	-1	166	
Node 240: 3: qs_1	-10	1109	
Node 240: 4: qs_2	-8	684	
Node 240: 5: Vento +X	567	-1015	
Node 240: 6: Vento -X	-553	-802	
Node 240: 7: SLV X	-2649	-1266	
Node 240: 8: SLV Z	-2	-27	-7
Node 240: 11: Comb. SLU A1 1 [C.1]	-518	792	
Node 240: 12: Comb. SLU A1 2 [C.2]	-516	679	
Node 240: 13: Comb. SLU A1 3 [C.3]	-843	-202	
Node 240: 14: Comb. SLU A1 4 [C.4]	-841	-315	
Node 240: 15: Comb. SLU A1 5 [C.5]	-836	-715	
Node 240: 16: Comb. SLU A1 6 [C.6]	-835	-827	
Node 240: 17: Comb. SLU A1 7 [C.7]	490	600	
Node 240: 18: Comb. SLU A1 8 [C.8]	492	488	
Node 240: 19: Comb. SLU A1 9 [C.9]	837	-521	
Node 240: 20: Comb. SLU A1 10 [C.10]	839	-634	
Node 240: 21: Comb. SLU A1 11 [C.11]	843	-1034	
Node 240: 22: Comb. SLU A1 12 [C.12]	845	-1147	
Node 240: 23: Comb. SLU A1 13 [C.13]	-20	1514	
Node 240: 24: Comb. SLU A1 14 [C.14]	-18	1401	
Node 240: 25: Comb. SLU A1 15 [C.15]	-22	2151	
Node 240: 26: Comb. SLU A1 16 [C.16]	-21	2039	
Node 240: 27: Comb. SLU A1 17 [C.17]	-7	489	
Node 240: 28: Comb. SLU A1 18 [C.18]	-6	376	
Node 240: 29: Comb.SLV sism. 19 [C.19]	2644	1650	2
Node 240: 30: Comb.SLV sism. 20 [C.20]	2643	1633	-2
Node 240: 31: Comb.SLV sism. 21 [C.21]	-2654	-882	2
Node 240: 32: Comb.SLV sism. 22 [C.22]	-2656	-898	-2
Node 240: 33: Comb.SLV sism. 23 [C.23]	791	783	7
Node 240: 34: Comb.SLV sism. 24 [C.24]	787	728	-7
Node 240: 35: Comb.SLV sism. 25 [C.25]	-798	23	7
Node 240: 36: Comb.SLV sism. 26 [C.26]	-803	-31	-7
Node 240: 54: Env SLU [Absolute Envelope 1]	2656	2151	7
Node 256: 1: pp		521	
Node 256: 2: g		562	
Node 256: 3: qs_1		4111	
Node 256: 4: qs_2		3076	
Node 256: 5: Vento +X		-3238	
Node 256: 6: Vento -X		-1903	
Node 256: 7: SLV X		1345	
Node 256: 8: SLV Z		145	
Node 256: 11: Comb. SLU A1 1 [C.1]		4310	
Node 256: 12: Comb. SLU A1 2 [C.2]		3985	
Node 256: 13: Comb. SLU A1 3 [C.3]		861	
Node 256: 14: Comb. SLU A1 4 [C.4]		536	
Node 256: 15: Comb. SLU A1 5 [C.5]		-1446	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 256: 16: Comb. SLU A1 6 [C.6]		-1771	
Node 256: 17: Comb. SLU A1 7 [C.7]		3109	
Node 256: 18: Comb. SLU A1 8 [C.8]		2784	
Node 256: 19: Comb. SLU A1 9 [C.9]		-1141	
Node 256: 20: Comb. SLU A1 10 [C.10]		-1466	
Node 256: 21: Comb. SLU A1 11 [C.11]		-3448	
Node 256: 22: Comb. SLU A1 12 [C.12]		-3773	
Node 256: 23: Comb. SLU A1 13 [C.13]		6023	
Node 256: 24: Comb. SLU A1 14 [C.14]		5698	
Node 256: 25: Comb. SLU A1 15 [C.15]		7575	
Node 256: 26: Comb. SLU A1 16 [C.16]		7250	
Node 256: 27: Comb. SLU A1 17 [C.17]		1408	
Node 256: 28: Comb. SLU A1 18 [C.18]		1083	
Node 256: 29: Comb.SLV sism. 19 [C.19]		-306	
Node 256: 30: Comb.SLV sism. 20 [C.20]		-219	
Node 256: 31: Comb.SLV sism. 21 [C.21]		2385	
Node 256: 32: Comb.SLV sism. 22 [C.22]		2472	
Node 256: 33: Comb.SLV sism. 23 [C.23]		535	
Node 256: 34: Comb.SLV sism. 24 [C.24]		824	
Node 256: 35: Comb.SLV sism. 25 [C.25]		1342	
Node 256: 36: Comb.SLV sism. 26 [C.26]		1631	
Node 256: 54: Env SLU [Absolute Envelope 1]		7575	
Node 276: 1: pp		521	
Node 276: 2: g		563	
Node 276: 3: qs_1		4113	
Node 276: 4: qs_2		1568	
Node 276: 5: Vento +X		-2200	
Node 276: 6: Vento -X		-2942	
Node 276: 7: SLV X		59	
Node 276: 8: SLV Z		144	
Node 276: 11: Comb. SLU A1 1 [C.1]		1112	
Node 276: 12: Comb. SLU A1 2 [C.2]		787	
Node 276: 13: Comb. SLU A1 3 [C.3]		-1830	
Node 276: 14: Comb. SLU A1 4 [C.4]		-2155	
Node 276: 15: Comb. SLU A1 5 [C.5]		-3005	
Node 276: 16: Comb. SLU A1 6 [C.6]		-3330	
Node 276: 17: Comb. SLU A1 7 [C.7]		1780	
Node 276: 18: Comb. SLU A1 8 [C.8]		1455	
Node 276: 19: Comb. SLU A1 9 [C.9]		-716	
Node 276: 20: Comb. SLU A1 10 [C.10]		-1041	
Node 276: 21: Comb. SLU A1 11 [C.11]		-1891	
Node 276: 22: Comb. SLU A1 12 [C.12]		-2216	
Node 276: 23: Comb. SLU A1 13 [C.13]		3760	
Node 276: 24: Comb. SLU A1 14 [C.14]		3435	
Node 276: 25: Comb. SLU A1 15 [C.15]		7577	
Node 276: 26: Comb. SLU A1 16 [C.16]		7252	
Node 276: 27: Comb. SLU A1 17 [C.17]		1408	
Node 276: 28: Comb. SLU A1 18 [C.18]		1083	
Node 276: 29: Comb.SLV sism. 19 [C.19]		981	
Node 276: 30: Comb.SLV sism. 20 [C.20]		1068	
Node 276: 31: Comb.SLV sism. 21 [C.21]		1099	
Node 276: 32: Comb.SLV sism. 22 [C.22]		1186	
Node 276: 33: Comb.SLV sism. 23 [C.23]		922	
Node 276: 34: Comb.SLV sism. 24 [C.24]		1210	
Node 276: 35: Comb.SLV sism. 25 [C.25]		957	
Node 276: 36: Comb.SLV sism. 26 [C.26]		1245	
Node 276: 54: Env SLU [Absolute Envelope 1]		7577	
Node 289: 1: pp		212	
Node 289: 2: g		167	
Node 289: 3: qs_1		1115	
Node 289: 4: qs_2		342	
Node 289: 5: Vento +X		-510	
Node 289: 6: Vento -X		-1316	
Node 289: 7: SLV X		-137	
Node 289: 8: SLV Z		-26	-7
Node 289: 11: Comb. SLU A1 1 [C.1]		-179	
Node 289: 12: Comb. SLU A1 2 [C.2]		-293	
Node 289: 13: Comb. SLU A1 3 [C.3]		-1225	
Node 289: 14: Comb. SLU A1 4 [C.4]		-1339	
Node 289: 15: Comb. SLU A1 5 [C.5]		-1481	
Node 289: 16: Comb. SLU A1 6 [C.6]		-1595	
Node 289: 17: Comb. SLU A1 7 [C.7]		546	
Node 289: 18: Comb. SLU A1 8 [C.8]		433	
Node 289: 19: Comb. SLU A1 9 [C.9]		-16	

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	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 289: 20: Comb. SLU A1 10 [C.10]		-130	
Node 289: 21: Comb. SLU A1 11 [C.11]		-272	
Node 289: 22: Comb. SLU A1 12 [C.12]		-386	
Node 289: 23: Comb. SLU A1 13 [C.13]		1006	
Node 289: 24: Comb. SLU A1 14 [C.14]		892	
Node 289: 25: Comb. SLU A1 15 [C.15]		2165	
Node 289: 26: Comb. SLU A1 16 [C.16]		2052	
Node 289: 27: Comb. SLU A1 17 [C.17]		493	
Node 289: 28: Comb. SLU A1 18 [C.18]		379	
Node 289: 29: Comb.SLV sism. 19 [C.19]		524	2
Node 289: 30: Comb.SLV sism. 20 [C.20]		508	-2
Node 289: 31: Comb.SLV sism. 21 [C.21]		250	2
Node 289: 32: Comb.SLV sism. 22 [C.22]		235	-2
Node 289: 33: Comb.SLV sism. 23 [C.23]		446	7
Node 289: 34: Comb.SLV sism. 24 [C.24]		394	-7
Node 289: 35: Comb.SLV sism. 25 [C.25]		364	7
Node 289: 36: Comb.SLV sism. 26 [C.26]		312	-7
Node 289: 54: Env SLU [Absolute Envelope 1]		2165	7
Node 294: 1: pp	12	241	
Node 294: 2: g	10	179	
Node 294: 3: qs_1	68	1198	
Node 294: 4: qs_2	54	747	
Node 294: 5: Vento +X	495	-1111	
Node 294: 6: Vento -X	-590	-844	
Node 294: 7: SLV X	-2695	-1278	
Node 294: 8: SLV Z	3	3	-8
Node 294: 11: Comb. SLU A1 1 [C.1]	-421	907	
Node 294: 12: Comb. SLU A1 2 [C.2]	-428	781	
Node 294: 13: Comb. SLU A1 3 [C.3]	-816	-159	
Node 294: 14: Comb. SLU A1 4 [C.4]	-823	-285	
Node 294: 15: Comb. SLU A1 5 [C.5]	-857	-720	
Node 294: 16: Comb. SLU A1 6 [C.6]	-863	-845	
Node 294: 17: Comb. SLU A1 7 [C.7]	556	667	
Node 294: 18: Comb. SLU A1 8 [C.8]	549	541	
Node 294: 19: Comb. SLU A1 9 [C.9]	812	-560	
Node 294: 20: Comb. SLU A1 10 [C.10]	805	-686	
Node 294: 21: Comb. SLU A1 11 [C.11]	771	-1120	
Node 294: 22: Comb. SLU A1 12 [C.12]	764	-1246	
Node 294: 23: Comb. SLU A1 13 [C.13]	110	1666	
Node 294: 24: Comb. SLU A1 14 [C.14]	104	1540	
Node 294: 25: Comb. SLU A1 15 [C.15]	131	2342	
Node 294: 26: Comb. SLU A1 16 [C.16]	125	2217	
Node 294: 27: Comb. SLU A1 17 [C.17]	29	546	
Node 294: 28: Comb. SLU A1 18 [C.18]	22	420	
Node 294: 29: Comb.SLV sism. 19 [C.19]	2716	1696	2
Node 294: 30: Comb.SLV sism. 20 [C.20]	2718	1698	-3
Node 294: 31: Comb.SLV sism. 21 [C.21]	-2674	-859	3
Node 294: 32: Comb.SLV sism. 22 [C.22]	-2672	-857	-2
Node 294: 33: Comb.SLV sism. 23 [C.23]	827	800	8
Node 294: 34: Comb.SLV sism. 24 [C.24]	834	807	-8
Node 294: 35: Comb.SLV sism. 25 [C.25]	-789	33	8
Node 294: 36: Comb.SLV sism. 26 [C.26]	-783	40	-8
Node 294: 54: Env SLU [Absolute Envelope 1]	2718	2342	8
Node 310: 1: pp		550	
Node 310: 2: g		581	
Node 310: 3: qs_1		4245	
Node 310: 4: qs_2		3180	
Node 310: 5: Vento +X		-3333	
Node 310: 6: Vento -X		-1973	
Node 310: 7: SLV X		1383	
Node 310: 8: SLV Z		11	
Node 310: 11: Comb. SLU A1 1 [C.1]		4463	
Node 310: 12: Comb. SLU A1 2 [C.2]		4124	
Node 310: 13: Comb. SLU A1 3 [C.3]		895	
Node 310: 14: Comb. SLU A1 4 [C.4]		556	
Node 310: 15: Comb. SLU A1 5 [C.5]		-1490	
Node 310: 16: Comb. SLU A1 6 [C.6]		-1829	
Node 310: 17: Comb. SLU A1 7 [C.7]		3239	
Node 310: 18: Comb. SLU A1 8 [C.8]		2900	
Node 310: 19: Comb. SLU A1 9 [C.9]		-1146	
Node 310: 20: Comb. SLU A1 10 [C.10]		-1485	
Node 310: 21: Comb. SLU A1 11 [C.11]		-3530	
Node 310: 22: Comb. SLU A1 12 [C.12]		-3869	
Node 310: 23: Comb. SLU A1 13 [C.13]		6239	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 310: 24: Comb. SLU A1 14 [C.14]		5900	
Node 310: 25: Comb. SLU A1 15 [C.15]		7837	
Node 310: 26: Comb. SLU A1 16 [C.16]		7498	
Node 310: 27: Comb. SLU A1 17 [C.17]		1469	
Node 310: 28: Comb. SLU A1 18 [C.18]		1130	
Node 310: 29: Comb.SLV sism. 19 [C.19]		-256	
Node 310: 30: Comb.SLV sism. 20 [C.20]		-249	
Node 310: 31: Comb.SLV sism. 21 [C.21]		2510	
Node 310: 32: Comb.SLV sism. 22 [C.22]		2516	
Node 310: 33: Comb.SLV sism. 23 [C.23]		704	
Node 310: 34: Comb.SLV sism. 24 [C.24]		727	
Node 310: 35: Comb.SLV sism. 25 [C.25]		1534	
Node 310: 36: Comb.SLV sism. 26 [C.26]		1557	
Node 310: 54: Env SLU [Absolute Envelope 1]		7837	
Node 330: 1: pp		552	
Node 330: 2: g		583	
Node 330: 3: qs_1		4260	
Node 330: 4: qs_2		1619	
Node 330: 5: Vento +X		-2270	
Node 330: 6: Vento -X		-3057	
Node 330: 7: SLV X		40	
Node 330: 8: SLV Z		12	
Node 330: 11: Comb. SLU A1 1 [C.1]		1153	
Node 330: 12: Comb. SLU A1 2 [C.2]		812	
Node 330: 13: Comb. SLU A1 3 [C.3]		-1896	
Node 330: 14: Comb. SLU A1 4 [C.4]		-2236	
Node 330: 15: Comb. SLU A1 5 [C.5]		-3110	
Node 330: 16: Comb. SLU A1 6 [C.6]		-3450	
Node 330: 17: Comb. SLU A1 7 [C.7]		1861	
Node 330: 18: Comb. SLU A1 8 [C.8]		1521	
Node 330: 19: Comb. SLU A1 9 [C.9]		-715	
Node 330: 20: Comb. SLU A1 10 [C.10]		-1055	
Node 330: 21: Comb. SLU A1 11 [C.11]		-1929	
Node 330: 22: Comb. SLU A1 12 [C.12]		-2269	
Node 330: 23: Comb. SLU A1 13 [C.13]		3904	
Node 330: 24: Comb. SLU A1 14 [C.14]		3563	
Node 330: 25: Comb. SLU A1 15 [C.15]		7866	
Node 330: 26: Comb. SLU A1 16 [C.16]		7525	
Node 330: 27: Comb. SLU A1 17 [C.17]		1475	
Node 330: 28: Comb. SLU A1 18 [C.18]		1135	
Node 330: 29: Comb.SLV sism. 19 [C.19]		1091	
Node 330: 30: Comb.SLV sism. 20 [C.20]		1098	
Node 330: 31: Comb.SLV sism. 21 [C.21]		1172	
Node 330: 32: Comb.SLV sism. 22 [C.22]		1179	
Node 330: 33: Comb.SLV sism. 23 [C.23]		1111	
Node 330: 34: Comb.SLV sism. 24 [C.24]		1135	
Node 330: 35: Comb.SLV sism. 25 [C.25]		1135	
Node 330: 36: Comb.SLV sism. 26 [C.26]		1159	
Node 330: 54: Env SLU [Absolute Envelope 1]		7866	
Node 343: 1: pp		234	
Node 343: 2: g		174	
Node 343: 3: qs_1		1159	
Node 343: 4: qs_2		354	
Node 343: 5: Vento +X		-529	
Node 343: 6: Vento -X		-1371	
Node 343: 7: SLV X		-150	
Node 343: 8: SLV Z		2	-8
Node 343: 11: Comb. SLU A1 1 [C.1]		-173	
Node 343: 12: Comb. SLU A1 2 [C.2]		-295	
Node 343: 13: Comb. SLU A1 3 [C.3]		-1261	
Node 343: 14: Comb. SLU A1 4 [C.4]		-1383	
Node 343: 15: Comb. SLU A1 5 [C.5]		-1527	
Node 343: 16: Comb. SLU A1 6 [C.6]		-1649	
Node 343: 17: Comb. SLU A1 7 [C.7]		585	
Node 343: 18: Comb. SLU A1 8 [C.8]		463	
Node 343: 19: Comb. SLU A1 9 [C.9]		1	
Node 343: 20: Comb. SLU A1 10 [C.10]		-121	
Node 343: 21: Comb. SLU A1 11 [C.11]		-264	
Node 343: 22: Comb. SLU A1 12 [C.12]		-387	
Node 343: 23: Comb. SLU A1 13 [C.13]		1061	
Node 343: 24: Comb. SLU A1 14 [C.14]		939	
Node 343: 25: Comb. SLU A1 15 [C.15]		2268	-1
Node 343: 26: Comb. SLU A1 16 [C.16]		2146	
Node 343: 27: Comb. SLU A1 17 [C.17]		530	

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 343: 28: Comb. SLU A1 18 [C.18]		407	
Node 343: 29: Comb.SLV sism. 19 [C.19]		556	3
Node 343: 30: Comb.SLV sism. 20 [C.20]		557	-2
Node 343: 31: Comb.SLV sism. 21 [C.21]		257	2
Node 343: 32: Comb.SLV sism. 22 [C.22]		258	-3
Node 343: 33: Comb.SLV sism. 23 [C.23]		451	8
Node 343: 34: Comb.SLV sism. 24 [C.24]		454	-8
Node 343: 35: Comb.SLV sism. 25 [C.25]		361	8
Node 343: 36: Comb.SLV sism. 26 [C.26]		364	-8
Node 343: 54: Env SLU [Absolute Envelope 1]		2268	8
Node 348: 1: pp	20	239	
Node 348: 2: g	22	180	
Node 348: 3: qs_1	153	1207	
Node 348: 4: qs_2	121	760	
Node 348: 5: Vento +X	376	-1131	
Node 348: 6: Vento -X	-590	-828	
Node 348: 7: SLV X	-2551	-1206	
Node 348: 8: SLV Z	-8	21	-9
Node 348: 11: Comb. SLU A1 1 [C.1]	-294	940	
Node 348: 12: Comb. SLU A1 2 [C.2]	-307	815	
Node 348: 13: Comb. SLU A1 3 [C.3]	-739	-126	
Node 348: 14: Comb. SLU A1 4 [C.4]	-752	-252	
Node 348: 15: Comb. SLU A1 5 [C.5]	-830	-696	
Node 348: 16: Comb. SLU A1 6 [C.6]	-843	-822	
Node 348: 17: Comb. SLU A1 7 [C.7]	575	667	
Node 348: 18: Comb. SLU A1 8 [C.8]	562	541	
Node 348: 19: Comb. SLU A1 9 [C.9]	709	-581	
Node 348: 20: Comb. SLU A1 10 [C.10]	696	-707	
Node 348: 21: Comb. SLU A1 11 [C.11]	618	-1151	
Node 348: 22: Comb. SLU A1 12 [C.12]	605	-1277	
Node 348: 23: Comb. SLU A1 13 [C.13]	237	1685	
Node 348: 24: Comb. SLU A1 14 [C.14]	224	1559	
Node 348: 25: Comb. SLU A1 15 [C.15]	284	2356	
Node 348: 26: Comb. SLU A1 16 [C.16]	272	2230	
Node 348: 27: Comb. SLU A1 17 [C.17]	54	545	
Node 348: 28: Comb. SLU A1 18 [C.18]	42	420	
Node 348: 29: Comb.SLV sism. 19 [C.19]	2595	1619	2
Node 348: 30: Comb.SLV sism. 20 [C.20]	2590	1632	-3
Node 348: 31: Comb.SLV sism. 21 [C.21]	-2506	-793	3
Node 348: 32: Comb.SLV sism. 22 [C.22]	-2511	-780	-2
Node 348: 33: Comb.SLV sism. 23 [C.23]	815	760	9
Node 348: 34: Comb.SLV sism. 24 [C.24]	799	803	-9
Node 348: 35: Comb.SLV sism. 25 [C.25]	-715	36	9
Node 348: 36: Comb.SLV sism. 26 [C.26]	-731	79	-9
Node 348: 54: Env SLU [Absolute Envelope 1]	2595	2356	9
Node 364: 1: pp		549	
Node 364: 2: g		556	
Node 364: 3: qs_1		4066	
Node 364: 4: qs_2		3045	
Node 364: 5: Vento +X		-3172	
Node 364: 6: Vento -X		-1904	
Node 364: 7: SLV X		1304	
Node 364: 8: SLV Z		-133	
Node 364: 11: Comb. SLU A1 1 [C.1]		4292	
Node 364: 12: Comb. SLU A1 2 [C.2]		3960	
Node 364: 13: Comb. SLU A1 3 [C.3]		865	
Node 364: 14: Comb. SLU A1 4 [C.4]		534	
Node 364: 15: Comb. SLU A1 5 [C.5]		-1419	
Node 364: 16: Comb. SLU A1 6 [C.6]		-1750	
Node 364: 17: Comb. SLU A1 7 [C.7]		3150	
Node 364: 18: Comb. SLU A1 8 [C.8]		2818	
Node 364: 19: Comb. SLU A1 9 [C.9]		-1038	
Node 364: 20: Comb. SLU A1 10 [C.10]		-1369	
Node 364: 21: Comb. SLU A1 11 [C.11]		-3322	
Node 364: 22: Comb. SLU A1 12 [C.12]		-3653	
Node 364: 23: Comb. SLU A1 13 [C.13]		6005	
Node 364: 24: Comb. SLU A1 14 [C.14]		5673	
Node 364: 25: Comb. SLU A1 15 [C.15]		7536	
Node 364: 26: Comb. SLU A1 16 [C.16]		7205	
Node 364: 27: Comb. SLU A1 17 [C.17]		1437	
Node 364: 28: Comb. SLU A1 18 [C.18]		1105	
Node 364: 29: Comb.SLV sism. 19 [C.19]		-159	
Node 364: 30: Comb.SLV sism. 20 [C.20]		-238	
Node 364: 31: Comb.SLV sism. 21 [C.21]		2449	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 364: 32: Comb.SLV sism. 22 [C.22]		2369	
Node 364: 33: Comb.SLV sism. 23 [C.23]		847	
Node 364: 34: Comb.SLV sism. 24 [C.24]		581	
Node 364: 35: Comb.SLV sism. 25 [C.25]		1629	
Node 364: 36: Comb.SLV sism. 26 [C.26]		1363	
Node 364: 54: Env SLU [Absolute Envelope 1]		7536	
Node 384: 1: pp		557	
Node 384: 2: g		566	
Node 384: 3: qs_1		4136	
Node 384: 4: qs_2		1576	
Node 384: 5: Vento +X		-2208	
Node 384: 6: Vento -X		-2965	
Node 384: 7: SLV X		44	
Node 384: 8: SLV Z		-136	
Node 384: 11: Comb. SLU A1 1 [C.1]		1155	
Node 384: 12: Comb. SLU A1 2 [C.2]		818	
Node 384: 13: Comb. SLU A1 3 [C.3]		-1806	
Node 384: 14: Comb. SLU A1 4 [C.4]		-2143	
Node 384: 15: Comb. SLU A1 5 [C.5]		-2987	
Node 384: 16: Comb. SLU A1 6 [C.6]		-3324	
Node 384: 17: Comb. SLU A1 7 [C.7]		1836	
Node 384: 18: Comb. SLU A1 8 [C.8]		1499	
Node 384: 19: Comb. SLU A1 9 [C.9]		-670	
Node 384: 20: Comb. SLU A1 10 [C.10]		-1007	
Node 384: 21: Comb. SLU A1 11 [C.11]		-1852	
Node 384: 22: Comb. SLU A1 12 [C.12]		-2189	
Node 384: 23: Comb. SLU A1 13 [C.13]		3823	
Node 384: 24: Comb. SLU A1 14 [C.14]		3486	
Node 384: 25: Comb. SLU A1 15 [C.15]		7664	
Node 384: 26: Comb. SLU A1 16 [C.16]		7327	
Node 384: 27: Comb. SLU A1 17 [C.17]		1460	
Node 384: 28: Comb. SLU A1 18 [C.18]		1123	
Node 384: 29: Comb.SLV sism. 19 [C.19]		1120	
Node 384: 30: Comb.SLV sism. 20 [C.20]		1038	
Node 384: 31: Comb.SLV sism. 21 [C.21]		1208	
Node 384: 32: Comb.SLV sism. 22 [C.22]		1127	
Node 384: 33: Comb.SLV sism. 23 [C.23]		1246	
Node 384: 34: Comb.SLV sism. 24 [C.24]		974	
Node 384: 35: Comb.SLV sism. 25 [C.25]		1272	
Node 384: 36: Comb.SLV sism. 26 [C.26]		1001	
Node 384: 54: Env SLU [Absolute Envelope 1]		7664	
Node 397: 1: pp		229	
Node 397: 2: g		169	
Node 397: 3: qs_1		1127	-1
Node 397: 4: qs_2		346	
Node 397: 5: Vento +X		-516	1
Node 397: 6: Vento -X		-1331	
Node 397: 7: SLV X		-144	
Node 397: 8: SLV Z		26	-9
Node 397: 11: Comb. SLU A1 1 [C.1]		-163	-1
Node 397: 12: Comb. SLU A1 2 [C.2]		-282	
Node 397: 13: Comb. SLU A1 3 [C.3]		-1220	
Node 397: 14: Comb. SLU A1 4 [C.4]		-1339	
Node 397: 15: Comb. SLU A1 5 [C.5]		-1479	
Node 397: 16: Comb. SLU A1 6 [C.6]		-1599	
Node 397: 17: Comb. SLU A1 7 [C.7]		570	
Node 397: 18: Comb. SLU A1 8 [C.8]		451	
Node 397: 19: Comb. SLU A1 9 [C.9]		2	
Node 397: 20: Comb. SLU A1 10 [C.10]		-118	
Node 397: 21: Comb. SLU A1 11 [C.11]		-258	1
Node 397: 22: Comb. SLU A1 12 [C.12]		-377	1
Node 397: 23: Comb. SLU A1 13 [C.13]		1035	-1
Node 397: 24: Comb. SLU A1 14 [C.14]		916	-1
Node 397: 25: Comb. SLU A1 15 [C.15]		2208	-1
Node 397: 26: Comb. SLU A1 16 [C.16]		2089	-1
Node 397: 27: Comb. SLU A1 17 [C.17]		517	
Node 397: 28: Comb. SLU A1 18 [C.18]		398	
Node 397: 29: Comb.SLV sism. 19 [C.19]		534	3
Node 397: 30: Comb.SLV sism. 20 [C.20]		549	-2
Node 397: 31: Comb.SLV sism. 21 [C.21]		246	2
Node 397: 32: Comb.SLV sism. 22 [C.22]		261	-3
Node 397: 33: Comb.SLV sism. 23 [C.23]		415	9
Node 397: 34: Comb.SLV sism. 24 [C.24]		466	-9
Node 397: 35: Comb.SLV sism. 25 [C.25]		329	9

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	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 397: 36: Comb.SLV sism. 26 [C.26]		380	-9
Node 397: 54: Env SLU [Absolute Envelope 1]		2208	9
Node 402: 1: pp	4	205	
Node 402: 2: g	19	166	
Node 402: 3: qs_1	132	1111	
Node 402: 4: qs_2	107	702	
Node 402: 5: Vento +X	354	-1045	
Node 402: 6: Vento -X	-542	-762	
Node 402: 7: SLV X	-2371	-1119	1
Node 402: 8: SLV Z	-10	-30	-10
Node 402: 11: Comb. SLU A1 1 [C.1]	-298	850	1
Node 402: 12: Comb. SLU A1 2 [C.2]	-305	739	1
Node 402: 13: Comb. SLU A1 3 [C.3]	-704	-133	
Node 402: 14: Comb. SLU A1 4 [C.4]	-711	-245	
Node 402: 15: Comb. SLU A1 5 [C.5]	-784	-660	
Node 402: 16: Comb. SLU A1 6 [C.6]	-791	-771	
Node 402: 17: Comb. SLU A1 7 [C.7]	508	595	
Node 402: 18: Comb. SLU A1 8 [C.8]	501	484	
Node 402: 19: Comb. SLU A1 9 [C.9]	640	-558	
Node 402: 20: Comb. SLU A1 10 [C.10]	633	-670	
Node 402: 21: Comb. SLU A1 11 [C.11]	560	-1085	-1
Node 402: 22: Comb. SLU A1 12 [C.12]	553	-1196	-1
Node 402: 23: Comb. SLU A1 13 [C.13]	190	1536	
Node 402: 24: Comb. SLU A1 14 [C.14]	183	1424	
Node 402: 25: Comb. SLU A1 15 [C.15]	227	2149	
Node 402: 26: Comb. SLU A1 16 [C.16]	220	2038	
Node 402: 27: Comb. SLU A1 17 [C.17]	29	483	
Node 402: 28: Comb. SLU A1 18 [C.18]	23	371	
Node 402: 29: Comb.SLV sism. 19 [C.19]	2397	1500	2
Node 402: 30: Comb.SLV sism. 20 [C.20]	2391	1481	-3
Node 402: 31: Comb.SLV sism. 21 [C.21]	-2346	-739	-4
Node 402: 32: Comb.SLV sism. 22 [C.22]	-2352	-757	2
Node 402: 33: Comb.SLV sism. 23 [C.23]	744	738	9
Node 402: 34: Comb.SLV sism. 24 [C.24]	724	677	-10
Node 402: 35: Comb.SLV sism. 25 [C.25]	-679	66	10
Node 402: 36: Comb.SLV sism. 26 [C.26]	-699	5	-9
Node 402: 54: Env SLU [Absolute Envelope 1]	2397	2149	10
Node 418: 1: pp		497	
Node 418: 2: g		514	
Node 418: 3: qs_1		3758	
Node 418: 4: qs_2		2828	
Node 418: 5: Vento +X		-2954	
Node 418: 6: Vento -X		-1746	
Node 418: 7: SLV X		1241	
Node 418: 8: SLV Z		129	
Node 418: 11: Comb. SLU A1 1 [C.1]		3985	
Node 418: 12: Comb. SLU A1 2 [C.2]		3682	
Node 418: 13: Comb. SLU A1 3 [C.3]		817	
Node 418: 14: Comb. SLU A1 4 [C.4]		514	
Node 418: 15: Comb. SLU A1 5 [C.5]		-1304	
Node 418: 16: Comb. SLU A1 6 [C.6]		-1608	
Node 418: 17: Comb. SLU A1 7 [C.7]		2898	
Node 418: 18: Comb. SLU A1 8 [C.8]		2594	
Node 418: 19: Comb. SLU A1 9 [C.9]		-996	
Node 418: 20: Comb. SLU A1 10 [C.10]		-1299	
Node 418: 21: Comb. SLU A1 11 [C.11]		-3117	
Node 418: 22: Comb. SLU A1 12 [C.12]		-3421	
Node 418: 23: Comb. SLU A1 13 [C.13]		5557	
Node 418: 24: Comb. SLU A1 14 [C.14]		5253	
Node 418: 25: Comb. SLU A1 15 [C.15]		6951	
Node 418: 26: Comb. SLU A1 16 [C.16]		6647	
Node 418: 27: Comb. SLU A1 17 [C.17]		1314	
Node 418: 28: Comb. SLU A1 18 [C.18]		1011	
Node 418: 29: Comb.SLV sism. 19 [C.19]		-269	
Node 418: 30: Comb.SLV sism. 20 [C.20]		-191	
Node 418: 31: Comb.SLV sism. 21 [C.21]		2213	
Node 418: 32: Comb.SLV sism. 22 [C.22]		2291	
Node 418: 33: Comb.SLV sism. 23 [C.23]		510	
Node 418: 34: Comb.SLV sism. 24 [C.24]		767	
Node 418: 35: Comb.SLV sism. 25 [C.25]		1255	
Node 418: 36: Comb.SLV sism. 26 [C.26]		1512	
Node 418: 54: Env SLU [Absolute Envelope 1]		6951	
Node 438: 1: pp		494	
Node 438: 2: g		512	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 438: 3: qs_1		3746	
Node 438: 4: qs_2		1414	
Node 438: 5: Vento +X		-1976	
Node 438: 6: Vento -X		-2709	
Node 438: 7: SLV X		5	
Node 438: 8: SLV Z		128	
Node 438: 11: Comb. SLU A1 1 [C.1]		991	
Node 438: 12: Comb. SLU A1 2 [C.2]		689	
Node 438: 13: Comb. SLU A1 3 [C.3]		-1695	
Node 438: 14: Comb. SLU A1 4 [C.4]		-1997	
Node 438: 15: Comb. SLU A1 5 [C.5]		-2756	
Node 438: 16: Comb. SLU A1 6 [C.6]		-3058	
Node 438: 17: Comb. SLU A1 7 [C.7]		1651	
Node 438: 18: Comb. SLU A1 8 [C.8]		1349	
Node 438: 19: Comb. SLU A1 9 [C.9]		-595	
Node 438: 20: Comb. SLU A1 10 [C.10]		-897	
Node 438: 21: Comb. SLU A1 11 [C.11]		-1656	
Node 438: 22: Comb. SLU A1 12 [C.12]		-1958	
Node 438: 23: Comb. SLU A1 13 [C.13]		3429	
Node 438: 24: Comb. SLU A1 14 [C.14]		3127	
Node 438: 25: Comb. SLU A1 15 [C.15]		6928	
Node 438: 26: Comb. SLU A1 16 [C.16]		6626	
Node 438: 27: Comb. SLU A1 17 [C.17]		1308	
Node 438: 28: Comb. SLU A1 18 [C.18]		1006	
Node 438: 29: Comb.SLV sism. 19 [C.19]		963	
Node 438: 30: Comb.SLV sism. 20 [C.20]		1040	
Node 438: 31: Comb.SLV sism. 21 [C.21]		973	
Node 438: 32: Comb.SLV sism. 22 [C.22]		1050	
Node 438: 33: Comb.SLV sism. 23 [C.23]		877	
Node 438: 34: Comb.SLV sism. 24 [C.24]		1133	
Node 438: 35: Comb.SLV sism. 25 [C.25]		880	
Node 438: 36: Comb.SLV sism. 26 [C.26]		1136	
Node 438: 54: Env SLU [Absolute Envelope 1]		6928	
Node 451: 1: pp		203	
Node 451: 2: g		154	
Node 451: 3: qs_1		1030	-1
Node 451: 4: qs_2		312	-1
Node 451: 5: Vento +X		-466	1
Node 451: 6: Vento -X		-1224	
Node 451: 7: SLV X		-137	-1
Node 451: 8: SLV Z		-24	-10
Node 451: 11: Comb. SLU A1 1 [C.1]		-170	-1
Node 451: 12: Comb. SLU A1 2 [C.2]		-277	-1
Node 451: 13: Comb. SLU A1 3 [C.3]		-1138	
Node 451: 14: Comb. SLU A1 4 [C.4]		-1245	
Node 451: 15: Comb. SLU A1 5 [C.5]		-1372	
Node 451: 16: Comb. SLU A1 6 [C.6]		-1479	
Node 451: 17: Comb. SLU A1 7 [C.7]		512	
Node 451: 18: Comb. SLU A1 8 [C.8]		405	
Node 451: 19: Comb. SLU A1 9 [C.9]		-1	1
Node 451: 20: Comb. SLU A1 10 [C.10]		-108	1
Node 451: 21: Comb. SLU A1 11 [C.11]		-235	1
Node 451: 22: Comb. SLU A1 12 [C.12]		-343	1
Node 451: 23: Comb. SLU A1 13 [C.13]		932	-1
Node 451: 24: Comb. SLU A1 14 [C.14]		825	-1
Node 451: 25: Comb. SLU A1 15 [C.15]		2008	-2
Node 451: 26: Comb. SLU A1 16 [C.16]		1901	-2
Node 451: 27: Comb. SLU A1 17 [C.17]		464	
Node 451: 28: Comb. SLU A1 18 [C.18]		357	
Node 451: 29: Comb.SLV sism. 19 [C.19]		501	3
Node 451: 30: Comb.SLV sism. 20 [C.20]		487	-2
Node 451: 31: Comb.SLV sism. 21 [C.21]		227	2
Node 451: 32: Comb.SLV sism. 22 [C.22]		212	-4
Node 451: 33: Comb.SLV sism. 23 [C.23]		422	10
Node 451: 34: Comb.SLV sism. 24 [C.24]		373	-10
Node 451: 35: Comb.SLV sism. 25 [C.25]		340	9
Node 451: 36: Comb.SLV sism. 26 [C.26]		291	-10
Node 451: 54: Env SLU [Absolute Envelope 1]		2008	10
Node 456: 1: pp	-28	125	
Node 456: 2: g	-46	52	
Node 456: 3: qs_1	-317	343	
Node 456: 4: qs_2	-254	180	
Node 456: 5: Vento +X	644	-262	
Node 456: 6: Vento -X	-196	-340	

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	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 456: 7: SLV X	-1824	-893	1
Node 456: 8: SLV Z	14	10	-10
Node 456: 11: Comb. SLU A1 1 [C.1]	-653	194	1
Node 456: 12: Comb. SLU A1 2 [C.2]	-631	141	1
Node 456: 13: Comb. SLU A1 3 [C.3]	-580	-144	
Node 456: 14: Comb. SLU A1 4 [C.4]	-558	-197	
Node 456: 15: Comb. SLU A1 5 [C.5]	-390	-279	
Node 456: 16: Comb. SLU A1 6 [C.6]	-368	-332	
Node 456: 17: Comb. SLU A1 7 [C.7]	102	264	
Node 456: 18: Comb. SLU A1 8 [C.8]	124	211	
Node 456: 19: Comb. SLU A1 9 [C.9]	679	-28	
Node 456: 20: Comb. SLU A1 10 [C.10]	701	-81	
Node 456: 21: Comb. SLU A1 11 [C.11]	870	-163	-1
Node 456: 22: Comb. SLU A1 12 [C.12]	892	-216	-1
Node 456: 23: Comb. SLU A1 13 [C.13]	-477	500	1
Node 456: 24: Comb. SLU A1 14 [C.14]	-455	447	1
Node 456: 25: Comb. SLU A1 15 [C.15]	-571	745	
Node 456: 26: Comb. SLU A1 16 [C.16]	-549	692	
Node 456: 27: Comb. SLU A1 17 [C.17]	-96	230	
Node 456: 28: Comb. SLU A1 18 [C.18]	-74	177	
Node 456: 29: Comb.SLV sism. 19 [C.19]	1746	1067	2
Node 456: 30: Comb.SLV sism. 20 [C.20]	1755	1073	-4
Node 456: 31: Comb.SLV sism. 21 [C.21]	-1902	-719	4
Node 456: 32: Comb.SLV sism. 22 [C.22]	-1893	-713	-2
Node 456: 33: Comb.SLV sism. 23 [C.23]	459	435	10
Node 456: 34: Comb.SLV sism. 24 [C.24]	488	455	-10
Node 456: 35: Comb.SLV sism. 25 [C.25]	-635	-101	10
Node 456: 36: Comb.SLV sism. 26 [C.26]	-606	-81	-10
Node 456: 54: Env SLU [Absolute Envelope 1]	1902	1073	10
Node 472: 1: pp		360	
Node 472: 2: g		283	
Node 472: 3: qs_1		2062	
Node 472: 4: qs_2		1530	
Node 472: 5: Vento +X		-1665	
Node 472: 6: Vento -X		-924	
Node 472: 7: SLV X		890	
Node 472: 8: SLV Z		88	
Node 472: 11: Comb. SLU A1 1 [C.1]		2300	
Node 472: 12: Comb. SLU A1 2 [C.2]		2107	
Node 472: 13: Comb. SLU A1 3 [C.3]		599	
Node 472: 14: Comb. SLU A1 4 [C.4]		405	
Node 472: 15: Comb. SLU A1 5 [C.5]		-549	
Node 472: 16: Comb. SLU A1 6 [C.6]		-742	
Node 472: 17: Comb. SLU A1 7 [C.7]		1633	
Node 472: 18: Comb. SLU A1 8 [C.8]		1439	
Node 472: 19: Comb. SLU A1 9 [C.9]		-514	
Node 472: 20: Comb. SLU A1 10 [C.10]		-707	
Node 472: 21: Comb. SLU A1 11 [C.11]		-1662	
Node 472: 22: Comb. SLU A1 12 [C.12]		-1855	
Node 472: 23: Comb. SLU A1 13 [C.13]		3131	
Node 472: 24: Comb. SLU A1 14 [C.14]		2938	
Node 472: 25: Comb. SLU A1 15 [C.15]		3930	
Node 472: 26: Comb. SLU A1 16 [C.16]		3737	
Node 472: 27: Comb. SLU A1 17 [C.17]		836	
Node 472: 28: Comb. SLU A1 18 [C.18]		643	
Node 472: 29: Comb.SLV sism. 19 [C.19]		-273	
Node 472: 30: Comb.SLV sism. 20 [C.20]		-220	
Node 472: 31: Comb.SLV sism. 21 [C.21]		1507	
Node 472: 32: Comb.SLV sism. 22 [C.22]		1560	
Node 472: 33: Comb.SLV sism. 23 [C.23]		288	
Node 472: 34: Comb.SLV sism. 24 [C.24]		465	
Node 472: 35: Comb.SLV sism. 25 [C.25]		822	
Node 472: 36: Comb.SLV sism. 26 [C.26]		999	
Node 472: 54: Env SLU [Absolute Envelope 1]		3930	
Node 492: 1: pp		355	
Node 492: 2: g		273	
Node 492: 3: qs_1		1997	
Node 492: 4: qs_2		776	
Node 492: 5: Vento +X		-1100	
Node 492: 6: Vento -X		-1396	
Node 492: 7: SLV X		90	
Node 492: 8: SLV Z		91	
Node 492: 11: Comb. SLU A1 1 [C.1]		725	
Node 492: 12: Comb. SLU A1 2 [C.2]		536	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 492: 13: Comb. SLU A1 3 [C.3]		-695	
Node 492: 14: Comb. SLU A1 4 [C.4]		-884	
Node 492: 15: Comb. SLU A1 5 [C.5]		-1277	
Node 492: 16: Comb. SLU A1 6 [C.6]		-1466	
Node 492: 17: Comb. SLU A1 7 [C.7]		991	
Node 492: 18: Comb. SLU A1 8 [C.8]		802	
Node 492: 19: Comb. SLU A1 9 [C.9]		-252	
Node 492: 20: Comb. SLU A1 10 [C.10]		-440	
Node 492: 21: Comb. SLU A1 11 [C.11]		-834	
Node 492: 22: Comb. SLU A1 12 [C.12]		-1022	
Node 492: 23: Comb. SLU A1 13 [C.13]		1981	
Node 492: 24: Comb. SLU A1 14 [C.14]		1793	
Node 492: 25: Comb. SLU A1 15 [C.15]		3812	
Node 492: 26: Comb. SLU A1 16 [C.16]		3623	
Node 492: 27: Comb. SLU A1 17 [C.17]		817	
Node 492: 28: Comb. SLU A1 18 [C.18]		628	
Node 492: 29: Comb.SLV sism. 19 [C.19]		510	
Node 492: 30: Comb.SLV sism. 20 [C.20]		565	
Node 492: 31: Comb.SLV sism. 21 [C.21]		691	
Node 492: 32: Comb.SLV sism. 22 [C.22]		746	
Node 492: 33: Comb.SLV sism. 23 [C.23]		510	
Node 492: 34: Comb.SLV sism. 24 [C.24]		692	
Node 492: 35: Comb.SLV sism. 25 [C.25]		564	
Node 492: 36: Comb.SLV sism. 26 [C.26]		747	
Node 492: 54: Env SLU [Absolute Envelope 1]		3812	
Node 505: 1: pp		140	
Node 505: 2: g		78	
Node 505: 3: qs_1		523	-1
Node 505: 4: qs_2		163	-1
Node 505: 5: Vento +X		-244	1
Node 505: 6: Vento -X		-611	
Node 505: 7: SLV X		-72	-1
Node 505: 8: SLV Z		2	-10
Node 505: 11: Comb. SLU A1 1 [C.1]		-21	-1
Node 505: 12: Comb. SLU A1 2 [C.2]		-86	-1
Node 505: 13: Comb. SLU A1 3 [C.3]		-510	
Node 505: 14: Comb. SLU A1 4 [C.4]		-575	
Node 505: 15: Comb. SLU A1 5 [C.5]		-632	
Node 505: 16: Comb. SLU A1 6 [C.6]		-698	
Node 505: 17: Comb. SLU A1 7 [C.7]		310	
Node 505: 18: Comb. SLU A1 8 [C.8]		244	
Node 505: 19: Comb. SLU A1 9 [C.9]		41	1
Node 505: 20: Comb. SLU A1 10 [C.10]		-25	1
Node 505: 21: Comb. SLU A1 11 [C.11]		-82	1
Node 505: 22: Comb. SLU A1 12 [C.12]		-147	1
Node 505: 23: Comb. SLU A1 13 [C.13]		529	-1
Node 505: 24: Comb. SLU A1 14 [C.14]		463	-1
Node 505: 25: Comb. SLU A1 15 [C.15]		1068	-2
Node 505: 26: Comb. SLU A1 16 [C.16]		1003	-2
Node 505: 27: Comb. SLU A1 17 [C.17]		284	
Node 505: 28: Comb. SLU A1 18 [C.18]		218	
Node 505: 29: Comb.SLV sism. 19 [C.19]		290	3
Node 505: 30: Comb.SLV sism. 20 [C.20]		291	-2
Node 505: 31: Comb.SLV sism. 21 [C.21]		146	2
Node 505: 32: Comb.SLV sism. 22 [C.22]		147	-4
Node 505: 33: Comb.SLV sism. 23 [C.23]		238	10
Node 505: 34: Comb.SLV sism. 24 [C.24]		242	-10
Node 505: 35: Comb.SLV sism. 25 [C.25]		195	9
Node 505: 36: Comb.SLV sism. 26 [C.26]		199	-10
Node 505: 54: Env SLU [Absolute Envelope 1]		1068	10
Node 510: 1: pp	-25	131	
Node 510: 2: g	-44	59	
Node 510: 3: qs_1	-306	391	
Node 510: 4: qs_2	-244	211	
Node 510: 5: Vento +X	649	-308	
Node 510: 6: Vento -X	-217	-369	
Node 510: 7: SLV X	-1878	-917	
Node 510: 8: SLV Z	-12	-11	-5
Node 510: 11: Comb. SLU A1 1 [C.1]	-651	232	
Node 510: 12: Comb. SLU A1 2 [C.2]	-630	175	
Node 510: 13: Comb. SLU A1 3 [C.3]	-598	-148	
Node 510: 14: Comb. SLU A1 4 [C.4]	-577	-205	
Node 510: 15: Comb. SLU A1 5 [C.5]	-415	-306	
Node 510: 16: Comb. SLU A1 6 [C.6]	-394	-364	

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	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 510: 17: Comb. SLU A1 7 [C.7]	128	287	
Node 510: 18: Comb. SLU A1 8 [C.8]	149	230	
Node 510: 19: Comb. SLU A1 9 [C.9]	700	-56	
Node 510: 20: Comb. SLU A1 10 [C.10]	721	-113	
Node 510: 21: Comb. SLU A1 11 [C.11]	884	-215	
Node 510: 22: Comb. SLU A1 12 [C.12]	904	-272	
Node 510: 23: Comb. SLU A1 13 [C.13]	-456	564	
Node 510: 24: Comb. SLU A1 14 [C.14]	-435	507	
Node 510: 25: Comb. SLU A1 15 [C.15]	-549	834	
Node 510: 26: Comb. SLU A1 16 [C.16]	-529	777	
Node 510: 27: Comb. SLU A1 17 [C.17]	-90	248	
Node 510: 28: Comb. SLU A1 18 [C.18]	-69	191	
Node 510: 29: Comb.SLV sism. 19 [C.19]	1812	1111	2
Node 510: 30: Comb.SLV sism. 20 [C.20]	1805	1104	-1
Node 510: 31: Comb.SLV sism. 21 [C.21]	-1943	-723	1
Node 510: 32: Comb.SLV sism. 22 [C.22]	-1950	-730	-2
Node 510: 33: Comb.SLV sism. 23 [C.23]	506	477	5
Node 510: 34: Comb.SLV sism. 24 [C.24]	482	454	-5
Node 510: 35: Comb.SLV sism. 25 [C.25]	-620	-73	5
Node 510: 36: Comb.SLV sism. 26 [C.26]	-644	-96	-5
Node 510: 54: Env SLU [Absolute Envelope 1]	1950	1111	5
Node 526: 1: pp		370	
Node 526: 2: g		303	
Node 526: 3: qs_1		2210	
Node 526: 4: qs_2		1640	
Node 526: 5: Vento +X		-1779	
Node 526: 6: Vento -X		-994	
Node 526: 7: SLV X		920	
Node 526: 8: SLV Z		-76	
Node 526: 11: Comb. SLU A1 1 [C.1]		2441	
Node 526: 12: Comb. SLU A1 2 [C.2]		2239	
Node 526: 13: Comb. SLU A1 3 [C.3]		614	
Node 526: 14: Comb. SLU A1 4 [C.4]		413	
Node 526: 15: Comb. SLU A1 5 [C.5]		-616	
Node 526: 16: Comb. SLU A1 6 [C.6]		-818	
Node 526: 17: Comb. SLU A1 7 [C.7]		1734	
Node 526: 18: Comb. SLU A1 8 [C.8]		1532	
Node 526: 19: Comb. SLU A1 9 [C.9]		-564	
Node 526: 20: Comb. SLU A1 10 [C.10]		-765	
Node 526: 21: Comb. SLU A1 11 [C.11]		-1794	
Node 526: 22: Comb. SLU A1 12 [C.12]		-1996	
Node 526: 23: Comb. SLU A1 13 [C.13]		3335	
Node 526: 24: Comb. SLU A1 14 [C.14]		3133	
Node 526: 25: Comb. SLU A1 15 [C.15]		4190	
Node 526: 26: Comb. SLV sism. 20 [C.16]		3988	
Node 526: 27: Comb. SLU A1 17 [C.17]		875	
Node 526: 28: Comb. SLU A1 18 [C.18]		673	
Node 526: 29: Comb.SLV sism. 19 [C.19]		-224	
Node 526: 30: Comb.SLV sism. 20 [C.20]		-270	
Node 526: 31: Comb.SLV sism. 21 [C.21]		1616	
Node 526: 32: Comb.SLV sism. 22 [C.22]		1570	
Node 526: 33: Comb.SLV sism. 23 [C.23]		473	
Node 526: 34: Comb.SLV sism. 24 [C.24]		322	
Node 526: 35: Comb.SLV sism. 25 [C.25]		1025	
Node 526: 36: Comb.SLV sism. 26 [C.26]		873	
Node 526: 54: Env SLU [Absolute Envelope 1]		4190	
Node 546: 1: pp		365	
Node 546: 2: g		294	
Node 546: 3: qs_1		2147	
Node 546: 4: qs_2		833	
Node 546: 5: Vento +X		-1179	
Node 546: 6: Vento -X		-1505	
Node 546: 7: SLV X		89	
Node 546: 8: SLV Z		-78	
Node 546: 11: Comb. SLU A1 1 [C.1]		752	
Node 546: 12: Comb. SLU A1 2 [C.2]		554	
Node 546: 13: Comb. SLU A1 3 [C.3]		-776	
Node 546: 14: Comb. SLU A1 4 [C.4]		-973	
Node 546: 15: Comb. SLU A1 5 [C.5]		-1401	
Node 546: 16: Comb. SLU A1 6 [C.6]		-1598	
Node 546: 17: Comb. SLU A1 7 [C.7]		1045	
Node 546: 18: Comb. SLU A1 8 [C.8]		847	
Node 546: 19: Comb. SLU A1 9 [C.9]		-288	
Node 546: 20: Comb. SLU A1 10 [C.10]		-485	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 546: 21: Comb. SLU A1 11 [C.11]		-913	
Node 546: 22: Comb. SLU A1 12 [C.12]		-1110	
Node 546: 23: Comb. SLU A1 13 [C.13]		2106	
Node 546: 24: Comb. SLU A1 14 [C.14]		1909	
Node 546: 25: Comb. SLU A1 15 [C.15]		4077	
Node 546: 26: Comb. SLU A1 16 [C.16]		3880	
Node 546: 27: Comb. SLU A1 17 [C.17]		857	
Node 546: 28: Comb. SLU A1 18 [C.18]		659	
Node 546: 29: Comb.SLV sism. 19 [C.19]		594	
Node 546: 30: Comb.SLV sism. 20 [C.20]		547	
Node 546: 31: Comb.SLV sism. 21 [C.21]		771	
Node 546: 32: Comb.SLV sism. 22 [C.22]		724	
Node 546: 33: Comb.SLV sism. 23 [C.23]		710	
Node 546: 34: Comb.SLV sism. 24 [C.24]		554	
Node 546: 35: Comb.SLV sism. 25 [C.25]		764	
Node 546: 36: Comb.SLV sism. 26 [C.26]		607	
Node 546: 54: Env SLU [Absolute Envelope 1]		4077	
Node 559: 1: pp		145	
Node 559: 2: g		84	
Node 559: 3: qs_1		564	1
Node 559: 4: qs_2		176	
Node 559: 5: Vento +X		-263	
Node 559: 6: Vento -X		-660	
Node 559: 7: SLV X		-76	
Node 559: 8: SLV Z		-5	-5
Node 559: 11: Comb. SLU A1 1 [C.1]		-31	
Node 559: 12: Comb. SLU A1 2 [C.2]		-100	
Node 559: 13: Comb. SLU A1 3 [C.3]		-559	
Node 559: 14: Comb. SLU A1 4 [C.4]		-628	
Node 559: 15: Comb. SLU A1 5 [C.5]		-691	
Node 559: 16: Comb. SLU A1 6 [C.6]		-760	
Node 559: 17: Comb. SLU A1 7 [C.7]		326	
Node 559: 18: Comb. SLU A1 8 [C.8]		257	
Node 559: 19: Comb. SLU A1 9 [C.9]		36	
Node 559: 20: Comb. SLU A1 10 [C.10]		-32	
Node 559: 21: Comb. SLU A1 11 [C.11]		-95	-1
Node 559: 22: Comb. SLU A1 12 [C.12]		-164	-1
Node 559: 23: Comb. SLU A1 13 [C.13]		562	1
Node 559: 24: Comb. SLU A1 14 [C.14]		493	1
Node 559: 25: Comb. SLU A1 15 [C.15]		1145	1
Node 559: 26: Comb. SLU A1 16 [C.16]		1076	1
Node 559: 27: Comb. SLU A1 17 [C.17]		299	
Node 559: 28: Comb. SLU A1 18 [C.18]		230	
Node 559: 29: Comb.SLV sism. 19 [C.19]		307	1
Node 559: 30: Comb.SLV sism. 20 [C.20]		304	-2
Node 559: 31: Comb.SLV sism. 21 [C.21]		155	2
Node 559: 32: Comb.SLV sism. 22 [C.22]		152	-1
Node 559: 33: Comb.SLV sism. 23 [C.23]		257	5
Node 559: 34: Comb.SLV sism. 24 [C.24]		248	-5
Node 559: 35: Comb.SLV sism. 25 [C.25]		211	5
Node 559: 36: Comb.SLV sism. 26 [C.26]		202	-4
Node 559: 54: Env SLU [Absolute Envelope 1]		1145	5
Node 564: 1: pp	19	222	
Node 564: 2: g	32	184	
Node 564: 3: qs_1	222	1235	
Node 564: 4: qs_2	178	786	
Node 564: 5: Vento +X	282	-1172	
Node 564: 6: Vento -X	-596	-825	
Node 564: 7: SLV X	-2384	-1119	
Node 564: 8: SLV Z	9	27	-4
Node 564: 11: Comb. SLU A1 1 [C.1]	-203	966	
Node 564: 12: Comb. SLU A1 2 [C.2]	-218	844	
Node 564: 13: Comb. SLU A1 3 [C.3]	-695	-119	
Node 564: 14: Comb. SLU A1 4 [C.4]	-710	-241	
Node 564: 15: Comb. SLU A1 5 [C.5]	-828	-709	
Node 564: 16: Comb. SLU A1 6 [C.6]	-844	-831	
Node 564: 17: Comb. SLU A1 7 [C.7]	587	653	
Node 564: 18: Comb. SLU A1 8 [C.8]	572	531	
Node 564: 19: Comb. SLU A1 9 [C.9]	623	-640	
Node 564: 20: Comb. SLU A1 10 [C.10]	608	-762	
Node 564: 21: Comb. SLU A1 11 [C.11]	489	-1230	
Node 564: 22: Comb. SLU A1 12 [C.12]	474	-1352	
Node 564: 23: Comb. SLU A1 13 [C.13]	334	1708	
Node 564: 24: Comb. SLU A1 14 [C.14]	318	1586	

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	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 564: 25: Comb. SLU A1 15 [C.15]	399	2380	
Node 564: 26: Comb. SLU A1 16 [C.16]	384	2258	
Node 564: 27: Comb. SLU A1 17 [C.17]	66	529	
Node 564: 28: Comb. SLU A1 18 [C.18]	51	407	
Node 564: 29: Comb.SLV sism. 19 [C.19]	2432	1517	1
Node 564: 30: Comb.SLV sism. 20 [C.20]	2437	1533	-1
Node 564: 31: Comb.SLV sism. 21 [C.21]	-2336	-720	1
Node 564: 32: Comb.SLV sism. 22 [C.22]	-2330	-704	-1
Node 564: 33: Comb.SLV sism. 23 [C.23]	757	716	4
Node 564: 34: Comb.SLV sism. 24 [C.24]	775	769	-4
Node 564: 35: Comb.SLV sism. 25 [C.25]	-673	44	4
Node 564: 36: Comb.SLV sism. 26 [C.26]	-656	98	-4
Node 564: 54: Env SLU [Absolute Envelope 1]	2437	2380	4
Node 580: 1: pp		509	
Node 580: 2: g		545	
Node 580: 3: qs_1		3986	
Node 580: 4: qs_2		3000	
Node 580: 5: Vento +X		-3116	
Node 580: 6: Vento -X		-1864	
Node 580: 7: SLV X		1249	
Node 580: 8: SLV Z		-123	
Node 580: 11: Comb. SLU A1 1 [C.1]		4192	
Node 580: 12: Comb. SLU A1 2 [C.2]		3876	
Node 580: 13: Comb. SLU A1 3 [C.3]		823	
Node 580: 14: Comb. SLU A1 4 [C.4]		507	
Node 580: 15: Comb. SLU A1 5 [C.5]		-1427	
Node 580: 16: Comb. SLU A1 6 [C.6]		-1743	
Node 580: 17: Comb. SLU A1 7 [C.7]		3065	
Node 580: 18: Comb. SLU A1 8 [C.8]		2749	
Node 580: 19: Comb. SLU A1 9 [C.9]		-1055	
Node 580: 20: Comb. SLU A1 10 [C.10]		-1371	
Node 580: 21: Comb. SLU A1 11 [C.11]		-3305	
Node 580: 22: Comb. SLU A1 12 [C.12]		-3621	
Node 580: 23: Comb. SLU A1 13 [C.13]		5870	
Node 580: 24: Comb. SLU A1 14 [C.14]		5554	
Node 580: 25: Comb. SLU A1 15 [C.15]		7348	
Node 580: 26: Comb. SLU A1 16 [C.16]		7032	
Node 580: 27: Comb. SLU A1 17 [C.17]		1370	
Node 580: 28: Comb. SLU A1 18 [C.18]		1054	
Node 580: 29: Comb.SLV sism. 19 [C.19]		-158	
Node 580: 30: Comb.SLV sism. 20 [C.20]		-232	
Node 580: 31: Comb.SLV sism. 21 [C.21]		2339	
Node 580: 32: Comb.SLV sism. 22 [C.22]		2265	
Node 580: 33: Comb.SLV sism. 23 [C.23]		802	
Node 580: 34: Comb.SLV sism. 24 [C.24]		556	
Node 580: 35: Comb.SLV sism. 25 [C.25]		1551	
Node 580: 36: Comb.SLV sism. 26 [C.26]		1305	
Node 580: 54: Env SLU [Absolute Envelope 1]		7348	
Node 600: 1: pp		512	
Node 600: 2: g		549	
Node 600: 3: qs_1		4015	
Node 600: 4: qs_2		1517	
Node 600: 5: Vento +X		-2119	
Node 600: 6: Vento -X		-2904	
Node 600: 7: SLV X		3	
Node 600: 8: SLV Z		-122	
Node 600: 11: Comb. SLU A1 1 [C.1]		1042	
Node 600: 12: Comb. SLU A1 2 [C.2]		723	
Node 600: 13: Comb. SLU A1 3 [C.3]		-1839	
Node 600: 14: Comb. SLU A1 4 [C.4]		-2157	
Node 600: 15: Comb. SLU A1 5 [C.5]		-2977	
Node 600: 16: Comb. SLU A1 6 [C.6]		-3295	
Node 600: 17: Comb. SLU A1 7 [C.7]		1748	
Node 600: 18: Comb. SLU A1 8 [C.8]		1430	
Node 600: 19: Comb. SLU A1 9 [C.9]		-661	
Node 600: 20: Comb. SLU A1 10 [C.10]		-979	
Node 600: 21: Comb. SLU A1 11 [C.11]		-1799	
Node 600: 22: Comb. SLU A1 12 [C.12]		-2117	
Node 600: 23: Comb. SLU A1 13 [C.13]		3655	
Node 600: 24: Comb. SLU A1 14 [C.14]		3337	
Node 600: 25: Comb. SLU A1 15 [C.15]		7403	
Node 600: 26: Comb. SLU A1 16 [C.16]		7084	
Node 600: 27: Comb. SLU A1 17 [C.17]		1380	
Node 600: 28: Comb. SLU A1 18 [C.18]		1061	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 600: 29: Comb.SLV sism. 19 [C.19]		1095	
Node 600: 30: Comb.SLV sism. 20 [C.20]		1022	
Node 600: 31: Comb.SLV sism. 21 [C.21]		1101	
Node 600: 32: Comb.SLV sism. 22 [C.22]		1027	
Node 600: 33: Comb.SLV sism. 23 [C.23]		1183	
Node 600: 34: Comb.SLV sism. 24 [C.24]		938	
Node 600: 35: Comb.SLV sism. 25 [C.25]		1185	
Node 600: 36: Comb.SLV sism. 26 [C.26]		940	
Node 600: 54: Env SLU [Absolute Envelope 1]		7403	
Node 613: 1: pp		212	
Node 613: 2: g		166	
Node 613: 3: qs_1		1106	
Node 613: 4: qs_2		336	
Node 613: 5: Vento +X		-501	
Node 613: 6: Vento -X		-1314	
Node 613: 7: SLV X		-144	
Node 613: 8: SLV Z		22	-4
Node 613: 11: Comb. SLU A1 1 [C.1]		-188	
Node 613: 12: Comb. SLU A1 2 [C.2]		-301	
Node 613: 13: Comb. SLU A1 3 [C.3]		-1228	
Node 613: 14: Comb. SLU A1 4 [C.4]		-1341	
Node 613: 15: Comb. SLU A1 5 [C.5]		-1480	
Node 613: 16: Comb. SLU A1 6 [C.6]		-1593	
Node 613: 17: Comb. SLU A1 7 [C.7]		543	
Node 613: 18: Comb. SLU A1 8 [C.8]		429	
Node 613: 19: Comb. SLU A1 9 [C.9]		-10	
Node 613: 20: Comb. SLU A1 10 [C.10]		-123	
Node 613: 21: Comb. SLU A1 11 [C.11]		-262	
Node 613: 22: Comb. SLU A1 12 [C.12]		-375	
Node 613: 23: Comb. SLU A1 13 [C.13]		994	
Node 613: 24: Comb. SLU A1 14 [C.14]		881	
Node 613: 25: Comb. SLU A1 15 [C.15]		2149	1
Node 613: 26: Comb. SLU A1 16 [C.16]		2036	1
Node 613: 27: Comb. SLU A1 17 [C.17]		490	
Node 613: 28: Comb. SLU A1 18 [C.18]		377	
Node 613: 29: Comb.SLV sism. 19 [C.19]		515	1
Node 613: 30: Comb.SLV sism. 20 [C.20]		528	-1
Node 613: 31: Comb.SLV sism. 21 [C.21]		227	2
Node 613: 32: Comb.SLV sism. 22 [C.22]		240	-1
Node 613: 33: Comb.SLV sism. 23 [C.23]		399	4
Node 613: 34: Comb.SLV sism. 24 [C.24]		442	-4
Node 613: 35: Comb.SLV sism. 25 [C.25]		312	4
Node 613: 36: Comb.SLV sism. 26 [C.26]		356	-4
Node 613: 54: Env SLU [Absolute Envelope 1]		2149	4
Node 618: 1: pp	17	222	
Node 618: 2: g	25	180	
Node 618: 3: qs_1	170	1206	
Node 618: 4: qs_2	131	759	
Node 618: 5: Vento +X	355	-1130	
Node 618: 6: Vento -X	-591	-823	
Node 618: 7: SLV X	-2445	-1154	
Node 618: 8: SLV Z	-2	-27	-3
Node 618: 11: Comb. SLU A1 1 [C.1]	-281	920	
Node 618: 12: Comb. SLU A1 2 [C.2]	-294	800	
Node 618: 13: Comb. SLU A1 3 [C.3]	-735	-143	
Node 618: 14: Comb. SLU A1 4 [C.4]	-747	-264	
Node 618: 15: Comb. SLU A1 5 [C.5]	-833	-713	
Node 618: 16: Comb. SLU A1 6 [C.6]	-845	-833	
Node 618: 17: Comb. SLU A1 7 [C.7]	570	644	
Node 618: 18: Comb. SLU A1 8 [C.8]	558	524	
Node 618: 19: Comb. SLU A1 9 [C.9]	685	-604	
Node 618: 20: Comb. SLU A1 10 [C.10]	672	-724	
Node 618: 21: Comb. SLU A1 11 [C.11]	586	-1173	
Node 618: 22: Comb. SLU A1 12 [C.12]	574	-1294	
Node 618: 23: Comb. SLU A1 13 [C.13]	251	1661	
Node 618: 24: Comb. SLU A1 14 [C.14]	238	1541	
Node 618: 25: Comb. SLU A1 15 [C.15]	310	2331	
Node 618: 26: Comb. SLU A1 16 [C.16]	297	2211	
Node 618: 27: Comb. SLU A1 17 [C.17]	54	522	
Node 618: 28: Comb. SLU A1 18 [C.18]	42	402	
Node 618: 29: Comb.SLV sism. 19 [C.19]	2487	1564	1
Node 618: 30: Comb.SLV sism. 20 [C.20]	2486	1548	-1
Node 618: 31: Comb.SLV sism. 21 [C.21]	-2403	-745	1
Node 618: 32: Comb.SLV sism. 22 [C.22]	-2404	-761	-1

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LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 618: 33: Comb.SLV sism. 23 [C.23]	777	775	3
Node 618: 34: Comb.SLV sism. 24 [C.24]	773	721	-3
Node 618: 35: Comb.SLV sism. 25 [C.25]	-690	83	3
Node 618: 36: Comb.SLV sism. 26 [C.26]	-694	28	-3
Node 618: 54: Env SLU [Absolute Envelope 1]	2487	2331	3
Node 634: 1: pp		511	
Node 634: 2: g		551	
Node 634: 3: qs_1		4030	
Node 634: 4: qs_2		3016	
Node 634: 5: Vento +X		-3145	
Node 634: 6: Vento -X		-1884	
Node 634: 7: SLV X		1262	
Node 634: 8: SLV Z		109	
Node 634: 11: Comb. SLU A1 1 [C.1]		4209	
Node 634: 12: Comb. SLU A1 2 [C.2]		3891	
Node 634: 13: Comb. SLU A1 3 [C.3]		817	
Node 634: 14: Comb. SLU A1 4 [C.4]		498	
Node 634: 15: Comb. SLU A1 5 [C.5]		-1445	
Node 634: 16: Comb. SLU A1 6 [C.6]		-1764	
Node 634: 17: Comb. SLU A1 7 [C.7]		3074	
Node 634: 18: Comb. SLU A1 8 [C.8]		2756	
Node 634: 19: Comb. SLU A1 9 [C.9]		-1075	
Node 634: 20: Comb. SLU A1 10 [C.10]		-1393	
Node 634: 21: Comb. SLU A1 11 [C.11]		-3337	
Node 634: 22: Comb. SLU A1 12 [C.12]		-3655	
Node 634: 23: Comb. SLU A1 13 [C.13]		5905	
Node 634: 24: Comb. SLU A1 14 [C.14]		5586	
Node 634: 25: Comb. SLU A1 15 [C.15]		7426	
Node 634: 26: Comb. SLU A1 16 [C.16]		7107	
Node 634: 27: Comb. SLU A1 17 [C.17]		1381	
Node 634: 28: Comb. SLU A1 18 [C.18]		1062	
Node 634: 29: Comb.SLV sism. 19 [C.19]		-232	
Node 634: 30: Comb.SLV sism. 20 [C.20]		-167	
Node 634: 31: Comb.SLV sism. 21 [C.21]		2291	
Node 634: 32: Comb.SLV sism. 22 [C.22]		2356	
Node 634: 33: Comb.SLV sism. 23 [C.23]		575	
Node 634: 34: Comb.SLV sism. 24 [C.24]		793	
Node 634: 35: Comb.SLV sism. 25 [C.25]		1332	
Node 634: 36: Comb.SLV sism. 26 [C.26]		1550	
Node 634: 54: Env SLU [Absolute Envelope 1]		7426	
Node 654: 1: pp		516	
Node 654: 2: g		558	
Node 654: 3: qs_1		4082	
Node 654: 4: qs_2		1547	
Node 654: 5: Vento +X		-2168	
Node 654: 6: Vento -X		-2933	
Node 654: 7: SLV X		26	
Node 654: 8: SLV Z		110	
Node 654: 11: Comb. SLU A1 1 [C.1]		1076	
Node 654: 12: Comb. SLU A1 2 [C.2]		754	
Node 654: 13: Comb. SLU A1 3 [C.3]		-1844	
Node 654: 14: Comb. SLU A1 4 [C.4]		-2166	
Node 654: 15: Comb. SLU A1 5 [C.5]		-3004	
Node 654: 16: Comb. SLU A1 6 [C.6]		-3326	
Node 654: 17: Comb. SLU A1 7 [C.7]		1765	
Node 654: 18: Comb. SLU A1 8 [C.8]		1443	
Node 654: 19: Comb. SLU A1 9 [C.9]		-695	
Node 654: 20: Comb. SLU A1 10 [C.10]		-1017	
Node 654: 21: Comb. SLU A1 11 [C.11]		-1855	
Node 654: 22: Comb. SLU A1 12 [C.12]		-2178	
Node 654: 23: Comb. SLU A1 13 [C.13]		3716	
Node 654: 24: Comb. SLU A1 14 [C.14]		3394	
Node 654: 25: Comb. SLU A1 15 [C.15]		7518	
Node 654: 26: Comb. SLU A1 16 [C.16]		7196	
Node 654: 27: Comb. SLU A1 17 [C.17]		1396	
Node 654: 28: Comb. SLU A1 18 [C.18]		1074	
Node 654: 29: Comb.SLV sism. 19 [C.19]		1015	
Node 654: 30: Comb.SLV sism. 20 [C.20]		1081	
Node 654: 31: Comb.SLV sism. 21 [C.21]		1067	
Node 654: 32: Comb.SLV sism. 22 [C.22]		1132	
Node 654: 33: Comb.SLV sism. 23 [C.23]		957	
Node 654: 34: Comb.SLV sism. 24 [C.24]		1176	
Node 654: 35: Comb.SLV sism. 25 [C.25]		972	
Node 654: 36: Comb.SLV sism. 26 [C.26]		1191	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 654: 54: Env SLU [Absolute Envelope 1]		7518	
Node 667: 1: pp		212	
Node 667: 2: g		167	
Node 667: 3: qs_1		1112	
Node 667: 4: qs_2		340	
Node 667: 5: Vento +X		-507	
Node 667: 6: Vento -X		-1316	
Node 667: 7: SLV X		-140	
Node 667: 8: SLV Z		-26	-3
Node 667: 11: Comb. SLU A1 1 [C.1]		-182	
Node 667: 12: Comb. SLU A1 2 [C.2]		-296	
Node 667: 13: Comb. SLU A1 3 [C.3]		-1227	
Node 667: 14: Comb. SLU A1 4 [C.4]		-1340	
Node 667: 15: Comb. SLU A1 5 [C.5]		-1482	
Node 667: 16: Comb. SLU A1 6 [C.6]		-1595	
Node 667: 17: Comb. SLU A1 7 [C.7]		545	
Node 667: 18: Comb. SLU A1 8 [C.8]		432	
Node 667: 19: Comb. SLU A1 9 [C.9]		-14	
Node 667: 20: Comb. SLU A1 10 [C.10]		-128	
Node 667: 21: Comb. SLU A1 11 [C.11]		-269	
Node 667: 22: Comb. SLU A1 12 [C.12]		-383	
Node 667: 23: Comb. SLU A1 13 [C.13]		1002	
Node 667: 24: Comb. SLU A1 14 [C.14]		888	
Node 667: 25: Comb. SLU A1 15 [C.15]		2161	
Node 667: 26: Comb. SLU A1 16 [C.16]		2047	
Node 667: 27: Comb. SLU A1 17 [C.17]		492	
Node 667: 28: Comb. SLU A1 18 [C.18]		379	
Node 667: 29: Comb.SLV sism. 19 [C.19]		527	1
Node 667: 30: Comb.SLV sism. 20 [C.20]		511	-1
Node 667: 31: Comb.SLV sism. 21 [C.21]		246	1
Node 667: 32: Comb.SLV sism. 22 [C.22]		230	-1
Node 667: 33: Comb.SLV sism. 23 [C.23]		447	3
Node 667: 34: Comb.SLV sism. 24 [C.24]		395	-3
Node 667: 35: Comb.SLV sism. 25 [C.25]		362	3
Node 667: 36: Comb.SLV sism. 26 [C.26]		310	-3
Node 667: 54: Env SLU [Absolute Envelope 1]		2161	3
Node 672: 1: pp	40	234	
Node 672: 2: g	45	191	
Node 672: 3: qs_1	314	1281	
Node 672: 4: qs_2	141	817	
Node 672: 5: Vento +X	188	-1217	
Node 672: 6: Vento -X	-624	-840	
Node 672: 7: SLV X	-2253	-1054	
Node 672: 8: SLV Z	-6	21	-1
Node 672: 11: Comb. SLU A1 1 [C.1]	-89	1021	
Node 672: 12: Comb. SLU A1 2 [C.2]	-115	894	
Node 672: 13: Comb. SLU A1 3 [C.3]	-643	-95	
Node 672: 14: Comb. SLU A1 4 [C.4]	-669	-223	
Node 672: 15: Comb. SLU A1 5 [C.5]	-824	-708	
Node 672: 16: Comb. SLU A1 6 [C.6]	-850	-835	
Node 672: 17: Comb. SLU A1 7 [C.7]	641	681	
Node 672: 18: Comb. SLU A1 8 [C.8]	616	554	
Node 672: 19: Comb. SLU A1 9 [C.9]	574	-662	
Node 672: 20: Comb. SLU A1 10 [C.10]	548	-789	
Node 672: 21: Comb. SLU A1 11 [C.11]	393	-1274	
Node 672: 22: Comb. SLU A1 12 [C.12]	368	-1402	
Node 672: 23: Comb. SLU A1 13 [C.13]	472	1777	
Node 672: 24: Comb. SLU A1 14 [C.14]	447	1649	
Node 672: 25: Comb. SLU A1 15 [C.15]	582	2473	
Node 672: 26: Comb. SLU A1 16 [C.16]	556	2346	
Node 672: 27: Comb. SLU A1 17 [C.17]	111	552	
Node 672: 28: Comb. SLU A1 18 [C.18]	86	425	
Node 672: 29: Comb.SLV sism. 19 [C.19]	2341	1473	
Node 672: 30: Comb.SLV sism. 20 [C.20]	2337	1485	-1
Node 672: 31: Comb.SLV sism. 21 [C.21]	-2166	-636	1
Node 672: 32: Comb.SLV sism. 22 [C.22]	-2169	-623	
Node 672: 33: Comb.SLV sism. 23 [C.23]	768	720	1
Node 672: 34: Comb.SLV sism. 24 [C.24]	756	762	-1
Node 672: 35: Comb.SLV sism. 25 [C.25]	-584	88	1
Node 672: 36: Comb.SLV sism. 26 [C.26]	-596	129	-1
Node 672: 54: Env SLU [Absolute Envelope 1]	2341	2473	1
Node 688: 1: pp		498	
Node 688: 2: g		540	
Node 688: 3: qs_1		3953	

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LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	FX (kgf)	FY (kgf)	FZ (kgf)
Node 688: 4: qs_2		2959	
Node 688: 5: Vento +X		-3057	
Node 688: 6: Vento -X		-1866	
Node 688: 7: SLV X		1161	
Node 688: 8: SLV Z		-125	
Node 688: 11: Comb. SLU A1 1 [C.1]		4108	
Node 688: 12: Comb. SLU A1 2 [C.2]		3796	
Node 688: 13: Comb. SLU A1 3 [C.3]		769	
Node 688: 14: Comb. SLU A1 4 [C.4]		458	
Node 688: 15: Comb. SLU A1 5 [C.5]		-1450	
Node 688: 16: Comb. SLU A1 6 [C.6]		-1761	
Node 688: 17: Comb. SLU A1 7 [C.7]		3035	
Node 688: 18: Comb. SLU A1 8 [C.8]		2724	
Node 688: 19: Comb. SLU A1 9 [C.9]		-1018	
Node 688: 20: Comb. SLU A1 10 [C.10]		-1329	
Node 688: 21: Comb. SLU A1 11 [C.11]		-3237	
Node 688: 22: Comb. SLU A1 12 [C.12]		-3548	
Node 688: 23: Comb. SLU A1 13 [C.13]		5787	
Node 688: 24: Comb. SLU A1 14 [C.14]		5476	
Node 688: 25: Comb. SLU A1 15 [C.15]		7279	
Node 688: 26: Comb. SLU A1 16 [C.16]		6968	
Node 688: 27: Comb. SLU A1 17 [C.17]		1349	
Node 688: 28: Comb. SLU A1 18 [C.18]		1038	
Node 688: 29: Comb.SLV sism. 19 [C.19]		-86	
Node 688: 30: Comb.SLV sism. 20 [C.20]		-160	
Node 688: 31: Comb.SLV sism. 21 [C.21]		2236	
Node 688: 32: Comb.SLV sism. 22 [C.22]		2161	
Node 688: 33: Comb.SLV sism. 23 [C.23]		814	
Node 688: 34: Comb.SLV sism. 24 [C.24]		565	
Node 688: 35: Comb.SLV sism. 25 [C.25]		1511	
Node 688: 36: Comb.SLV sism. 26 [C.26]		1262	
Node 688: 54: Env SLU [Absolute Envelope 1]		7279	
Node 708: 1: pp		515	
Node 708: 2: g		558	
Node 708: 3: qs_1		4077	
Node 708: 4: qs_2		1545	
Node 708: 5: Vento +X		-2164	
Node 708: 6: Vento -X		-2932	
Node 708: 7: SLV X		24	
Node 708: 8: SLV Z		-127	
Node 708: 11: Comb. SLU A1 1 [C.1]		1072	
Node 708: 12: Comb. SLU A1 2 [C.2]		750	
Node 708: 13: Comb. SLU A1 3 [C.3]		-1846	
Node 708: 14: Comb. SLU A1 4 [C.4]		-2167	
Node 708: 15: Comb. SLU A1 5 [C.5]		-3004	
Node 708: 16: Comb. SLU A1 6 [C.6]		-3326	
Node 708: 17: Comb. SLU A1 7 [C.7]		1763	
Node 708: 18: Comb. SLU A1 8 [C.8]		1441	
Node 708: 19: Comb. SLU A1 9 [C.9]		-694	
Node 708: 20: Comb. SLU A1 10 [C.10]		-1015	
Node 708: 21: Comb. SLU A1 11 [C.11]		-1852	
Node 708: 22: Comb. SLU A1 12 [C.12]		-2174	
Node 708: 23: Comb. SLU A1 13 [C.13]		3711	
Node 708: 24: Comb. SLU A1 14 [C.14]		3389	
Node 708: 25: Comb. SLU A1 15 [C.15]		7510	
Node 708: 26: Comb. SLU A1 16 [C.16]		7188	
Node 708: 27: Comb. SLU A1 17 [C.17]		1394	
Node 708: 28: Comb. SLU A1 18 [C.18]		1072	
Node 708: 29: Comb.SLV sism. 19 [C.19]		1087	
Node 708: 30: Comb.SLV sism. 20 [C.20]		1010	
Node 708: 31: Comb.SLV sism. 21 [C.21]		1134	
Node 708: 32: Comb.SLV sism. 22 [C.22]		1058	
Node 708: 33: Comb.SLV sism. 23 [C.23]		1193	
Node 708: 34: Comb.SLV sism. 24 [C.24]		938	
Node 708: 35: Comb.SLV sism. 25 [C.25]		1207	
Node 708: 36: Comb.SLV sism. 26 [C.26]		952	
Node 708: 54: Env SLU [Absolute Envelope 1]		7510	
Node 721: 1: pp		212	
Node 721: 2: g		167	
Node 721: 3: qs_1		1113	
Node 721: 4: qs_2		341	
Node 721: 5: Vento +X		-508	
Node 721: 6: Vento -X		-1316	
Node 721: 7: SLV X		-139	

	FX (kgf)	FY (kgf)	FZ (kgf)
Node 721: 8: SLV Z		24	-1
Node 721: 11: Comb. SLU A1 1 [C.1]		-181	
Node 721: 12: Comb. SLU A1 2 [C.2]		-295	
Node 721: 13: Comb. SLU A1 3 [C.3]		-1226	
Node 721: 14: Comb. SLU A1 4 [C.4]		-1340	
Node 721: 15: Comb. SLU A1 5 [C.5]		-1481	
Node 721: 16: Comb. SLU A1 6 [C.6]		-1595	
Node 721: 17: Comb. SLU A1 7 [C.7]		546	
Node 721: 18: Comb. SLU A1 8 [C.8]		432	
Node 721: 19: Comb. SLU A1 9 [C.9]		-15	
Node 721: 20: Comb. SLU A1 10 [C.10]		-128	
Node 721: 21: Comb. SLU A1 11 [C.11]		-270	
Node 721: 22: Comb. SLU A1 12 [C.12]		-384	
Node 721: 23: Comb. SLU A1 13 [C.13]		1003	
Node 721: 24: Comb. SLU A1 14 [C.14]		890	
Node 721: 25: Comb. SLU A1 15 [C.15]		2162	-1
Node 721: 26: Comb. SLU A1 16 [C.16]		2049	
Node 721: 27: Comb. SLU A1 17 [C.17]		492	
Node 721: 28: Comb. SLU A1 18 [C.18]		379	
Node 721: 29: Comb.SLV sism. 19 [C.19]		511	1
Node 721: 30: Comb.SLV sism. 20 [C.20]		525	
Node 721: 31: Comb.SLV sism. 21 [C.21]		233	
Node 721: 32: Comb.SLV sism. 22 [C.22]		247	-1
Node 721: 33: Comb.SLV sism. 23 [C.23]		397	1
Node 721: 34: Comb.SLV sism. 24 [C.24]		444	-1
Node 721: 35: Comb.SLV sism. 25 [C.25]		313	1
Node 721: 36: Comb.SLV sism. 26 [C.26]		361	-1
Node 721: 54: Env SLU [Absolute Envelope 1]		2162	1
Node 726: 1: pp	81	258	
Node 726: 2: g	88	214	
Node 726: 3: qs_1	604	1441	
Node 726: 4: qs_2	490	956	
Node 726: 5: Vento +X	-189	-1429	
Node 726: 6: Vento -X	-669	-864	
Node 726: 7: SLV X	-1839	-820	
Node 726: 8: SLV Z	25	-11	1
Node 726: 11: Comb. SLU A1 1 [C.1]	351	1271	
Node 726: 12: Comb. SLU A1 2 [C.2]	301	1129	
Node 726: 13: Comb. SLU A1 3 [C.3]	-418	35	
Node 726: 14: Comb. SLU A1 4 [C.4]	-468	-106	
Node 726: 15: Comb. SLU A1 5 [C.5]	-785	-682	
Node 726: 16: Comb. SLU A1 6 [C.6]	-836	-823	
Node 726: 17: Comb. SLU A1 7 [C.7]	784	762	
Node 726: 18: Comb. SLU A1 8 [C.8]	734	621	
Node 726: 19: Comb. SLU A1 9 [C.9]	303	-812	
Node 726: 20: Comb. SLU A1 10 [C.10]	253	-953	
Node 726: 21: Comb. SLU A1 11 [C.11]	-64	-1529	
Node 726: 22: Comb. SLU A1 12 [C.12]	-115	-1671	
Node 726: 23: Comb. SLU A1 13 [C.13]	954	2048	
Node 726: 24: Comb. SLU A1 14 [C.14]	903	1906	
Node 726: 25: Comb. SLU A1 15 [C.15]	1124	2776	
Node 726: 26: Comb. SLU A1 16 [C.16]	1074	2634	
Node 726: 27: Comb. SLU A1 17 [C.17]	219	614	
Node 726: 28: Comb. SLU A1 18 [C.18]	168	472	
Node 726: 29: Comb.SLV sism. 19 [C.19]	2000	1296	-1
Node 726: 30: Comb.SLV sism. 20 [C.20]	2015	1289	
Node 726: 31: Comb.SLV sism. 21 [C.21]	-1678	-344	
Node 726: 32: Comb.SLV sism. 22 [C.22]	-1664	-351	1
Node 726: 33: Comb.SLV sism. 23 [C.23]	696	730	-1
Node 726: 34: Comb.SLV sism. 24 [C.24]	745	707	1
Node 726: 35: Comb.SLV sism. 25 [C.25]	-408	238	-1
Node 726: 36: Comb.SLV sism. 26 [C.26]	-359	215	1
Node 726: 54: Env SLU [Absolute Envelope 1]	2015	2776	1
Node 742: 1: pp		471	
Node 742: 2: g		519	
Node 742: 3: qs_1		3806	
Node 742: 4: qs_2		2883	
Node 742: 5: Vento +X		-2934	
Node 742: 6: Vento -X		-1812	
Node 742: 7: SLV X		1060	
Node 742: 8: SLV Z		169	
Node 742: 11: Comb. SLU A1 1 [C.1]		3981	
Node 742: 12: Comb. SLU A1 2 [C.2]		3684	
Node 742: 13: Comb. SLU A1 3 [C.3]		732	

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 742: 14: Comb. SLU A1 4 [C.4]		435	
Node 742: 15: Comb. SLU A1 5 [C.5]		-1431	
Node 742: 16: Comb. SLU A1 6 [C.6]		-1728	
Node 742: 17: Comb. SLU A1 7 [C.7]		2972	
Node 742: 18: Comb. SLU A1 8 [C.8]		2675	
Node 742: 19: Comb. SLU A1 9 [C.9]		-951	
Node 742: 20: Comb. SLU A1 10 [C.10]		-1248	
Node 742: 21: Comb. SLU A1 11 [C.11]		-3113	
Node 742: 22: Comb. SLU A1 12 [C.12]		-3410	
Node 742: 23: Comb. SLU A1 13 [C.13]		5612	
Node 742: 24: Comb. SLU A1 14 [C.14]		5315	
Node 742: 25: Comb. SLU A1 15 [C.15]		6996	
Node 742: 26: Comb. SLU A1 16 [C.16]		6699	
Node 742: 27: Comb. SLU A1 17 [C.17]		1287	
Node 742: 28: Comb. SLU A1 18 [C.18]		990	
Node 742: 29: Comb.SLV sism. 19 [C.19]		-120	
Node 742: 30: Comb.SLV sism. 20 [C.20]		-19	
Node 742: 31: Comb.SLV sism. 21 [C.21]		1999	
Node 742: 32: Comb.SLV sism. 22 [C.22]		2100	
Node 742: 33: Comb.SLV sism. 23 [C.23]		503	
Node 742: 34: Comb.SLV sism. 24 [C.24]		841	
Node 742: 35: Comb.SLV sism. 25 [C.25]		1139	
Node 742: 36: Comb.SLV sism. 26 [C.26]		1477	
Node 742: 54: Env SLU [Absolute Envelope 1]		6996	
Node 762: 1: pp		480	
Node 762: 2: g		529	
Node 762: 3: qs_1		3872	
Node 762: 4: qs_2		1433	
Node 762: 5: Vento +X		-1985	
Node 762: 6: Vento -X		-2857	
Node 762: 7: SLV X		-126	
Node 762: 8: SLV Z		176	
Node 762: 11: Comb. SLU A1 1 [C.1]		889	
Node 762: 12: Comb. SLU A1 2 [C.2]		587	
Node 762: 13: Comb. SLU A1 3 [C.3]		-1900	
Node 762: 14: Comb. SLU A1 4 [C.4]		-2202	
Node 762: 15: Comb. SLU A1 5 [C.5]		-2974	
Node 762: 16: Comb. SLU A1 6 [C.6]		-3277	
Node 762: 17: Comb. SLU A1 7 [C.7]		1674	
Node 762: 18: Comb. SLU A1 8 [C.8]		1371	
Node 762: 19: Comb. SLU A1 9 [C.9]		-592	
Node 762: 20: Comb. SLU A1 10 [C.10]		-894	
Node 762: 21: Comb. SLU A1 11 [C.11]		-1666	
Node 762: 22: Comb. SLU A1 12 [C.12]		-1969	
Node 762: 23: Comb. SLU A1 13 [C.13]		3460	
Node 762: 24: Comb. SLU A1 14 [C.14]		3158	
Node 762: 25: Comb. SLU A1 15 [C.15]		7120	
Node 762: 26: Comb. SLU A1 16 [C.16]		6817	
Node 762: 27: Comb. SLU A1 17 [C.17]		1311	
Node 762: 28: Comb. SLU A1 18 [C.18]		1009	
Node 762: 29: Comb.SLV sism. 19 [C.19]		1082	
Node 762: 30: Comb.SLV sism. 20 [C.20]		1187	
Node 762: 31: Comb.SLV sism. 21 [C.21]		830	
Node 762: 32: Comb.SLV sism. 22 [C.22]		935	
Node 762: 33: Comb.SLV sism. 23 [C.23]		871	
Node 762: 34: Comb.SLV sism. 24 [C.24]		1222	
Node 762: 35: Comb.SLV sism. 25 [C.25]		795	
Node 762: 36: Comb.SLV sism. 26 [C.26]		1147	
Node 762: 54: Env SLU [Absolute Envelope 1]		7120	
Node 775: 1: pp		211	
Node 775: 2: g		163	
Node 775: 3: qs_1		1088	
Node 775: 4: qs_2		324	
Node 775: 5: Vento +X		-485	
Node 775: 6: Vento -X		-1305	
Node 775: 7: SLV X		-160	
Node 775: 8: SLV Z		-25	1
Node 775: 11: Comb. SLU A1 1 [C.1]		-203	
Node 775: 12: Comb. SLU A1 2 [C.2]		-315	
Node 775: 13: Comb. SLU A1 3 [C.3]		-1229	
Node 775: 14: Comb. SLU A1 4 [C.4]		-1341	
Node 775: 15: Comb. SLU A1 5 [C.5]		-1472	
Node 775: 16: Comb. SLU A1 6 [C.6]		-1584	
Node 775: 17: Comb. SLU A1 7 [C.7]		536	

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 775: 18: Comb. SLU A1 8 [C.8]		424	
Node 775: 19: Comb. SLU A1 9 [C.9]		2	
Node 775: 20: Comb. SLU A1 10 [C.10]		-111	
Node 775: 21: Comb. SLU A1 11 [C.11]		-242	1
Node 775: 22: Comb. SLU A1 12 [C.12]		-354	1
Node 775: 23: Comb. SLU A1 13 [C.13]		972	-1
Node 775: 24: Comb. SLU A1 14 [C.14]		860	-1
Node 775: 25: Comb. SLU A1 15 [C.15]		2118	-1
Node 775: 26: Comb. SLU A1 16 [C.16]		2006	-1
Node 775: 27: Comb. SLU A1 17 [C.17]		486	
Node 775: 28: Comb. SLU A1 18 [C.18]		374	
Node 775: 29: Comb.SLV sism. 19 [C.19]		541	
Node 775: 30: Comb.SLV sism. 20 [C.20]		526	1
Node 775: 31: Comb.SLV sism. 21 [C.21]		222	-1
Node 775: 32: Comb.SLV sism. 22 [C.22]		207	
Node 775: 33: Comb.SLV sism. 23 [C.23]		447	-1
Node 775: 34: Comb.SLV sism. 24 [C.24]		397	1
Node 775: 35: Comb.SLV sism. 25 [C.25]		351	-2
Node 775: 36: Comb.SLV sism. 26 [C.26]		301	1
Node 775: 54: Env SLU [Absolute Envelope 1]		2118	2
Node 780: 1: pp	-7	17	33
Node 780: 2: g	-7	-3	32
Node 780: 3: qs_1	-43	-21	208
Node 780: 4: qs_2	-61	-30	240
Node 780: 5: Vento +X	92	45	-359
Node 780: 6: Vento -X	-10	-5	5
Node 780: 7: SLV X	-142	-61	463
Node 780: 8: SLV Z	179	88	-2212
Node 780: 11: Comb. SLU A1 1 [C.1]	-119	-32	449
Node 780: 12: Comb. SLU A1 2 [C.2]	-115	-36	429
Node 780: 13: Comb. SLU A1 3 [C.3]	-79	-12	272
Node 780: 14: Comb. SLU A1 4 [C.4]	-75	-16	253
Node 780: 15: Comb. SLU A1 5 [C.5]	-33	11	92
Node 780: 16: Comb. SLU A1 6 [C.6]	-29	6	73
Node 780: 17: Comb. SLU A1 7 [C.7]	-27	14	120
Node 780: 18: Comb. SLU A1 8 [C.8]	-23	9	101
Node 780: 19: Comb. SLU A1 9 [C.9]	74	63	-275
Node 780: 20: Comb. SLU A1 10 [C.10]	78	59	-295
Node 780: 21: Comb. SLU A1 11 [C.11]	120	86	-455
Node 780: 22: Comb. SLU A1 12 [C.12]	124	82	-474
Node 780: 23: Comb. SLU A1 13 [C.13]	-110	-27	444
Node 780: 24: Comb. SLU A1 14 [C.14]	-105	-31	424
Node 780: 25: Comb. SLU A1 15 [C.15]	-83	-14	397
Node 780: 26: Comb. SLU A1 16 [C.16]	-79	-18	377
Node 780: 27: Comb. SLU A1 17 [C.17]	-18	18	84
Node 780: 28: Comb. SLU A1 18 [C.18]	-14	14	65
Node 780: 29: Comb.SLV sism. 19 [C.19]	75	49	266
Node 780: 30: Comb.SLV sism. 20 [C.20]	182	102	-1062
Node 780: 31: Comb.SLV sism. 21 [C.21]	-209	-74	1191
Node 780: 32: Comb.SLV sism. 22 [C.22]	-102	-21	-136
Node 780: 33: Comb.SLV sism. 23 [C.23]	-150	-56	2138
Node 780: 34: Comb.SLV sism. 24 [C.24]	208	120	-2286
Node 780: 35: Comb.SLV sism. 25 [C.25]	-235	-92	2415
Node 780: 36: Comb.SLV sism. 26 [C.26]	123	84	-2008
Node 780: 54: Env SLU [Absolute Envelope 1]	235	120	2415
Node 783: 1: pp	-16	1	9
Node 783: 2: g	-16	-6	9
Node 783: 3: qs_1	-101	-39	59
Node 783: 4: qs_2	-155	-60	92
Node 783: 5: Vento +X	216	85	-111
Node 783: 6: Vento -X	-23	-9	8
Node 783: 7: SLV X	-279	-108	123
Node 783: 8: SLV Z	77	18	-358
Node 783: 11: Comb. SLU A1 1 [C.1]	-294	-105	168
Node 783: 12: Comb. SLU A1 2 [C.2]	-284	-104	163
Node 783: 13: Comb. SLU A1 3 [C.3]	-191	-66	104
Node 783: 14: Comb. SLU A1 4 [C.4]	-182	-64	99
Node 783: 15: Comb. SLU A1 5 [C.5]	-75	-20	35
Node 783: 16: Comb. SLU A1 6 [C.6]	-66	-19	30
Node 783: 17: Comb. SLU A1 7 [C.7]	-79	-21	62
Node 783: 18: Comb. SLU A1 8 [C.8]	-70	-19	56
Node 783: 19: Comb. SLU A1 9 [C.9]	167	75	-73
Node 783: 20: Comb. SLU A1 10 [C.10]	176	77	-79
Node 783: 21: Comb. SLU A1 11 [C.11]	283	121	-142

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 783: 22: Comb. SLU A1 12 [C.12]	292	122	-148
Node 783: 23: Comb. SLU A1 13 [C.13]	-274	-97	162
Node 783: 24: Comb. SLU A1 14 [C.14]	-264	-96	156
Node 783: 25: Comb. SLU A1 15 [C.15]	-193	-66	112
Node 783: 26: Comb. SLU A1 16 [C.16]	-184	-64	107
Node 783: 27: Comb. SLU A1 17 [C.17]	-41	-7	24
Node 783: 28: Comb. SLU A1 18 [C.18]	-32	-5	19
Node 783: 29: Comb.SLV sism. 19 [C.19]	224	97	3
Node 783: 30: Comb.SLV sism. 20 [C.20]	271	108	-212
Node 783: 31: Comb.SLV sism. 21 [C.21]	-334	-118	249
Node 783: 32: Comb.SLV sism. 22 [C.22]	-288	-107	34
Node 783: 33: Comb.SLV sism. 23 [C.23]	-25	9	340
Node 783: 34: Comb.SLV sism. 24 [C.24]	129	46	-377
Node 783: 35: Comb.SLV sism. 25 [C.25]	-193	-56	414
Node 783: 36: Comb.SLV sism. 26 [C.26]	-38	-19	-303
Node 783: 54: Env SLU [Absolute Envelope 1]	334	122	414
Node 786: 1: pp	-10	17	-29
Node 786: 2: g	-10	-3	-30
Node 786: 3: qs_1	-63	-21	-187
Node 786: 4: qs_2	-96	-32	-271
Node 786: 5: Vento +X	133	45	378
Node 786: 6: Vento -X	-12	-4	-31
Node 786: 7: SLV X	-180	-55	-476
Node 786: 8: SLV Z	-173	-59	-3961
Node 786: 11: Comb. SLU A1 1 [C.1]	-180	-34	-510
Node 786: 12: Comb. SLU A1 2 [C.2]	-174	-38	-492
Node 786: 13: Comb. SLU A1 3 [C.3]	-115	-12	-326
Node 786: 14: Comb. SLU A1 4 [C.4]	-109	-16	-308
Node 786: 15: Comb. SLU A1 5 [C.5]	-44	12	-123
Node 786: 16: Comb. SLU A1 6 [C.6]	-38	8	-105
Node 786: 17: Comb. SLU A1 7 [C.7]	-49	10	-141
Node 786: 18: Comb. SLU A1 8 [C.8]	-44	6	-124
Node 786: 19: Comb. SLU A1 9 [C.9]	102	61	288
Node 786: 20: Comb. SLU A1 10 [C.10]	108	57	306
Node 786: 21: Comb. SLU A1 11 [C.11]	174	86	491
Node 786: 22: Comb. SLU A1 12 [C.12]	180	81	509
Node 786: 23: Comb. SLU A1 13 [C.13]	-169	-30	-482
Node 786: 24: Comb. SLU A1 14 [C.14]	-163	-35	-464
Node 786: 25: Comb. SLU A1 15 [C.15]	-119	-14	-356
Node 786: 26: Comb. SLU A1 16 [C.16]	-114	-18	-339
Node 786: 27: Comb. SLU A1 17 [C.17]	-26	18	-76
Node 786: 28: Comb. SLU A1 18 [C.18]	-20	14	-58
Node 786: 29: Comb.SLV sism. 19 [C.19]	213	86	1607
Node 786: 30: Comb.SLV sism. 20 [C.20]	109	51	-770
Node 786: 31: Comb.SLV sism. 21 [C.21]	-148	-23	654
Node 786: 32: Comb.SLV sism. 22 [C.22]	-252	-58	-1723
Node 786: 33: Comb.SLV sism. 23 [C.23]	208	89	4046
Node 786: 34: Comb.SLV sism. 24 [C.24]	-139	-28	-3877
Node 786: 35: Comb.SLV sism. 25 [C.25]	100	56	3760
Node 786: 36: Comb.SLV sism. 26 [C.26]	-247	-61	-4162
Node 786: 54: Env SLU [Absolute Envelope 1]	252	89	4162
Node 795: 1: pp	-25	29	79
Node 795: 2: g	-28	9	81
Node 795: 3: qs_1	-200	68	574
Node 795: 4: qs_2	-121	41	356
Node 795: 5: Vento +X	201	-68	-585
Node 795: 6: Vento -X	48	-16	-138
Node 795: 7: SLV X	-205	63	562
Node 795: 8: SLV Z	170	-58	-3959
Node 795: 11: Comb. SLU A1 1 [C.1]	-207	97	616
Node 795: 12: Comb. SLU A1 2 [C.2]	-191	85	568
Node 795: 13: Comb. SLU A1 3 [C.3]	-88	56	267
Node 795: 14: Comb. SLU A1 4 [C.4]	-72	45	219
Node 795: 15: Comb. SLU A1 5 [C.5]	3	26	
Node 795: 16: Comb. SLU A1 6 [C.6]	19	14	-48
Node 795: 17: Comb. SLU A1 7 [C.7]	-70	51	214
Node 795: 18: Comb. SLU A1 8 [C.8]	-54	39	166
Node 795: 19: Comb. SLU A1 9 [C.9]	141	-21	-404
Node 795: 20: Comb. SLU A1 10 [C.10]	157	-32	-452
Node 795: 21: Comb. SLU A1 11 [C.11]	232	-52	-671
Node 795: 22: Comb. SLU A1 12 [C.12]	248	-63	-718
Node 795: 23: Comb. SLU A1 13 [C.13]	-251	112	740
Node 795: 24: Comb. SLU A1 14 [C.14]	-235	100	693
Node 795: 25: Comb. SLU A1 15 [C.15]	-369	152	1067

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 795: 26: Comb. SLU A1 16 [C.16]	-353	140	1020
Node 795: 27: Comb. SLU A1 17 [C.17]	-69	50	207
Node 795: 28: Comb. SLU A1 18 [C.18]	-53	39	159
Node 795: 29: Comb.SLV sism. 19 [C.19]	101	-7	784
Node 795: 30: Comb.SLV sism. 20 [C.20]	203	-42	-1591
Node 795: 31: Comb.SLV sism. 21 [C.21]	-309	119	1909
Node 795: 32: Comb.SLV sism. 22 [C.22]	-207	84	-466
Node 795: 33: Comb.SLV sism. 23 [C.23]	-162	77	3949
Node 795: 34: Comb.SLV sism. 24 [C.24]	179	-38	-3968
Node 795: 35: Comb.SLV sism. 25 [C.25]	-284	115	4287
Node 795: 36: Comb.SLV sism. 26 [C.26]	56		-3631
Node 795: 54: Env SLU [Absolute Envelope 1]	369	152	4287
Node 798: 1: pp	-49	28	7
Node 798: 2: g	-55	23	7
Node 798: 3: qs_1	-391	163	42
Node 798: 4: qs_2	-237	99	28
Node 798: 5: Vento +X	377	-156	8
Node 798: 6: Vento -X	122	-54	-88
Node 798: 7: SLV X	-344	138	-36
Node 798: 8: SLV Z	-84	21	-357
Node 798: 11: Comb. SLU A1 1 [C.1]	-380	166	-19
Node 798: 12: Comb. SLU A1 2 [C.2]	-349	150	-24
Node 798: 13: Comb. SLU A1 3 [C.3]	-129	59	-93
Node 798: 14: Comb. SLU A1 4 [C.4]	-98	44	-97
Node 798: 15: Comb. SLU A1 5 [C.5]	48	-15	-114
Node 798: 16: Comb. SLU A1 6 [C.6]	80	-30	-118
Node 798: 17: Comb. SLU A1 7 [C.7]	-151	74	67
Node 798: 18: Comb. SLU A1 8 [C.8]	-119	59	62
Node 798: 19: Comb. SLU A1 9 [C.9]	253	-93	50
Node 798: 20: Comb. SLU A1 10 [C.10]	285	-108	46
Node 798: 21: Comb. SLU A1 11 [C.11]	431	-167	29
Node 798: 22: Comb. SLU A1 12 [C.12]	462	-182	25
Node 798: 23: Comb. SLU A1 13 [C.13]	-490	214	60
Node 798: 24: Comb. SLU A1 14 [C.14]	-459	199	56
Node 798: 25: Comb. SLU A1 15 [C.15]	-722	311	80
Node 798: 26: Comb. SLU A1 16 [C.16]	-691	295	76
Node 798: 27: Comb. SLU A1 17 [C.17]	-135	66	18
Node 798: 28: Comb. SLU A1 18 [C.18]	-104	51	14
Node 798: 29: Comb.SLV sism. 19 [C.19]	265	-93	157
Node 798: 30: Comb.SLV sism. 20 [C.20]	214	-81	-57
Node 798: 31: Comb.SLV sism. 21 [C.21]	-422	182	84
Node 798: 32: Comb.SLV sism. 22 [C.22]	-473	195	-130
Node 798: 33: Comb.SLV sism. 23 [C.23]	83	-12	382
Node 798: 34: Comb.SLV sism. 24 [C.24]	-85	31	-333
Node 798: 35: Comb.SLV sism. 25 [C.25]	-123	71	360
Node 798: 36: Comb.SLV sism. 26 [C.26]	-292	113	-354
Node 798: 54: Env SLU [Absolute Envelope 1]	722	311	382
Node 801: 1: pp	-26	34	-99
Node 801: 2: g	-29	14	-99
Node 801: 3: qs_1	-205	101	-695
Node 801: 4: qs_2	-126	62	-444
Node 801: 5: Vento +X	190	-94	670
Node 801: 6: Vento -X	78	-38	245
Node 801: 7: SLV X	-184	82	-635
Node 801: 8: SLV Z	-182	89	-2205
Node 801: 11: Comb. SLU A1 1 [C.1]	-192	121	-704
Node 801: 12: Comb. SLU A1 2 [C.2]	-175	107	-644
Node 801: 13: Comb. SLU A1 3 [C.3]	-50	51	-224
Node 801: 14: Comb. SLU A1 4 [C.4]	-34	37	-164
Node 801: 15: Comb. SLU A1 5 [C.5]	44	5	109
Node 801: 16: Comb. SLU A1 6 [C.6]	61	-9	169
Node 801: 17: Comb. SLU A1 7 [C.7]	-90	71	-321
Node 801: 18: Comb. SLU A1 8 [C.8]	-74	57	-261
Node 801: 19: Comb. SLU A1 9 [C.9]	119	-31	414
Node 801: 20: Comb. SLU A1 10 [C.10]	135	-46	474
Node 801: 21: Comb. SLU A1 11 [C.11]	213	-78	747
Node 801: 22: Comb. SLU A1 12 [C.12]	230	-92	807
Node 801: 23: Comb. SLU A1 13 [C.13]	-262	155	-924
Node 801: 24: Comb. SLU A1 14 [C.14]	-245	141	-864
Node 801: 25: Comb. SLU A1 15 [C.15]	-380	213	-1301
Node 801: 26: Comb. SLU A1 16 [C.16]	-363	199	-1241
Node 801: 27: Comb. SLU A1 17 [C.17]	-72	62	-258
Node 801: 28: Comb. SLU A1 18 [C.18]	-56	48	-198
Node 801: 29: Comb.SLV sism. 19 [C.19]	183	-61	1099

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	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 801: 30: Comb.SLV sism. 20 [C.20]	74	-7	-224
Node 801: 31: Comb.SLV sism. 21 [C.21]	-185	103	-172
Node 801: 32: Comb.SLV sism. 22 [C.22]	-294	157	-1495
Node 801: 33: Comb.SLV sism. 23 [C.23]	182	-66	2198

	FX	FY	FZ
	(kgf)	(kgf)	(kgf)
Node 801: 34: Comb.SLV sism. 24 [C.24]	-182	113	-2213
Node 801: 35: Comb.SLV sism. 25 [C.25]	71	-17	1816
Node 801: 36: Comb.SLV sism. 26 [C.26]	-293	162	-2594
Node 801: 54: Env SLU [Absolute Envelope 1]	380	213	2594

2.8.5. ALTRI RISULTATI SIGNIFICATIVI

Nella presente parte vengono riportati tutti gli altri risultati che il progettista ritiene di interesse per la descrizione e la comprensione del/i modello/i e del comportamento della struttura.

DIMENSIONAMENTO GIUNTO SISMICO

La distanza tra costruzioni contigue deve essere tale da evitare fenomeni di martellamento e comunque non minore della somma degli spostamenti massimi determinati per lo SLV.

Lo spostamento massimo calcolato per le coperture in progetto allo SLV è pari a circa 0.56 cm;

A fronte di una distanza minima richiesta fra le due coperture pari a 1.12cm si adotta, per altre esigenze, un giunto pari a 19.0cm.

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VERIFICA PANNELLI DI COPERTURA

Pannello di copertura

Il manto di copertura verrà realizzato con pannelli COVERIB850 sp.8/10 della Ditta ONDULIT.

Coverib 850 / Resistenza meccanica lastre rette

$\delta_{max} \leq 1/200 L$ (carico compressivo)

$\delta_2 \leq 1/250 L$ (solo accidentale)

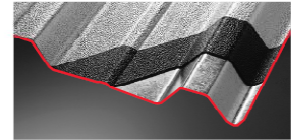
$f_{yb} \geq 2.500 \text{ daN/cm}^2$ (tensione di snervamento)

$M_{c,Rd} = M_{el,Rd} = W_{el} f_{yb} / \gamma_{M0}$

Le caratteristiche geometriche dei profili sono state calcolate

secondo IJM del 14.U1.2008, EN 1993-1-3 e EN 1993-1-5

Coverib 850			
Spessore acciaio	J	W min	W min
	cm ² /m	cm ³ /m	cm ³ /m
0.50 mm	8.57	3.76	3.40
0.60 mm	10.48	4.79	4.37
0.80 mm	14.47	6.71	6.07



SCHEMA STATICO: UNA CAMPATA



SOVRACCARICO DISCENDENTE NEVE - P (daN/m²)

spess. acc.		60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360
0.50 mm	L = m	1,83	1,76	1,70	1,60	1,52	1,45	1,40	1,3	1,31	1,27	1,24	1,21	1,18	1,15	1,11	1,08
0.60 mm	L = m	1,99	1,91	1,84	1,73	1,65	1,58	1,52	1,4	1,42	1,38	1,34	1,31	1,28	1,25	1,23	1,20
0.80 mm	L = m	2,26	2,17	2,10	1,97	1,87	1,79	1,72	1,6	1,61	1,57	1,52	1,49	1,45	1,42	1,39	1,37

M max +	1/8 [p+q] l ²
M min -	=
f max [q]	5/384 q l ⁴ /EI
f max [p+q]	5/384 [p+q] l ⁴ /EI

SOVRACCARICO ASCENDENTE VENTO - P (daN/m²)

spess. acc.		60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360
0.50 mm	L = m	1,76	1,60	1,49	1,4	1,33	1,27	1,22	1,18	1,14	1,11	1,08	1,06	1,03	1,01	0,99	0,97
0.60 mm	L = m	1,91	1,73	1,61	1,5	1,44	1,38	1,32	1,28	1,24	1,20	1,17	1,14	1,12	1,09	1,07	1,05
0.80 mm	L = m	2,20	1,99	1,85	1,7	1,65	1,58	1,52	1,47	1,42	1,38	1,35	1,31	1,28	1,26	1,23	1,21

M max +	1/8 [p+q] l ²
M min -	=
f max [q]	5/384 q l ⁴ /EI
f max [p+q]	5/384 [p+q] l ⁴ /EI

SCHEMA STATICO: DUE CAMPATE



SOVRACCARICO DISCENDENTE NEVE - P (daN/m²)

spess. acc.		60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360
0.50 mm	L = m	2,07	1,96	1,86	1,71	1,59	1,49	1,41	1,3	1,28	1,23	1,18	1,14	1,10	1,07	1,03	1,01
0.60 mm	L = m	2,35	2,22	2,12	1,94	1,81	1,70	1,60	1,5	1,46	1,40	1,34	1,29	1,25	1,21	1,18	1,15
0.80 mm	L = m	2,91	2,76	2,63	2,42	2,25	2,11	2,00	1,9	1,81	1,74	1,67	1,61	1,56	1,51	1,47	1,43

M max +	1/14 [p+q] l ²
M min -	1/8 [p+q] l ²
f max [q]	2,07/384 q l ⁴ /EI
f max [p+q]	2,07/384 [p+q] l ⁴ /EI

SOVRACCARICO ASCENDENTE VENTO - P (daN/m²)

spess. acc.		60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360
0.50 mm	L = m	2,37	2,15	2,00	1,8	1,78	1,67	1,57	1,49	1,42	1,35	1,30	1,25	1,21	1,17	1,13	1,02
0.60 mm	L = m	2,56	2,33	2,16	2,0	1,93	1,85	1,78	1,69	1,61	1,54	1,48	1,42	1,38	1,33	1,29	1,17
0.80 mm	L = m	2,95	2,68	2,48	2,3	2,22	2,12	2,04	1,97	1,91	1,86	1,81	1,75	1,69	1,63	1,58	1,46

M max +	1/14 [p+q] l ²
M min -	1/8 [p+q] l ²
f max [q]	2,07/384 q l ⁴ /EI
f max [p+q]	2,07/384 [p+q] l ⁴ /EI

SCHEMA STATICO: TRE CAMPATE



SOVRACCARICO DISCENDENTE NEVE - P (daN/m²)

spess. acc.		60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360
0.50 mm	L = m	2,30	2,19	2,08	1,91	1,78	1,67	1,58	1,5	1,43	1,37	1,32	1,27	1,23	1,19	1,16	1,12
0.60 mm	L = m	2,49	2,40	2,31	2,17	2,02	1,90	1,79	1,7	1,63	1,56	1,50	1,45	1,40	1,36	1,32	1,28
0.80 mm	L = m	2,83	2,73	2,63	2,48	2,35	2,25	2,16	2,0	2,02	1,94	1,87	1,80	1,75	1,69	1,64	1,60

M max +	1/12,5 [p+q] l ²
M min -	1/10 [p+q] l ²
f max [q]	2,53/384 q l ⁴ /EI
f max [p+q]	2,53/384 [p+q] l ⁴ /EI

SOVRACCARICO ASCENDENTE VENTO - P (daN/m²)

spess. acc.		60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360
0.50 mm	L = m	2,21	2,01	1,87	1,7	1,67	1,60	1,54	1,48	1,44	1,39	1,36	1,30	1,29	1,27	1,24	1,22
0.60 mm	L = m	2,40	2,18	2,02	1,8	1,81	1,73	1,66	1,60	1,55	1,51	1,47	1,43	1,40	1,37	1,34	1,32
0.80 mm	L = m	2,75	2,50	2,37	2,1	2,08	1,99	1,91	1,84	1,79	1,74	1,69	1,65	1,61	1,58	1,55	1,52

M max +	1/12,5 [p+q] l ²
M min -	1/10 [p+q] l ²
f max [q]	2,53/384 q l ⁴ /EI
f max [p+q]	2,53/384 [p+q] l ⁴ /EI

Risulta verificato che per ogni possibile schema statico considerato la lamiera sp.8/10 è in grado di portare sia il carico verticale discendente della neve che il carico verticale ascendente del vento su di una luce di 161 cm > 112 cm (interasse arcarecci).

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2.9. GIUDIZIO MOTIVATO DI ACCETTABILITÀ DEI RISULTATI

A seguito della restituzione dei modelli numerici, viene formulato un giudizio motivato sull'accettabilità dei risultati.

A seguito del riscontro eseguito con calcoli effettuati con schemi semplificati, si assevera l'attendibilità dei risultati del programma di calcolo per quanto riguarda lo stato deformativo e di sollecitazione, nonché le verifiche strutturali.

Il software utilizzato permette di modellare analiticamente il comportamento fisico della struttura utilizzando la libreria disponibile di elementi finiti.

Le funzioni di visualizzazione ed interrogazione sul modello permettono di controllare sia la coerenza geometrica che le azioni applicate rispetto alla realtà fisica.

Inoltre la visualizzazione ed interrogazione dei risultati ottenuti dall'analisi quali sollecitazioni, tensioni, deformazioni, spostamenti, reazioni vincolari hanno permesso un immediato controllo con i risultati ottenuti mediante schemi semplificati di cui è nota la soluzione in forma chiusa nell'ambito della Scienza delle Costruzioni.

Si è inoltre controllato che le reazioni vincolari diano valori in equilibrio con i carichi applicati, in particolare per i valori dei taglianti di base delle azioni sismiche si è provveduto a confrontarli con valori ottenuti da modelli semplificati.

Le sollecitazioni ottenute sulle travi per i carichi verticali direttamente agenti sono stati confrontati con semplici schemi a trave continua.

Per gli elementi inflessi di tipo bidimensionale si è provveduto a confrontare i valori ottenuti dall'analisi FEM con i valori di momento flettente ottenuti con gli schemi semplificati della Tecnica delle Costruzioni.

Si è inoltre verificato che tutte le funzioni di controllo ed autodiagnostica del software abbiano dato esito positivo.

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2.10. VERIFICHE AGLI STATI LIMITE ULTIMI

Vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

2.10.1. VERIFICHE S.L.U. ACCIAIO

Le verifiche di resistenza e instabilità seguono le indicazioni per il calcolo agli stati limite ultimi poste in 4.2 DM14/01/2008 riprese dal cap.6 EN1993-1-1:2005.

In base alla classe della sezione (par.4.2.3.1 DM2008) si adotta la seguente metodologia di verifica:

Sezioni compatte: Classi 1-2, verifica plastica

Sezioni moderatamente snelle: Classe 3, verifica elastica

Sezioni snelle: Classe 4, viene eseguita solo una verifica elastica

La presente relazione è stata generata da **Ludi3**, un post-processore del codice fem STRAUS per verifiche di resistenza e di stabilità di strutture in acciaio.

Ludi3 tratta in modo automatico le verifiche di resistenza e la verifica di stabilità secondo quanto prescritto dalla normativa. La lunghezza libera d'inflessione, nei due piani principali d'inerzia, è riportata nel paragrafo relativo ai dati delle travi.

VERIFICHE DI RESISTENZA

Il criterio di verifica limita la sollecitazione esterna S_{Ed} ad essere inferiore a quella resistente: $S_{Ed}/S_{Rd} \leq 1$. In particolare nel caso di sovrapposizione di sollecitazioni assiali e flettenti, è usata l'approssimazione a favore di sicurezza in cui i rapporti vengono sommati linearmente come da § 6.2.1(7):

$$\frac{N_{Ed}}{N_{Rd}} + \frac{M_{1,Ed}}{M_{1,Rd}} + \frac{M_{2,Ed}}{M_{2,Rd}} \leq 1$$

I coefficienti di sicurezza utilizzati sono divisi per verifiche di resistenza e verifiche di instabilità sono

$$\gamma_{M0} = 1.05$$

$$\gamma_{M1} = 1.05$$

Il limite ultimo raggiungibile per sezioni di classe 1 e 2 è la sezione completamente plasticizzata, mentre per le sezioni di classe 3 sono ammesse solo verifiche in campo elastico. Lo stato limite è quindi quello relativo al superamento del limite elastico nella fibra della sezione maggiormente sollecitata.

La resistenza ultima assiale, uguale per l'analisi elastica e plastica, è calcolata con la relazione:

$$N_{Rd} = N_{Rd,p1} = \frac{A \cdot f_y}{\gamma_{M0}}$$

Nella resistenza ultima flessionale il modulo di resistenza W è come quello plastico W_{pl} per le sezioni di classe 1 e 2 e quello elastico $W_{el,min}$ per le sezioni di classe 3.

Come da prescrizioni del § 6.2.8, la presenza di sforzi taglianti, superiori al 50% del valore resistente, è computata inserendo un coefficiente riduttivo nella tensione di snervamento del materiale:

$$f_{y,v} = (1 - \rho)$$

$$\rho = \left(\frac{2V_{Ed}}{V_{pl,Rd}} - 1 \right)^2$$

e quindi:

$$M_{Rd} = M_{V,Rd} = \frac{W \cdot (1 - \rho) f_y}{\gamma_{M0}}$$

Le verifiche di resistenza al taglio (§ 6.2.6) sono differenziate tra il caso di sezioni di classe 1 e 2, per le quali è calcolato il rapporto massimo tra sollecitazioni agenti e resistenti, e le sezioni di classe 3, per le quali il coefficiente di sicurezza è calcolato come rapporto tensionale:

$$\frac{V_{Ed}}{V_{Rd}} \leq 1$$

classi 1 e 2

$$\frac{\tau_{Ed}}{f_y / (\sqrt{3} \gamma_{M0})} \leq 1$$

classe 3

in cui $V_{Rd} = V_{pl,Rd}$. Nel caso di copresenza di sollecitazioni torcenti sono applicati i coefficienti riduttivi prescritti al § 6.2.7(9).

Le verifiche a torsione (§ 6.2.7) sono eseguite calcolando le tensioni tangenziali nei punti significativi della sezione secondo le regole della Scienza delle Costruzioni.

In particolare, per sezioni aperte (Saint Venant): $\tau_T = \frac{T \cdot s}{J_t}$

per sezioni chiuse (Bredt): $\tau_T = \frac{T}{2 \cdot \Omega \cdot s}$

Nella ricerca della tensione tangenziale τ_{Ed} massima le tensioni derivanti dalla torsione sono sommate a quelle dovute agli sforzi taglianti.

$$\frac{\tau_{V1,Ed} + \tau_{V2,Ed} + \tau_{T,Ed}}{f_y / (\sqrt{3} \gamma_{M0})} \leq 1$$

VERIFICHE DI STABILITÀ

Le verifiche di stabilità di elementi metallici compressi sono condotte seguendo le prescrizioni del § 6.3 dell'Eurocodice3. La norma prevede di cautelarsi dagli effetti di sbandamento assiale nelle direzioni 1 e 2 e lo sbandamento flesso torsionale (LT = lateral torsional) tramite i coefficienti di riduzioni χ .

L'asta compressa è verificata se vengono soddisfatte le seguenti disuguaglianze:

$$\frac{N_{Ed}}{\chi_1 N_{b,Rd}} + k_{yy} \frac{M_{1,Ed}}{\chi_{LT} M_{1,b,Rd}} + k_{yz} \frac{M_{2,Ed}}{M_{2,b,Rd}} \leq 1$$

$$\frac{N_{Ed}}{\chi_2 N_{b,Rd}} + k_{zy} \frac{M_{1,Ed}}{\chi_{LT} M_{1,b,Rd}} + k_{zz} \frac{M_{2,Ed}}{M_{2,b,Rd}} \leq 1$$

dove:

N_{Ed} , $M_{1,Ed}$ ed $M_{2,Ed}$ sono le sollecitazioni massime sulla trave;

$N_{b,Rd}$, $M_{b,1,Rd}$ ed $M_{b,2,Rd}$ sono le sollecitazioni resistenti calcolate con il coefficiente di sicurezza γ_{M1} ;

χ sono i coefficienti di riduzione per instabilità flessionale e torsionale;

k_{yy} , k_{yz} , k_{zy} , k_{zz} sono i fattori di interazione. Ludi calcola tali fattori con entrambi i metodi (A e B) proposti dalla norma negli allegati.

Ai fini della verifica di un elemento compresso sono definiti i seguenti parametri di snellezza:

$$\lambda_1 = l_{0,1}/i_1 \quad \lambda_2 = l_{0,2}/i_2 \quad \lambda_\theta = l_{0,\theta}/i_{min}$$

dove ℓ_0 è la lunghezza libera d'inflessione dell'elemento e i è il raggio d'inerzia della sezione trasversale.

Per definire i singoli coefficienti χ è necessario calcolare la snellezza equivalente $\bar{\lambda}$ (funzione del carico critico) e il coefficiente Φ (funzione del carico critico e dell'imperfezione del materiale α).

$$\bar{\lambda} = \sqrt{\frac{A \cdot f_y}{N_{cr}}} \quad \text{e} \quad \Phi = 0.5 \cdot [1 + \alpha(\bar{\lambda} - 0.2) + \bar{\lambda}^2]$$

$$\chi = \frac{1}{\Phi + \sqrt{\Phi^2 - \bar{\lambda}^2}} \leq 1$$

In maniera del tutto equivalente è calcolato il valore di χ_{LT} :

$$\bar{\lambda}_{LT} = \sqrt{\frac{W \cdot f_y}{M_{cr}}} \quad \text{e} \quad \Phi_{LT} = 0.5 \cdot [1 + \alpha_{LT}(\bar{\lambda}_{LT} - 0.2) + \bar{\lambda}_{LT}^2]$$

$$\chi_{LT} = \frac{1}{\Phi_{LT} + \sqrt{\Phi_{LT}^2 - \bar{\lambda}_{LT}^2}} \leq 1$$

nelle formule utilizzate, i coefficienti di imperfezione α e α_{LT} sono tabulati nelle tabelle 6.1 e 6.3 a seconda del tipo di acciaio e del tipo di sezione; i carichi critici sono calcolati con la nota relazione:

$$N_{cr} = \pi^2 \frac{EA}{\lambda^2}$$

Per il calcolo del M_{cr} l'Eurocodice non specifica un metodo di calcolo, si richiede soltanto che esso inglobi la reale distribuzione dei momenti ed i vincoli applicati alle estremità dell'asta. Nella presente relazione il momento critico è calcolato seguendo le indicazioni della normativa inglese BS 5950-2000 "Structural use of steelwork in building", in accordo alla relazione del paragrafo 4.3 "Lateral torsional buckling":

$$M_{cr} = \frac{p_b \cdot W}{m_{LT}}$$

dove p_b è la tensione di buckling, W è il modulo di resistenza elastico o plastico a seconda della classe della sezione, m_{LT} è il coefficiente di equivalenza tra la trave sollecitata da momento costante e una distribuzione qualsiasi.

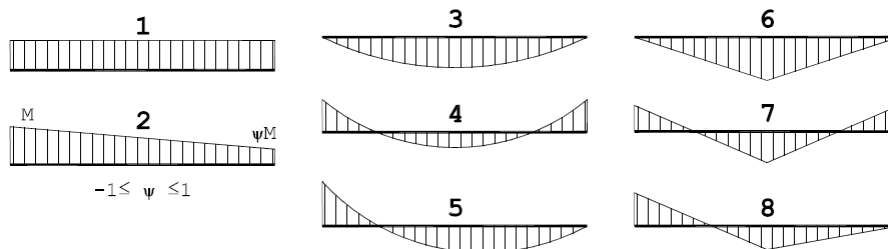
$$m_{LT} = 0.2 + \frac{0.15M_2 + 0.5M_3 + 0.15M_4}{M_{max}} \geq 0.44$$

in cui M_2 , M_3 , M_4 sono i momenti calcolati rispettivamente a $1/4\ell$, $1/2\ell$ e $3/4\ell$.

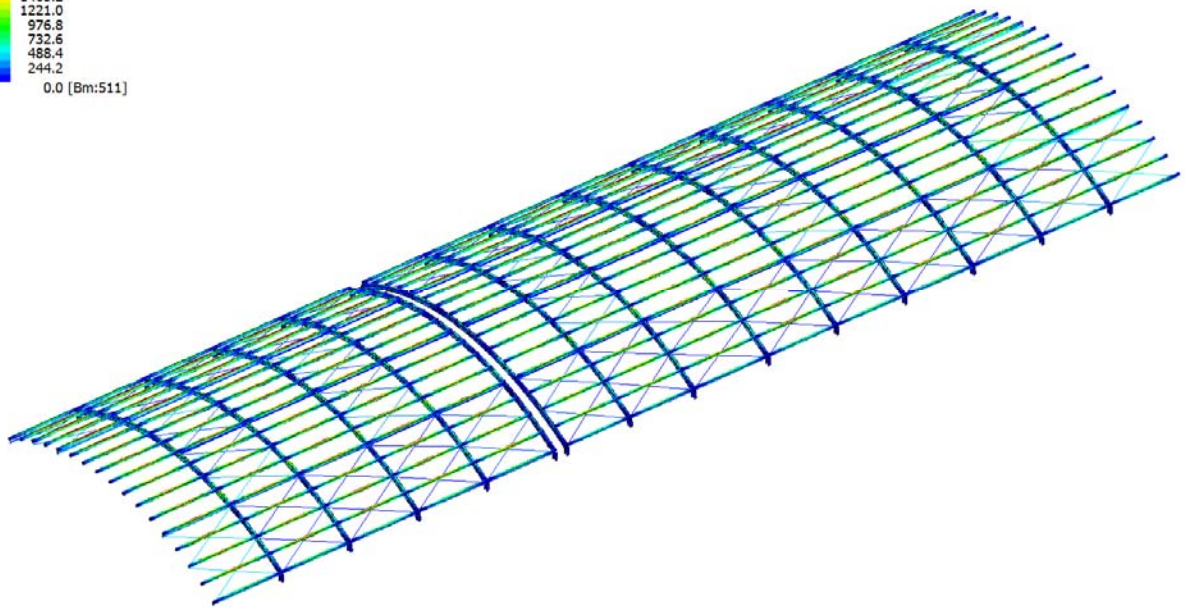
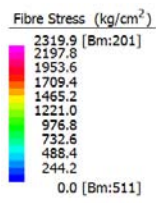
La tensione p_b è tabulata (BS 5950 table 16 e table 17) in funzione del materiale, del tipo di lavorazione (laminata o saldata) e dalla snellezza equivalente della trave λ_{LT} .

$$\lambda_{LT} = uv\lambda\sqrt{\beta_w}$$

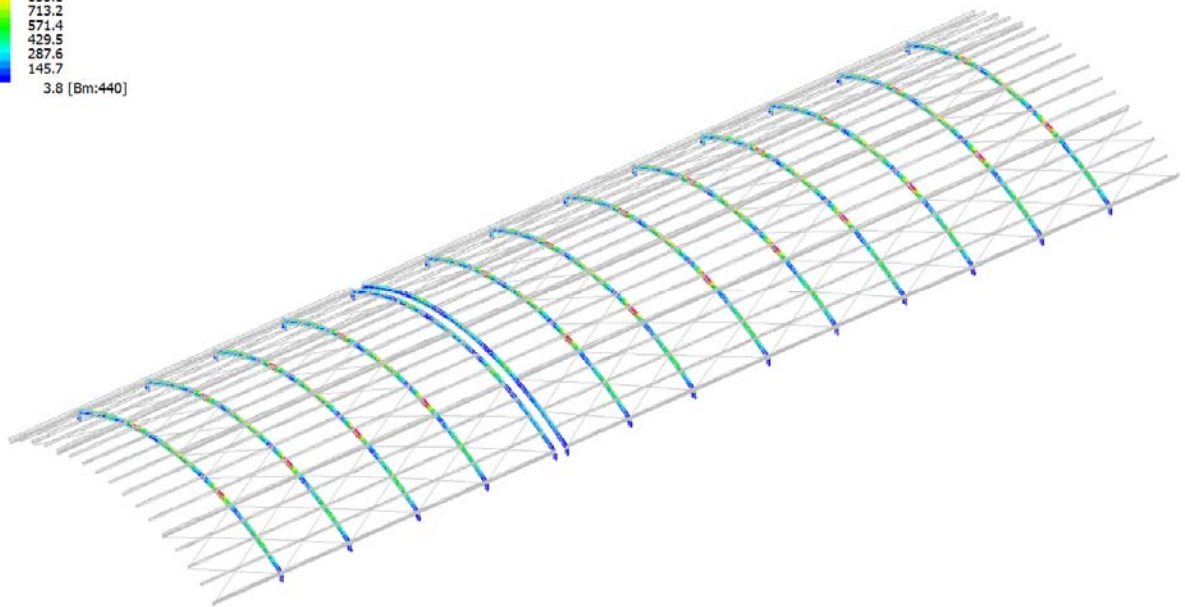
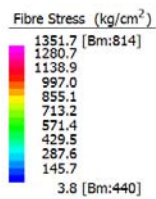
DIAGRAMMA DEI MOMENTI



COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

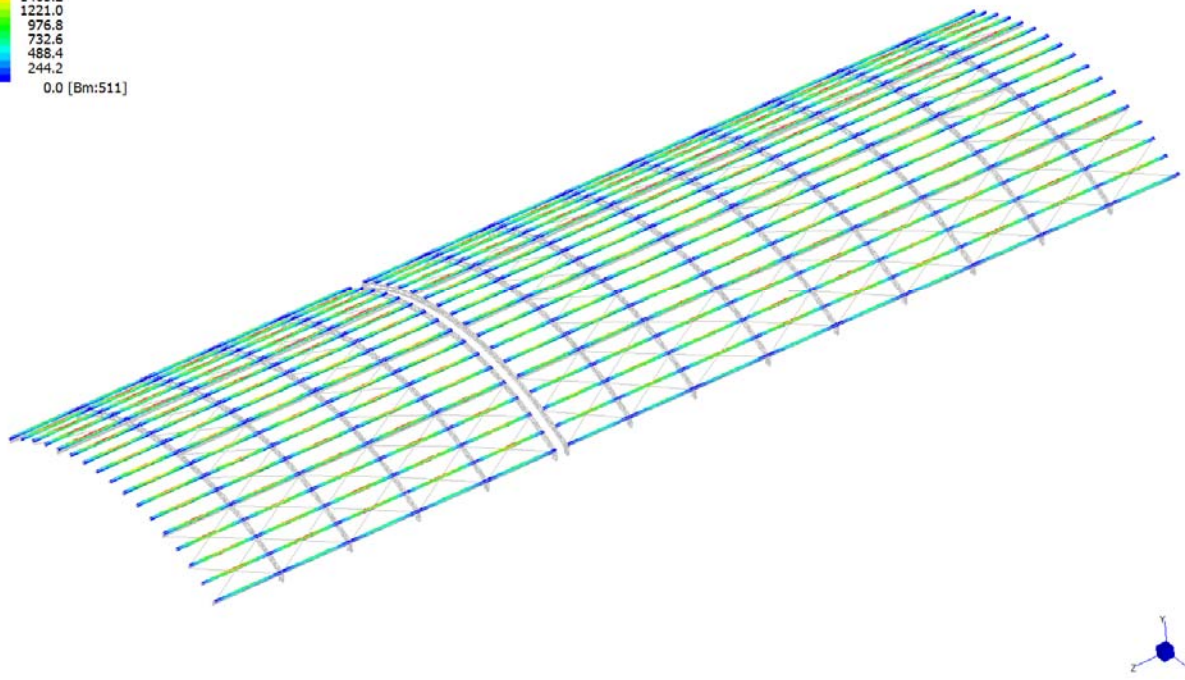
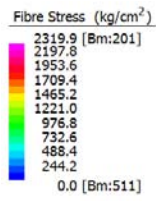


Inviluppo dello stato tensionale nelle comb. SLU

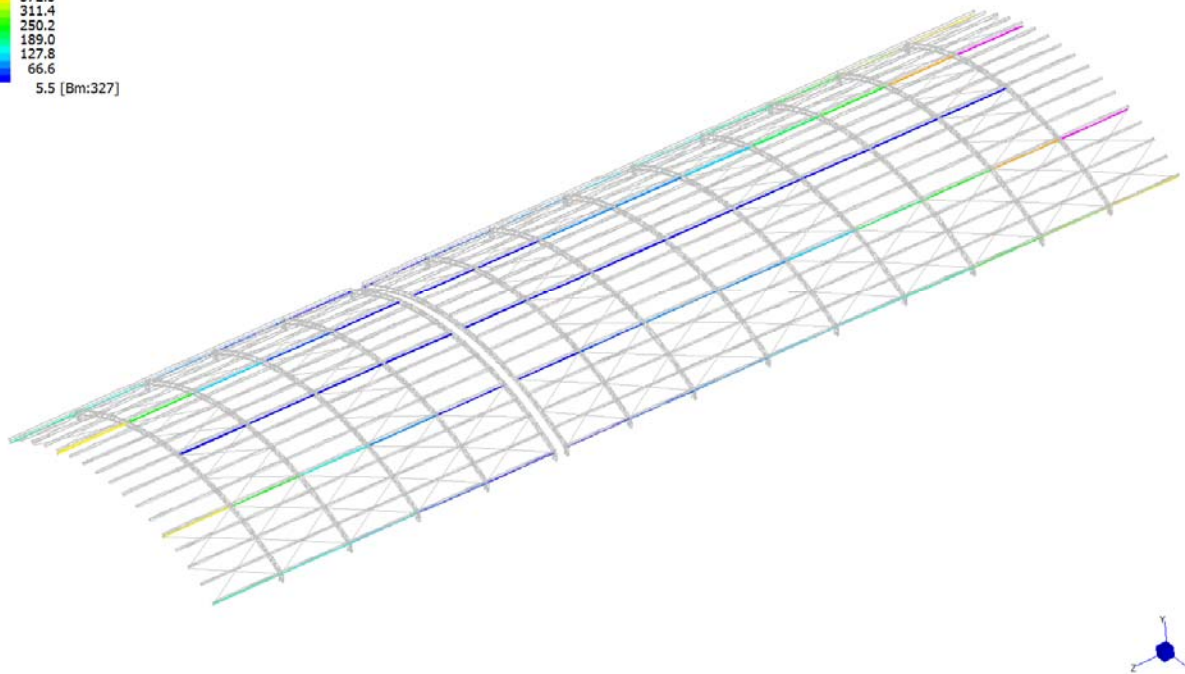
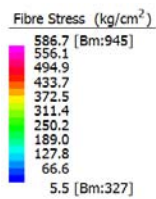


Inviluppo dello stato tensionale nelle comb. SLU (travi IPE240)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

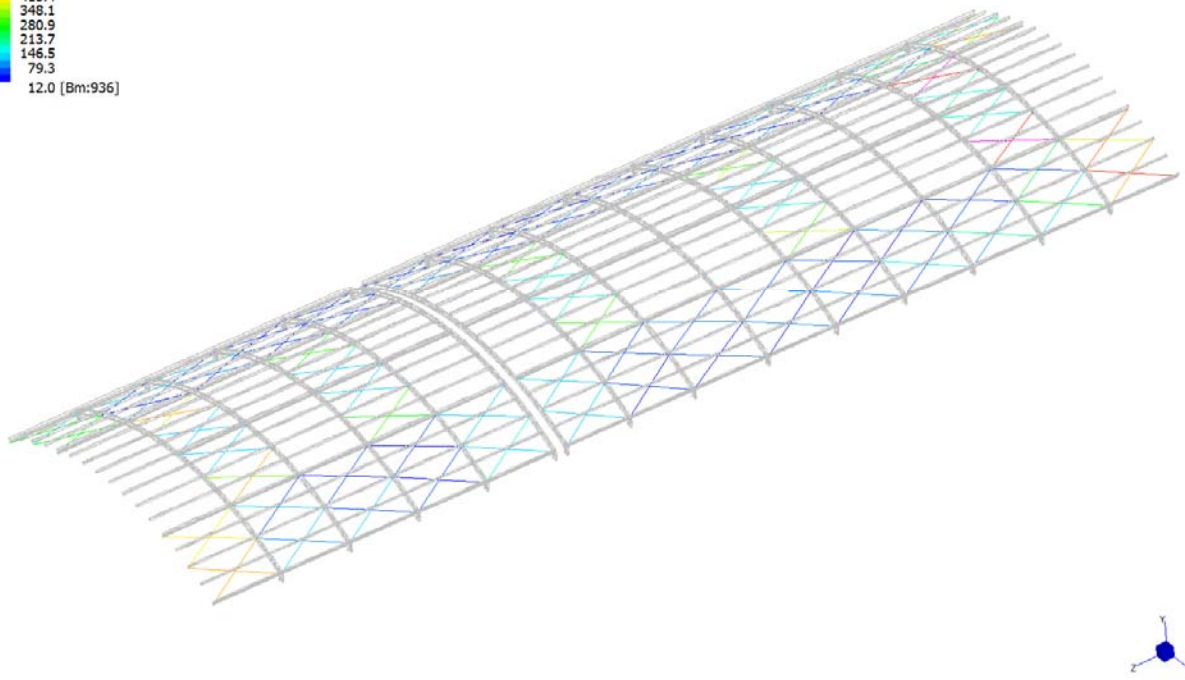
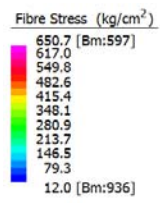


Inviluppo dello stato tensionale nelle comb. SLU (Tubo 120x80x3/4)



Inviluppo dello stato tensionale nelle comb. SLU (Tubo Ø88.9x4)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"



Involuppo dello stato tensionale nelle comb. SLU (Tondo Ø16)

Le tensioni sono da moltiplicare per due in base alla modellazione adottata.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

2.10.2. VERIFICHE ASTE ACCIAIO

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
1	+0.10	Cmb 22	45.00	1	
	+0.14	Cmb 19	0.00	1	Verificato
2	+0.01	Cmb 15	45.00	3	
	+0.03	Cmb 15	0.00	3	Verificato
3	+0.13	Cmb 21	55.61	1	
	+0.26	Cmb 20	0.00	1	Verificato
4	+0.13	Cmb 21	55.61	1	
	+0.26	Cmb 20	0.00	1	Verificato
5	+0.13	Cmb 21	0.00	1	
	+0.25	Cmb 12	0.00	1	Verificato
6	+0.13	Cmb 15	55.61	1	
	+0.26	Cmb 12	0.00	1	Verificato
7	+0.13	Cmb 15	0.00	1	
	+0.26	Cmb 13	0.00	1	Verificato
8	+0.12	Cmb 13	0.00	1	
	+0.23	Cmb 13	0.00	1	Verificato
9	+0.11	Cmb 13	0.00	1	
	+0.18	Cmb 13	0.00	1	Verificato
10	+0.07	Cmb 15	55.61	1	
	+0.10	Cmb 19	0.00	3	Verificato
11	+0.18	Cmb 15	55.61	1	
	+0.28	Cmb 15	0.00	1	Verificato
12	+0.26	Cmb 15	41.90	1	
	+0.36	Cmb 15	0.00	1	Verificato
13	+0.22	Cmb 15	0.00	1	
	+0.38	Cmb 15	0.00	1	Verificato
14	+0.12	Cmb 15	0.00	1	
	+0.17	Cmb 15	0.00	1	Verificato
15	+0.05	Cmb 15	55.61	1	
	+0.09	Cmb 20	0.00	2	Verificato
16	+0.11	Cmb 15	55.61	1	
	+0.18	Cmb 15	0.00	1	Verificato
17	+0.14	Cmb 15	55.61	1	
	+0.26	Cmb 15	0.00	1	Verificato
18	+0.16	Cmb 15	55.61	1	
	+0.30	Cmb 15	0.00	1	Verificato
19	+0.25	Cmb 15	0.00	1	
	+0.26	Cmb 15	0.00	1	Verificato
20	+0.05	Cmb 15	0.00	1	
	+0.08	Cmb 15	55.61	1	Verificato
21	+0.09	Cmb 15	0.00	1	
	+0.16	Cmb 15	55.61	1	Verificato
22	+0.10	Cmb 15	0.00	1	
	+0.20	Cmb 15	55.61	1	Verificato
23	+0.11	Cmb 15	0.00	1	
	+0.22	Cmb 15	55.61	1	Verificato
24	+0.11	Cmb 15	55.61	1	
	+0.21	Cmb 15	55.61	1	Verificato
25	+0.09	Cmb 15	55.61	1	
	+0.16	Cmb 15	55.61	1	Verificato
26	+0.07	Cmb 15	55.61	1	
	+0.10	Cmb 13	55.61	1	Verificato
27	+0.07	Cmb 15	0.00	1	
	+0.09	Cmb 15	55.61	1	Verificato
28	+0.17	Cmb 15	0.00	1	
	+0.27	Cmb 15	55.61	1	Verificato
29	+0.25	Cmb 15	0.00	1	
	+0.35	Cmb 15	41.90	1	Verificato

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
30	+0.21	Cmb 15	55.61	1	
	+0.36	Cmb 15	55.61	1	Verificato
31	+0.11	Cmb 15	55.61	1	
	+0.16	Cmb 15	55.61	1	Verificato
32	+0.06	Cmb 15	0.00	1	
	+0.07	Cmb 15	55.61	1	Verificato
33	+0.12	Cmb 15	0.00	1	
	+0.19	Cmb 15	55.61	1	Verificato
34	+0.14	Cmb 15	0.00	1	
	+0.26	Cmb 15	55.61	1	Verificato
35	+0.16	Cmb 15	0.00	1	
	+0.30	Cmb 15	55.61	1	Verificato
36	+0.24	Cmb 15	13.72	1	
	+0.26	Cmb 15	13.72	1	Verificato
37	+0.13	Cmb 20	45.00	1	
	+0.20	Cmb 20	0.00	1	Verificato
38	+0.13	Cmb 19	45.00	1	
	+0.20	Cmb 19	0.00	1	Verificato
39	+0.13	Cmb 19	45.00	1	
	+0.19	Cmb 20	0.00	1	Verificato
40	+0.11	Cmb 20	45.00	1	
	+0.16	Cmb 20	0.00	1	Verificato
41	+0.02	Cmb 15	45.00	3	
	+0.06	Cmb 15	0.00	3	Verificato
42	+0.02	Cmb 15	0.00	3	
	+0.06	Cmb 15	0.00	3	Verificato
43	+0.02	Cmb 15	45.00	3	
	+0.06	Cmb 15	0.00	3	Verificato
44	+0.02	Cmb 15	45.00	3	
	+0.06	Cmb 15	0.00	3	Verificato
45	+0.15	Cmb 21	55.61	1	
	+0.35	Cmb 20	0.00	1	Verificato
46	+0.16	Cmb 21	55.61	1	
	+0.36	Cmb 19	0.00	1	Verificato
47	+0.15	Cmb 22	55.61	1	
	+0.34	Cmb 19	0.00	1	Verificato
48	+0.12	Cmb 22	55.61	1	
	+0.30	Cmb 19	0.00	1	Verificato
49	+0.17	Cmb 21	55.61	1	
	+0.34	Cmb 20	0.00	1	Verificato
50	+0.17	Cmb 21	55.61	1	
	+0.35	Cmb 20	0.00	1	Verificato
51	+0.16	Cmb 22	55.61	1	
	+0.33	Cmb 19	0.00	1	Verificato
52	+0.14	Cmb 22	55.61	1	
	+0.29	Cmb 19	0.00	1	Verificato
53	+0.17	Cmb 12	55.61	1	
	+0.35	Cmb 15	0.00	1	Verificato
54	+0.17	Cmb 12	55.61	1	
	+0.35	Cmb 15	0.00	1	Verificato
55	+0.17	Cmb 12	55.61	1	
	+0.34	Cmb 15	0.00	1	Verificato
56	+0.15	Cmb 12	55.61	1	
	+0.31	Cmb 15	0.00	1	Verificato
57	+0.20	Cmb 13	55.61	1	
	+0.40	Cmb 13	0.00	1	Verificato
58	+0.20	Cmb 13	55.61	1	
	+0.40	Cmb 13	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
59	+0.20	Cmb 13	55.61	1	
	+0.40	Cmb 13	0.00	1	Verificato
60	+0.19	Cmb 13	55.61	1	
	+0.38	Cmb 13	0.00	1	Verificato
61	+0.20	Cmb 13	0.00	1	
	+0.41	Cmb 13	0.00	1	Verificato
62	+0.20	Cmb 13	0.00	1	
	+0.41	Cmb 13	0.00	1	Verificato
63	+0.19	Cmb 13	0.00	1	
	+0.41	Cmb 13	0.00	1	Verificato
64	+0.18	Cmb 13	0.00	1	
	+0.39	Cmb 13	0.00	1	Verificato
65	+0.19	Cmb 13	0.00	1	
	+0.39	Cmb 13	0.00	1	Verificato
66	+0.19	Cmb 13	0.00	1	
	+0.39	Cmb 13	0.00	1	Verificato
67	+0.19	Cmb 13	0.00	1	
	+0.39	Cmb 13	0.00	1	Verificato
68	+0.18	Cmb 13	0.00	1	
	+0.38	Cmb 13	0.00	1	Verificato
69	+0.18	Cmb 1	0.00	1	
	+0.31	Cmb 1	0.00	1	Verificato
70	+0.18	Cmb 1	0.00	1	
	+0.31	Cmb 1	0.00	1	Verificato
71	+0.17	Cmb 1	0.00	1	
	+0.31	Cmb 13	0.00	1	Verificato
72	+0.17	Cmb 13	0.00	1	
	+0.31	Cmb 13	0.00	1	Verificato
73	+0.12	Cmb 1	0.00	1	
	+0.19	Cmb 2	0.00	1	Verificato
74	+0.12	Cmb 1	0.00	1	
	+0.19	Cmb 2	0.00	1	Verificato
75	+0.12	Cmb 1	0.00	1	
	+0.18	Cmb 2	0.00	1	Verificato
76	+0.14	Cmb 23	55.61	3	
	+0.19	Cmb 2	0.00	1	Verificato
77	+0.30	Cmb 15	55.61	1	
	+0.48	Cmb 15	0.00	1	Verificato
78	+0.30	Cmb 15	55.61	1	
	+0.49	Cmb 15	0.00	1	Verificato
79	+0.29	Cmb 15	55.61	1	
	+0.48	Cmb 15	0.00	1	Verificato
80	+0.28	Cmb 15	55.61	1	
	+0.47	Cmb 15	0.00	1	Verificato
81	+0.43	Cmb 15	41.90	1	
	+0.63	Cmb 15	0.00	1	Verificato
82	+0.44	Cmb 15	41.90	1	
	+0.63	Cmb 15	0.00	1	Verificato
83	+0.43	Cmb 15	41.90	1	
	+0.62	Cmb 15	0.00	1	Verificato
84	+0.41	Cmb 15	41.90	1	
	+0.60	Cmb 15	0.00	1	Verificato
85	+0.38	Cmb 15	0.00	1	
	+0.67	Cmb 15	0.00	1	Verificato
86	+0.38	Cmb 15	0.00	1	
	+0.68	Cmb 15	0.00	1	Verificato
87	+0.37	Cmb 15	0.00	1	
	+0.67	Cmb 15	0.00	1	Verificato
88	+0.36	Cmb 15	0.00	1	
	+0.65	Cmb 15	0.00	1	Verificato
89	+0.20	Cmb 15	0.00	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.31	Cmb 15	0.00	1	Verificato
90	+0.20	Cmb 15	0.00	1	
	+0.31	Cmb 15	0.00	1	Verificato
91	+0.19	Cmb 15	0.00	1	
	+0.31	Cmb 15	0.00	1	Verificato
92	+0.19	Cmb 15	0.00	1	
	+0.31	Cmb 15	0.00	1	Verificato
93	+0.10	Cmb 15	55.61	1	
	+0.16	Cmb 15	0.00	1	Verificato
94	+0.10	Cmb 15	55.61	1	
	+0.16	Cmb 15	0.00	1	Verificato
95	+0.11	Cmb 15	55.61	1	
	+0.17	Cmb 15	0.00	1	Verificato
96	+0.11	Cmb 15	55.61	1	
	+0.19	Cmb 15	0.00	1	Verificato
97	+0.21	Cmb 15	55.61	1	
	+0.38	Cmb 15	0.00	1	Verificato
98	+0.21	Cmb 15	55.61	1	
	+0.37	Cmb 15	0.00	1	Verificato
99	+0.21	Cmb 15	55.61	1	
	+0.38	Cmb 15	0.00	1	Verificato
100	+0.21	Cmb 15	55.61	1	
	+0.40	Cmb 15	0.00	1	Verificato
101	+0.25	Cmb 15	55.61	1	
	+0.50	Cmb 15	0.00	1	Verificato
102	+0.25	Cmb 15	55.61	1	
	+0.50	Cmb 15	0.00	1	Verificato
103	+0.25	Cmb 15	55.61	1	
	+0.50	Cmb 15	0.00	1	Verificato
104	+0.25	Cmb 15	55.61	1	
	+0.51	Cmb 15	0.00	1	Verificato
105	+0.29	Cmb 15	55.61	1	
	+0.57	Cmb 15	0.00	1	Verificato
106	+0.29	Cmb 15	55.61	1	
	+0.57	Cmb 15	0.00	1	Verificato
107	+0.29	Cmb 15	55.61	1	
	+0.58	Cmb 15	0.00	1	Verificato
108	+0.28	Cmb 15	55.61	1	
	+0.58	Cmb 15	0.00	1	Verificato
109	+0.44	Cmb 15	0.00	1	
	+0.47	Cmb 15	0.00	1	Verificato
110	+0.44	Cmb 15	0.00	1	
	+0.47	Cmb 15	0.00	1	Verificato
111	+0.44	Cmb 15	0.00	1	
	+0.46	Cmb 15	0.00	1	Verificato
112	+0.42	Cmb 15	0.00	1	
	+0.45	Cmb 15	0.00	1	Verificato
113	+0.09	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
114	+0.09	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
115	+0.09	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
116	+0.09	Cmb 15	0.00	1	
	+0.16	Cmb 15	55.61	1	Verificato
117	+0.17	Cmb 15	0.00	1	
	+0.31	Cmb 15	55.61	1	Verificato
118	+0.17	Cmb 15	0.00	1	
	+0.30	Cmb 15	55.61	1	Verificato
119	+0.17	Cmb 15	0.00	1	
	+0.31	Cmb 15	55.61	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
120	+0.16	Cmb 15	0.00	1	
	+0.31	Cmb 15	55.61	1	Verificato
121	+0.18	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
122	+0.18	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
123	+0.18	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
124	+0.18	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
125	+0.20	Cmb 15	0.00	1	
	+0.41	Cmb 15	55.61	1	Verificato
126	+0.20	Cmb 15	0.00	1	
	+0.41	Cmb 15	55.61	1	Verificato
127	+0.20	Cmb 15	0.00	1	
	+0.41	Cmb 15	55.61	1	Verificato
128	+0.20	Cmb 15	0.00	1	
	+0.41	Cmb 15	55.61	1	Verificato
129	+0.20	Cmb 15	55.61	1	
	+0.38	Cmb 15	55.61	1	Verificato
130	+0.20	Cmb 15	55.61	1	
	+0.39	Cmb 15	55.61	1	Verificato
131	+0.20	Cmb 15	55.61	1	
	+0.39	Cmb 15	55.61	1	Verificato
132	+0.20	Cmb 15	55.61	1	
	+0.40	Cmb 15	55.61	1	Verificato
133	+0.16	Cmb 15	55.61	1	
	+0.29	Cmb 15	55.61	1	Verificato
134	+0.16	Cmb 15	55.61	1	
	+0.29	Cmb 15	55.61	1	Verificato
135	+0.16	Cmb 15	55.61	1	
	+0.30	Cmb 15	55.61	1	Verificato
136	+0.16	Cmb 15	55.61	1	
	+0.31	Cmb 15	55.61	1	Verificato
137	+0.12	Cmb 6	55.61	1	
	+0.19	Cmb 6	55.61	1	Verificato
138	+0.12	Cmb 6	55.61	1	
	+0.19	Cmb 6	55.61	1	Verificato
139	+0.12	Cmb 6	55.61	1	
	+0.19	Cmb 6	55.61	1	Verificato
140	+0.12	Cmb 6	55.61	1	
	+0.19	Cmb 6	55.61	1	Verificato
141	+0.12	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
142	+0.12	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
143	+0.12	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
144	+0.13	Cmb 23	0.00	3	
	+0.19	Cmb 15	55.61	1	Verificato
145	+0.30	Cmb 15	0.00	1	
	+0.49	Cmb 15	55.61	1	Verificato
146	+0.31	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
147	+0.31	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
148	+0.29	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
149	+0.44	Cmb 15	0.00	1	
	+0.64	Cmb 15	41.90	1	Verificato
150	+0.45	Cmb 15	0.00	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.65	Cmb 15	41.90	1	Verificato
151	+0.45	Cmb 15	0.00	1	
	+0.65	Cmb 15	41.90	1	Verificato
152	+0.43	Cmb 15	0.00	1	
	+0.63	Cmb 15	41.90	1	Verificato
153	+0.38	Cmb 15	55.61	1	
	+0.69	Cmb 15	55.61	1	Verificato
154	+0.39	Cmb 15	55.61	1	
	+0.69	Cmb 15	55.61	1	Verificato
155	+0.39	Cmb 15	55.61	1	
	+0.69	Cmb 15	55.61	1	Verificato
156	+0.38	Cmb 15	55.61	1	
	+0.70	Cmb 15	55.61	1	Verificato
157	+0.20	Cmb 15	55.61	1	
	+0.32	Cmb 15	55.61	1	Verificato
158	+0.20	Cmb 15	55.61	1	
	+0.32	Cmb 15	55.61	1	Verificato
159	+0.20	Cmb 15	55.61	1	
	+0.32	Cmb 15	55.61	1	Verificato
160	+0.20	Cmb 15	55.61	1	
	+0.35	Cmb 15	55.61	1	Verificato
161	+0.10	Cmb 15	0.00	1	
	+0.16	Cmb 15	55.61	1	Verificato
162	+0.10	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
163	+0.10	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
164	+0.10	Cmb 15	0.00	1	
	+0.18	Cmb 15	55.61	1	Verificato
165	+0.21	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
166	+0.21	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
167	+0.21	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
168	+0.21	Cmb 15	0.00	1	
	+0.39	Cmb 15	55.61	1	Verificato
169	+0.25	Cmb 15	0.00	1	
	+0.49	Cmb 15	55.61	1	Verificato
170	+0.25	Cmb 15	0.00	1	
	+0.49	Cmb 15	55.61	1	Verificato
171	+0.25	Cmb 15	0.00	1	
	+0.49	Cmb 15	55.61	1	Verificato
172	+0.24	Cmb 15	0.00	1	
	+0.51	Cmb 15	55.61	1	Verificato
173	+0.29	Cmb 15	0.00	1	
	+0.57	Cmb 15	55.61	1	Verificato
174	+0.29	Cmb 15	0.00	1	
	+0.57	Cmb 15	55.61	1	Verificato
175	+0.29	Cmb 15	0.00	1	
	+0.57	Cmb 15	55.61	1	Verificato
176	+0.28	Cmb 15	0.00	1	
	+0.58	Cmb 15	55.61	1	Verificato
177	+0.45	Cmb 15	13.72	1	
	+0.47	Cmb 15	13.72	1	Verificato
178	+0.45	Cmb 15	13.72	1	
	+0.48	Cmb 15	13.72	1	Verificato
179	+0.45	Cmb 15	13.72	1	
	+0.48	Cmb 15	13.72	1	Verificato
180	+0.44	Cmb 15	13.72	1	
	+0.47	Cmb 15	13.72	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
181	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
182	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
183	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
184	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
185	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
186	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
187	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
188	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
189	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
190	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
191	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
192	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
193	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
194	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
195	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
196	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
197	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
198	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
199	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
200	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
201	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
202	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
203	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
204	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
205	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
206	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
207	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
208	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
209	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
210	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
211	+0.56	Cmb 15	202.50	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.59	Cmb 15	0.00	1	Verificato
212	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
213	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
214	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
215	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
216	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
217	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
218	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
219	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
220	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
221	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
222	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
223	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
224	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
225	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
226	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
227	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
228	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
229	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
230	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
231	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
232	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
233	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
234	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
235	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
236	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
237	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
238	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
239	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
240	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
241	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
242	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
243	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
244	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
245	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
246	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
247	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
248	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
249	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
250	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
251	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
252	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
253	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
254	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
255	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
256	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
257	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
258	+0.56	Cmb 15	202.50	1	
	+0.60	Cmb 15	0.00	1	Verificato
259	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
260	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
261	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
262	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
263	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
264	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
265	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
266	+0.06	Cmb 26	0.00	1	
	+0.13	Cmb 26	0.00	1	Verificato
267	+0.04	Cmb 26	0.00	T.	
	+0.06	Cmb 23	0.00	1	Verificato
268	+0.02	Cmb 15	0.00	1	
	+0.05	Cmb 15	0.00	1	Verificato
269	+0.05	Cmb 25	0.00	T.	
	+0.09	Cmb 24	0.00	1	Verificato
270	+0.19	Cmb 26	0.00	1	
	+0.38	Cmb 26	0.00	1	Verificato
271	+0.15	Cmb 26	0.00	T.	
	+0.29	Cmb 23	0.00	1	Verificato
272	+0.06	Cmb 26	0.00	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.12	Cmb 26	0.00	1	Verificato
273	+0.06	Cmb 26	0.00	T.	
	+0.11	Cmb 23	0.00	1	Verificato
274	+0.06	Cmb 25	0.00	1	
	+0.12	Cmb 25	0.00	1	Verificato
275	+0.06	Cmb 25	0.00	T.	
	+0.11	Cmb 24	0.00	1	Verificato
276	+0.15	Cmb 25	0.00	1	
	+0.31	Cmb 25	0.00	1	Verificato
277	+0.19	Cmb 25	0.00	T.	
	+0.36	Cmb 24	0.00	1	Verificato
278	+0.05	Cmb 26	0.00	1	
	+0.09	Cmb 26	0.00	1	Verificato
279	+0.02	Cmb 22	0.00	T.	
	+0.03	Cmb 12	0.00	1	Verificato
280	+0.03	Cmb 25	0.00	1	
	+0.07	Cmb 25	0.00	1	Verificato
281	+0.06	Cmb 25	0.00	T.	
	+0.12	Cmb 24	0.00	1	Verificato
282	+0.03	Cmb 25	0.00	T.	
	+0.06	Cmb 24	0.00	1	Verificato
283	+0.02	Cmb 24	0.00	T.	
	+0.03	Cmb 25	0.00	1	Verificato
284	+0.02	Cmb 25	0.00	T.	
	+0.04	Cmb 24	0.00	1	Verificato
285	+6.34e-03	Cmb 25	0.00	1	
	+0.01	Cmb 25	0.00	1	Verificato
286	+0.13	Cmb 24	0.00	1	
	+0.26	Cmb 24	0.00	1	Verificato
287	+0.12	Cmb 25	0.00	1	
	+0.24	Cmb 25	0.00	1	Verificato
288	+0.06	Cmb 25	0.00	T.	
	+0.11	Cmb 24	0.00	1	Verificato
289	+0.05	Cmb 25	0.00	1	
	+0.11	Cmb 25	0.00	1	Verificato
290	+0.06	Cmb 26	0.00	T.	
	+0.11	Cmb 23	0.00	1	Verificato
291	+0.06	Cmb 23	0.00	T.	
	+0.11	Cmb 26	0.00	1	Verificato
292	+0.12	Cmb 23	0.00	1	
	+0.24	Cmb 23	0.00	1	Verificato
293	+0.13	Cmb 26	0.00	1	
	+0.26	Cmb 26	0.00	1	Verificato
294	+9.01e-03	Cmb 22	0.00	T.	
	+0.01	Cmb 19	0.00	1	Verificato
295	+0.02	Cmb 24	0.00	1	
	+0.04	Cmb 24	0.00	1	Verificato
296	+0.02	Cmb 26	0.00	T.	
	+0.04	Cmb 23	0.00	1	Verificato
297	+0.03	Cmb 24	0.00	1	
	+0.06	Cmb 24	0.00	1	Verificato
298	+0.05	Cmb 26	0.00	1	
	+0.10	Cmb 26	0.00	1	Verificato
299	+0.03	Cmb 26	0.00	T.	
	+0.06	Cmb 23	0.00	1	Verificato
300	+0.03	Cmb 25	0.00	1	
	+0.06	Cmb 25	0.00	1	Verificato
301	+0.05	Cmb 25	0.00	T.	
	+0.10	Cmb 24	0.00	1	Verificato
302	+0.06	Cmb 15	0.00	T.	
	+0.08	Cmb 12	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
303	+0.06	Cmb 15	0.00	1	
	+0.11	Cmb 15	0.00	1	Verificato
304	+0.03	Cmb 26	0.00	T.	
	+0.06	Cmb 23	0.00	1	Verificato
305	+0.03	Cmb 26	0.00	1	
	+0.06	Cmb 26	0.00	1	Verificato
306	+0.01	Cmb 25	0.00	T.	
	+0.02	Cmb 24	0.00	1	Verificato
307	+0.03	Cmb 25	0.00	T.	
	+0.06	Cmb 24	0.00	1	Verificato
308	+0.04	Cmb 25	0.00	T.	
	+0.10	Cmb 24	0.00	1	Verificato
309	+0.06	Cmb 25	0.00	T.	
	+0.15	Cmb 24	0.00	1	Verificato
310	+0.01	Cmb 26	0.00	1	
	+0.03	Cmb 26	0.00	1	Verificato
311	+0.03	Cmb 26	0.00	1	
	+0.06	Cmb 26	0.00	1	Verificato
312	+0.04	Cmb 26	0.00	1	
	+0.10	Cmb 26	0.00	1	Verificato
313	+0.06	Cmb 23	0.00	T.	
	+0.15	Cmb 26	0.00	1	Verificato
314	+7.64e-03	Cmb 15	0.00	1	
	+0.02	Cmb 15	0.00	1	Verificato
315	+0.03	Cmb 26	0.00	1	
	+0.07	Cmb 26	0.00	1	Verificato
316	+0.06	Cmb 26	0.00	1	
	+0.14	Cmb 26	0.00	1	Verificato
317	+0.10	Cmb 26	0.00	1	
	+0.24	Cmb 26	0.00	1	Verificato
318	+4.94e-03	Cmb 25	0.00	T.	
	+0.01	Cmb 24	0.00	1	Verificato
319	+0.03	Cmb 25	0.00	T.	
	+0.07	Cmb 24	0.00	1	Verificato
320	+0.06	Cmb 25	0.00	T.	
	+0.14	Cmb 24	0.00	1	Verificato
321	+0.10	Cmb 25	0.00	T.	
	+0.24	Cmb 24	0.00	1	Verificato
322	+0.08	Cmb 26	0.00	1	
	+0.20	Cmb 26	0.00	1	Verificato
323	+0.08	Cmb 25	0.00	T.	
	+0.19	Cmb 24	0.00	1	Verificato
324	+0.01	Cmb 25	0.00	T.	
	+0.03	Cmb 24	0.00	1	Verificato
325	+6.96e-03	Cmb 26	0.00	1	
	+0.02	Cmb 26	0.00	1	Verificato
326	+3.96e-03	Cmb 24	0.00	1	
	+9.87e-03	Cmb 24	0.00	1	Verificato
327	+2.40e-03	Cmb 26	0.00	1	
	+5.97e-03	Cmb 26	0.00	1	Verificato
328	+0.10	Cmb 21	0.00	1	
	+0.14	Cmb 20	45.00	1	Verificato
329	+0.01	Cmb 15	0.00	3	
	+0.03	Cmb 15	45.00	3	Verificato
330	+0.12	Cmb 22	0.00	1	
	+0.25	Cmb 19	55.61	1	Verificato
331	+0.13	Cmb 21	0.00	1	
	+0.25	Cmb 19	55.61	1	Verificato
332	+0.13	Cmb 21	55.61	1	
	+0.24	Cmb 12	55.61	1	Verificato
333	+0.13	Cmb 15	0.00	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.25	Cmb 12	55.61	1	Verificato
334	+0.13	Cmb 15	55.61	1	
	+0.24	Cmb 13	55.61	1	Verificato
335	+0.11	Cmb 13	55.61	1	
	+0.22	Cmb 13	55.61	1	Verificato
336	+0.10	Cmb 13	55.61	1	
	+0.17	Cmb 13	55.61	1	Verificato
337	+0.07	Cmb 15	0.00	1	
	+0.10	Cmb 20	55.61	3	Verificato
338	+0.17	Cmb 15	0.00	1	
	+0.26	Cmb 15	55.61	1	Verificato
339	+0.24	Cmb 15	0.00	1	
	+0.34	Cmb 15	41.90	1	Verificato
340	+0.21	Cmb 15	55.61	1	
	+0.36	Cmb 15	55.61	1	Verificato
341	+0.11	Cmb 15	55.61	1	
	+0.16	Cmb 15	55.61	1	Verificato
342	+0.05	Cmb 15	0.00	1	
	+0.09	Cmb 19	55.61	2	Verificato
343	+0.11	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
344	+0.13	Cmb 15	0.00	1	
	+0.24	Cmb 15	55.61	1	Verificato
345	+0.15	Cmb 15	0.00	1	
	+0.28	Cmb 15	55.61	1	Verificato
346	+0.24	Cmb 15	13.72	1	
	+0.25	Cmb 15	13.72	1	Verificato
347	+0.04	Cmb 15	55.61	1	
	+0.07	Cmb 15	0.00	1	Verificato
348	+0.09	Cmb 15	55.61	1	
	+0.15	Cmb 15	0.00	1	Verificato
349	+0.09	Cmb 15	55.61	1	
	+0.19	Cmb 15	0.00	1	Verificato
350	+0.10	Cmb 15	55.61	1	
	+0.21	Cmb 15	0.00	1	Verificato
351	+0.11	Cmb 15	0.00	1	
	+0.20	Cmb 15	0.00	1	Verificato
352	+0.09	Cmb 15	0.00	1	
	+0.15	Cmb 15	0.00	1	Verificato
353	+0.07	Cmb 15	0.00	1	
	+0.09	Cmb 13	0.00	1	Verificato
354	+0.07	Cmb 15	55.61	1	
	+0.09	Cmb 15	0.00	1	Verificato
355	+0.16	Cmb 15	55.61	1	
	+0.26	Cmb 15	0.00	1	Verificato
356	+0.23	Cmb 15	41.90	1	
	+0.33	Cmb 15	0.00	1	Verificato
357	+0.20	Cmb 15	0.00	1	
	+0.34	Cmb 15	0.00	1	Verificato
358	+0.10	Cmb 15	0.00	1	
	+0.15	Cmb 15	0.00	1	Verificato
359	+0.05	Cmb 15	55.61	1	
	+0.07	Cmb 15	0.00	1	Verificato
360	+0.11	Cmb 15	55.61	1	
	+0.18	Cmb 15	0.00	1	Verificato
361	+0.13	Cmb 15	55.61	1	
	+0.25	Cmb 15	0.00	1	Verificato
362	+0.15	Cmb 15	55.61	1	
	+0.28	Cmb 15	0.00	1	Verificato
363	+0.23	Cmb 15	0.00	1	
	+0.24	Cmb 15	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
364	+0.13	Cmb 19	0.00	1	
	+0.19	Cmb 19	45.00	1	Verificato
365	+0.14	Cmb 19	0.00	1	
	+0.21	Cmb 20	45.00	1	Verificato
366	+0.13	Cmb 20	0.00	1	
	+0.19	Cmb 20	45.00	1	Verificato
367	+0.11	Cmb 19	0.00	1	
	+0.16	Cmb 19	45.00	1	Verificato
368	+0.02	Cmb 15	0.00	3	
	+0.06	Cmb 15	45.00	3	Verificato
369	+0.02	Cmb 15	0.00	3	
	+0.06	Cmb 15	45.00	3	Verificato
370	+0.02	Cmb 15	0.00	3	
	+0.06	Cmb 15	45.00	3	Verificato
371	+0.02	Cmb 15	0.00	3	
	+0.06	Cmb 15	45.00	3	Verificato
372	+0.15	Cmb 22	0.00	1	
	+0.35	Cmb 19	55.61	1	Verificato
373	+0.16	Cmb 22	0.00	1	
	+0.37	Cmb 19	55.61	1	Verificato
374	+0.15	Cmb 21	0.00	1	
	+0.35	Cmb 20	55.61	1	Verificato
375	+0.12	Cmb 21	0.00	1	
	+0.31	Cmb 20	55.61	1	Verificato
376	+0.17	Cmb 21	0.00	1	
	+0.33	Cmb 20	55.61	1	Verificato
377	+0.18	Cmb 22	0.00	1	
	+0.36	Cmb 19	55.61	1	Verificato
378	+0.17	Cmb 21	0.00	1	
	+0.34	Cmb 20	55.61	1	Verificato
379	+0.15	Cmb 21	0.00	1	
	+0.31	Cmb 20	55.61	1	Verificato
380	+0.17	Cmb 21	55.61	1	
	+0.33	Cmb 15	55.61	1	Verificato
381	+0.18	Cmb 22	55.61	1	
	+0.36	Cmb 15	55.61	1	Verificato
382	+0.17	Cmb 21	55.61	1	
	+0.34	Cmb 15	55.61	1	Verificato
383	+0.15	Cmb 12	0.00	1	
	+0.32	Cmb 15	55.61	1	Verificato
384	+0.19	Cmb 13	0.00	1	
	+0.38	Cmb 13	55.61	1	Verificato
385	+0.21	Cmb 13	0.00	1	
	+0.41	Cmb 13	55.61	1	Verificato
386	+0.20	Cmb 13	0.00	1	
	+0.40	Cmb 13	55.61	1	Verificato
387	+0.19	Cmb 13	0.00	1	
	+0.38	Cmb 13	55.61	1	Verificato
388	+0.19	Cmb 13	55.61	1	
	+0.39	Cmb 13	55.61	1	Verificato
389	+0.21	Cmb 13	55.61	1	
	+0.42	Cmb 13	55.61	1	Verificato
390	+0.20	Cmb 13	55.61	1	
	+0.41	Cmb 13	55.61	1	Verificato
391	+0.18	Cmb 13	55.61	1	
	+0.39	Cmb 13	55.61	1	Verificato
392	+0.18	Cmb 13	55.61	1	
	+0.37	Cmb 13	55.61	1	Verificato
393	+0.19	Cmb 13	55.61	1	
	+0.40	Cmb 13	55.61	1	Verificato
394	+0.19	Cmb 13	55.61	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.39	Cmb 13	55.61	1	Verificato
395	+0.18	Cmb 13	55.61	1	
	+0.38	Cmb 13	55.61	1	Verificato
396	+0.17	Cmb 1	55.61	1	
	+0.30	Cmb 1	55.61	1	Verificato
397	+0.18	Cmb 1	55.61	1	
	+0.32	Cmb 1	55.61	1	Verificato
398	+0.17	Cmb 1	55.61	1	
	+0.31	Cmb 13	55.61	1	Verificato
399	+0.17	Cmb 13	55.61	1	
	+0.31	Cmb 13	55.61	1	Verificato
400	+0.11	Cmb 1	55.61	1	
	+0.18	Cmb 2	55.61	1	Verificato
401	+0.12	Cmb 1	55.61	1	
	+0.19	Cmb 2	55.61	1	Verificato
402	+0.12	Cmb 1	55.61	1	
	+0.18	Cmb 2	55.61	1	Verificato
403	+0.14	Cmb 25	0.00	1	
	+0.19	Cmb 2	55.61	1	Verificato
404	+0.28	Cmb 15	0.00	1	
	+0.46	Cmb 15	55.61	1	Verificato
405	+0.31	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
406	+0.29	Cmb 15	0.00	1	
	+0.48	Cmb 15	55.61	1	Verificato
407	+0.28	Cmb 15	0.00	1	
	+0.47	Cmb 15	55.61	1	Verificato
408	+0.41	Cmb 15	0.00	1	
	+0.59	Cmb 15	41.90	1	Verificato
409	+0.45	Cmb 15	0.00	1	
	+0.64	Cmb 15	41.90	1	Verificato
410	+0.43	Cmb 15	0.00	1	
	+0.62	Cmb 15	41.90	1	Verificato
411	+0.41	Cmb 15	0.00	1	
	+0.60	Cmb 15	41.90	1	Verificato
412	+0.36	Cmb 15	55.61	1	
	+0.63	Cmb 15	55.61	1	Verificato
413	+0.39	Cmb 15	55.61	1	
	+0.69	Cmb 15	55.61	1	Verificato
414	+0.37	Cmb 15	55.61	1	
	+0.67	Cmb 15	55.61	1	Verificato
415	+0.36	Cmb 15	55.61	1	
	+0.65	Cmb 15	55.61	1	Verificato
416	+0.19	Cmb 15	55.61	1	
	+0.29	Cmb 15	55.61	1	Verificato
417	+0.20	Cmb 15	55.61	1	
	+0.32	Cmb 15	55.61	1	Verificato
418	+0.20	Cmb 15	55.61	1	
	+0.31	Cmb 15	55.61	1	Verificato
419	+0.19	Cmb 15	55.61	1	
	+0.31	Cmb 15	55.61	1	Verificato
420	+0.10	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
421	+0.10	Cmb 15	0.00	1	
	+0.16	Cmb 15	55.61	1	Verificato
422	+0.11	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
423	+0.11	Cmb 15	0.00	1	
	+0.19	Cmb 15	55.61	1	Verificato
424	+0.20	Cmb 15	0.00	1	
	+0.35	Cmb 15	55.61	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
425	+0.22	Cmb 15	0.00	1	
	+0.38	Cmb 15	55.61	1	Verificato
426	+0.21	Cmb 15	0.00	1	
	+0.38	Cmb 15	55.61	1	Verificato
427	+0.21	Cmb 15	0.00	1	
	+0.40	Cmb 15	55.61	1	Verificato
428	+0.23	Cmb 15	0.00	1	
	+0.46	Cmb 15	55.61	1	Verificato
429	+0.25	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
430	+0.25	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
431	+0.25	Cmb 15	0.00	1	
	+0.51	Cmb 15	55.61	1	Verificato
432	+0.27	Cmb 15	0.00	1	
	+0.53	Cmb 15	55.61	1	Verificato
433	+0.29	Cmb 15	0.00	1	
	+0.58	Cmb 15	55.61	1	Verificato
434	+0.29	Cmb 15	0.00	1	
	+0.58	Cmb 15	55.61	1	Verificato
435	+0.28	Cmb 15	0.00	1	
	+0.58	Cmb 15	55.61	1	Verificato
436	+0.41	Cmb 15	13.72	1	
	+0.44	Cmb 15	13.72	1	Verificato
437	+0.45	Cmb 15	13.72	1	
	+0.48	Cmb 15	13.72	1	Verificato
438	+0.44	Cmb 15	13.72	1	
	+0.46	Cmb 15	13.72	1	Verificato
439	+0.42	Cmb 15	13.72	1	
	+0.45	Cmb 15	13.72	1	Verificato
440	+0.08	Cmb 15	55.61	1	
	+0.14	Cmb 15	0.00	1	Verificato
441	+0.09	Cmb 15	55.61	1	
	+0.15	Cmb 15	0.00	1	Verificato
442	+0.09	Cmb 15	55.61	1	
	+0.15	Cmb 15	0.00	1	Verificato
443	+0.09	Cmb 15	55.61	1	
	+0.16	Cmb 15	0.00	1	Verificato
444	+0.16	Cmb 15	55.61	1	
	+0.29	Cmb 15	0.00	1	Verificato
445	+0.17	Cmb 15	55.61	1	
	+0.31	Cmb 15	0.00	1	Verificato
446	+0.17	Cmb 15	55.61	1	
	+0.31	Cmb 15	0.00	1	Verificato
447	+0.17	Cmb 15	55.61	1	
	+0.31	Cmb 15	0.00	1	Verificato
448	+0.17	Cmb 15	55.61	1	
	+0.35	Cmb 15	0.00	1	Verificato
449	+0.19	Cmb 15	55.61	1	
	+0.38	Cmb 15	0.00	1	Verificato
450	+0.18	Cmb 15	55.61	1	
	+0.37	Cmb 15	0.00	1	Verificato
451	+0.18	Cmb 15	55.61	1	
	+0.37	Cmb 15	0.00	1	Verificato
452	+0.19	Cmb 15	55.61	1	
	+0.38	Cmb 15	0.00	1	Verificato
453	+0.21	Cmb 15	55.61	1	
	+0.42	Cmb 15	0.00	1	Verificato
454	+0.20	Cmb 15	55.61	1	
	+0.41	Cmb 15	0.00	1	Verificato
455	+0.20	Cmb 15	55.61	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.41	Cmb 15	0.00	1	Verificato
456	+0.19	Cmb 15	0.00	1	
	+0.36	Cmb 15	0.00	1	Verificato
457	+0.21	Cmb 15	0.00	1	
	+0.40	Cmb 15	0.00	1	Verificato
458	+0.20	Cmb 15	0.00	1	
	+0.39	Cmb 15	0.00	1	Verificato
459	+0.20	Cmb 15	0.00	1	
	+0.40	Cmb 15	0.00	1	Verificato
460	+0.15	Cmb 15	0.00	1	
	+0.27	Cmb 15	0.00	1	Verificato
461	+0.16	Cmb 15	0.00	1	
	+0.30	Cmb 15	0.00	1	Verificato
462	+0.16	Cmb 15	0.00	1	
	+0.30	Cmb 15	0.00	1	Verificato
463	+0.16	Cmb 15	0.00	1	
	+0.31	Cmb 15	0.00	1	Verificato
464	+0.11	Cmb 6	0.00	1	
	+0.17	Cmb 6	0.00	1	Verificato
465	+0.12	Cmb 6	0.00	1	
	+0.19	Cmb 6	0.00	1	Verificato
466	+0.12	Cmb 6	0.00	1	
	+0.19	Cmb 6	0.00	1	Verificato
467	+0.12	Cmb 6	0.00	1	
	+0.19	Cmb 6	0.00	1	Verificato
468	+0.11	Cmb 15	55.61	1	
	+0.16	Cmb 15	0.00	1	Verificato
469	+0.12	Cmb 15	55.61	1	
	+0.17	Cmb 15	0.00	1	Verificato
470	+0.12	Cmb 15	55.61	1	
	+0.17	Cmb 15	0.00	1	Verificato
471	+0.14	Cmb 25	55.61	1	
	+0.19	Cmb 15	0.00	1	Verificato
472	+0.28	Cmb 15	55.61	1	
	+0.46	Cmb 15	0.00	1	Verificato
473	+0.31	Cmb 15	55.61	1	
	+0.51	Cmb 15	0.00	1	Verificato
474	+0.31	Cmb 15	55.61	1	
	+0.50	Cmb 15	0.00	1	Verificato
475	+0.29	Cmb 15	55.61	1	
	+0.50	Cmb 15	0.00	1	Verificato
476	+0.41	Cmb 15	41.90	1	
	+0.60	Cmb 15	0.00	1	Verificato
477	+0.46	Cmb 15	41.90	1	
	+0.66	Cmb 15	0.00	1	Verificato
478	+0.45	Cmb 15	41.90	1	
	+0.65	Cmb 15	0.00	1	Verificato
479	+0.43	Cmb 15	41.90	1	
	+0.63	Cmb 15	0.00	1	Verificato
480	+0.36	Cmb 15	0.00	1	
	+0.65	Cmb 15	0.00	1	Verificato
481	+0.39	Cmb 15	0.00	1	
	+0.70	Cmb 15	0.00	1	Verificato
482	+0.39	Cmb 15	0.00	1	
	+0.69	Cmb 15	0.00	1	Verificato
483	+0.38	Cmb 15	0.00	1	
	+0.70	Cmb 15	0.00	1	Verificato
484	+0.19	Cmb 15	0.00	1	
	+0.30	Cmb 15	0.00	1	Verificato
485	+0.21	Cmb 15	0.00	1	
	+0.32	Cmb 15	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
486	+0.20	Cmb 15	0.00	1	
	+0.32	Cmb 15	0.00	1	Verificato
487	+0.20	Cmb 15	0.00	1	
	+0.35	Cmb 15	0.00	1	Verificato
488	+0.09	Cmb 15	55.61	1	
	+0.15	Cmb 15	0.00	1	Verificato
489	+0.10	Cmb 15	55.61	1	
	+0.15	Cmb 15	0.00	1	Verificato
490	+0.10	Cmb 15	55.61	1	
	+0.15	Cmb 15	0.00	1	Verificato
491	+0.10	Cmb 15	55.61	1	
	+0.18	Cmb 15	0.00	1	Verificato
492	+0.20	Cmb 15	55.61	1	
	+0.35	Cmb 15	0.00	1	Verificato
493	+0.21	Cmb 15	55.61	1	
	+0.37	Cmb 15	0.00	1	Verificato
494	+0.21	Cmb 15	55.61	1	
	+0.37	Cmb 15	0.00	1	Verificato
495	+0.21	Cmb 15	55.61	1	
	+0.39	Cmb 15	0.00	1	Verificato
496	+0.23	Cmb 15	55.61	1	
	+0.46	Cmb 15	0.00	1	Verificato
497	+0.25	Cmb 15	55.61	1	
	+0.50	Cmb 15	0.00	1	Verificato
498	+0.25	Cmb 15	55.61	1	
	+0.49	Cmb 15	0.00	1	Verificato
499	+0.24	Cmb 15	55.61	1	
	+0.51	Cmb 15	0.00	1	Verificato
500	+0.27	Cmb 15	55.61	1	
	+0.54	Cmb 15	0.00	1	Verificato
501	+0.29	Cmb 15	55.61	1	
	+0.58	Cmb 15	0.00	1	Verificato
502	+0.29	Cmb 15	55.61	1	
	+0.57	Cmb 15	0.00	1	Verificato
503	+0.28	Cmb 15	55.61	1	
	+0.58	Cmb 15	0.00	1	Verificato
504	+0.42	Cmb 15	0.00	1	
	+0.44	Cmb 15	0.00	1	Verificato
505	+0.46	Cmb 15	0.00	1	
	+0.49	Cmb 15	0.00	1	Verificato
506	+0.45	Cmb 15	0.00	1	
	+0.48	Cmb 15	0.00	1	Verificato
507	+0.44	Cmb 15	0.00	1	
	+0.47	Cmb 15	0.00	1	Verificato
508	+0.26	Cmb 15	187.50	2	
	+0.27	Cmb 15	0.00	2	Verificato
509	+0.27	Cmb 15	190.00	2	
	+0.28	Cmb 15	0.00	2	Verificato
510	+0.28	Cmb 15	219.50	1	
	+0.30	Cmb 15	0.00	1	Verificato
511	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
512	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
513	+0.50	Cmb 15	187.50	1	
	+0.53	Cmb 15	0.00	1	Verificato
514	+0.51	Cmb 15	190.00	1	
	+0.54	Cmb 15	0.00	1	Verificato
515	+0.53	Cmb 15	219.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
516	+0.58	Cmb 15	202.50	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.62	Cmb 15	0.00	1	Verificato
517	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
518	+0.50	Cmb 15	187.50	1	
	+0.53	Cmb 15	0.00	1	Verificato
519	+0.51	Cmb 15	190.00	1	
	+0.55	Cmb 15	0.00	1	Verificato
520	+0.53	Cmb 15	219.50	1	
	+0.58	Cmb 15	0.00	1	Verificato
521	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
522	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
523	+0.53	Cmb 13	187.50	1	
	+0.57	Cmb 13	0.00	1	Verificato
524	+0.54	Cmb 13	190.00	1	
	+0.58	Cmb 13	0.00	1	Verificato
525	+0.56	Cmb 13	219.50	1	
	+0.61	Cmb 13	0.00	1	Verificato
526	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
527	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
528	+0.60	Cmb 13	187.50	1	
	+0.64	Cmb 13	0.00	1	Verificato
529	+0.62	Cmb 13	190.00	1	
	+0.66	Cmb 13	0.00	1	Verificato
530	+0.64	Cmb 13	219.50	1	
	+0.69	Cmb 13	0.00	1	Verificato
531	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
532	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
533	+0.52	Cmb 13	187.50	1	
	+0.55	Cmb 13	0.00	1	Verificato
534	+0.54	Cmb 13	190.00	1	
	+0.57	Cmb 13	0.00	1	Verificato
535	+0.55	Cmb 13	219.50	1	
	+0.60	Cmb 13	0.00	1	Verificato
536	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
537	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
538	+0.48	Cmb 15	187.50	1	
	+0.51	Cmb 15	0.00	1	Verificato
539	+0.50	Cmb 15	190.00	1	
	+0.52	Cmb 15	0.00	1	Verificato
540	+0.51	Cmb 15	219.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
541	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
542	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
543	+0.48	Cmb 15	187.50	1	
	+0.49	Cmb 15	0.00	1	Verificato
544	+0.49	Cmb 15	190.00	1	
	+0.50	Cmb 15	0.00	1	Verificato
545	+0.51	Cmb 15	219.50	1	
	+0.53	Cmb 15	0.00	1	Verificato
546	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
547	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
548	+0.48	Cmb 15	187.50	1	
	+0.47	Cmb 15	0.00	1	Verificato
549	+0.49	Cmb 15	190.00	1	
	+0.48	Cmb 15	0.00	1	Verificato
550	+0.51	Cmb 15	219.50	1	
	+0.50	Cmb 15	0.00	1	Verificato
551	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
552	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
553	+0.26	Cmb 15	187.50	2	
	+0.27	Cmb 15	0.00	2	Verificato
554	+0.27	Cmb 15	190.00	2	
	+0.28	Cmb 15	0.00	2	Verificato
555	+0.28	Cmb 15	219.50	1	
	+0.30	Cmb 15	0.00	1	Verificato
556	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
557	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
558	+0.50	Cmb 15	187.50	1	
	+0.53	Cmb 15	0.00	1	Verificato
559	+0.51	Cmb 15	190.00	1	
	+0.54	Cmb 15	0.00	1	Verificato
560	+0.53	Cmb 15	219.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
561	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
562	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
563	+0.50	Cmb 15	187.50	1	
	+0.53	Cmb 15	0.00	1	Verificato
564	+0.51	Cmb 15	190.00	1	
	+0.55	Cmb 15	0.00	1	Verificato
565	+0.53	Cmb 15	219.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
566	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
567	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
568	+0.50	Cmb 15	187.50	1	
	+0.53	Cmb 15	0.00	1	Verificato
569	+0.51	Cmb 15	190.00	1	
	+0.55	Cmb 15	0.00	1	Verificato
570	+0.53	Cmb 15	219.50	1	
	+0.58	Cmb 15	0.00	1	Verificato
571	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
572	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
573	+0.49	Cmb 15	187.50	1	
	+0.53	Cmb 15	0.00	1	Verificato
574	+0.51	Cmb 15	190.00	1	
	+0.54	Cmb 15	0.00	1	Verificato
575	+0.52	Cmb 15	219.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
576	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
577	+0.57	Cmb 15	202.50	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.62	Cmb 15	0.00	1	Verificato
578	+0.49	Cmb 15	187.50	1	
	+0.52	Cmb 15	0.00	1	Verificato
579	+0.50	Cmb 15	190.00	1	
	+0.54	Cmb 15	0.00	1	Verificato
580	+0.52	Cmb 15	219.50	1	
	+0.56	Cmb 15	0.00	1	Verificato
581	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
582	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
583	+0.48	Cmb 15	187.50	1	
	+0.51	Cmb 15	0.00	1	Verificato
584	+0.50	Cmb 15	190.00	1	
	+0.52	Cmb 15	0.00	1	Verificato
585	+0.51	Cmb 15	219.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
586	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
587	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
588	+0.48	Cmb 15	187.50	1	
	+0.49	Cmb 15	0.00	1	Verificato
589	+0.49	Cmb 15	190.00	1	
	+0.50	Cmb 15	0.00	1	Verificato
590	+0.51	Cmb 15	219.50	1	
	+0.53	Cmb 15	0.00	1	Verificato
591	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
592	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
593	+0.11	Cmb 25	0.00	1	
	+0.22	Cmb 25	0.00	1	Verificato
594	+0.05	Cmb 25	0.00	T.	
	+0.09	Cmb 24	0.00	1	Verificato
595	+0.03	Cmb 26	0.00	1	
	+0.05	Cmb 26	0.00	1	Verificato
596	+0.10	Cmb 26	0.00	T.	
	+0.19	Cmb 23	0.00	1	Verificato
597	+0.29	Cmb 25	0.00	1	
	+0.57	Cmb 25	0.00	1	Verificato
598	+0.22	Cmb 25	0.00	T.	
	+0.42	Cmb 24	0.00	1	Verificato
599	+0.08	Cmb 25	0.00	1	
	+0.15	Cmb 25	0.00	1	Verificato
600	+0.08	Cmb 25	0.00	T.	
	+0.13	Cmb 24	0.00	1	Verificato
601	+0.08	Cmb 26	0.00	1	
	+0.15	Cmb 26	0.00	1	Verificato
602	+0.08	Cmb 26	0.00	T.	
	+0.14	Cmb 23	0.00	1	Verificato
603	+0.22	Cmb 26	0.00	1	
	+0.44	Cmb 26	0.00	1	Verificato
604	+0.28	Cmb 26	0.00	T.	
	+0.55	Cmb 23	0.00	1	Verificato
605	+0.10	Cmb 25	0.00	1	
	+0.19	Cmb 25	0.00	1	Verificato
606	+0.02	Cmb 25	0.00	T.	
	+0.04	Cmb 24	0.00	1	Verificato
607	+0.05	Cmb 26	0.00	1	
	+0.10	Cmb 26	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
608	+0.12	Cmb 26	0.00	T.	
	+0.22	Cmb 23	0.00	1	Verificato
609	+0.02	Cmb 26	0.00	T.	
	+0.04	Cmb 23	0.00	1	Verificato
610	+8.45e-03	Cmb 23	0.00	T.	
	+0.02	Cmb 26	0.00	1	Verificato
611	+0.03	Cmb 26	0.00	T.	
	+0.06	Cmb 23	0.00	1	Verificato
612	+0.02	Cmb 26	0.00	1	
	+0.05	Cmb 26	0.00	1	Verificato
613	+0.13	Cmb 26	0.00	T.	
	+0.25	Cmb 23	0.00	1	Verificato
614	+0.13	Cmb 26	0.00	1	
	+0.26	Cmb 26	0.00	1	Verificato
615	+0.07	Cmb 26	0.00	T.	
	+0.13	Cmb 23	0.00	1	Verificato
616	+0.07	Cmb 26	0.00	1	
	+0.13	Cmb 26	0.00	1	Verificato
617	+0.07	Cmb 25	0.00	T.	
	+0.13	Cmb 24	0.00	1	Verificato
618	+0.07	Cmb 25	0.00	1	
	+0.14	Cmb 25	0.00	1	Verificato
619	+0.12	Cmb 24	0.00	1	
	+0.25	Cmb 24	0.00	1	Verificato
620	+0.13	Cmb 25	0.00	1	
	+0.26	Cmb 25	0.00	1	Verificato
621	+0.02	Cmb 25	0.00	T.	
	+0.05	Cmb 24	0.00	1	Verificato
622	+0.03	Cmb 26	0.00	T.	
	+0.06	Cmb 23	0.00	1	Verificato
623	+0.01	Cmb 25	0.00	T.	
	+0.02	Cmb 24	0.00	1	Verificato
624	+0.02	Cmb 26	0.00	T.	
	+0.04	Cmb 23	0.00	1	Verificato
625	+0.03	Cmb 26	0.00	T.	
	+0.06	Cmb 23	0.00	1	Verificato
626	+0.02	Cmb 23	0.00	T.	
	+0.03	Cmb 26	0.00	1	Verificato
627	+0.02	Cmb 25	0.00	T.	
	+0.03	Cmb 24	0.00	1	Verificato
628	+0.03	Cmb 23	0.00	1	
	+0.06	Cmb 23	0.00	1	Verificato
629	+0.06	Cmb 15	0.00	T.	
	+0.07	Cmb 12	0.00	1	Verificato
630	+0.05	Cmb 15	0.00	1	
	+0.10	Cmb 15	0.00	1	Verificato
631	+0.03	Cmb 21	0.00	T.	
	+0.05	Cmb 20	0.00	1	Verificato
632	+0.03	Cmb 25	0.00	1	
	+0.05	Cmb 25	0.00	1	Verificato
633	+8.35e-03	Cmb 26	0.00	T.	
	+0.01	Cmb 23	0.00	1	Verificato
634	+0.02	Cmb 26	0.00	T.	
	+0.03	Cmb 23	0.00	1	Verificato
635	+0.03	Cmb 26	0.00	T.	
	+0.08	Cmb 23	0.00	1	Verificato
636	+0.13	Cmb 26	0.00	T.	
	+0.32	Cmb 23	0.00	1	Verificato
637	+7.87e-03	Cmb 25	0.00	1	
	+0.02	Cmb 25	0.00	1	Verificato
638	+0.02	Cmb 25	0.00	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.04	Cmb 25	0.00	1	Verificato
639	+0.03	Cmb 25	0.00	1	
	+0.08	Cmb 25	0.00	1	Verificato
640	+0.13	Cmb 24	0.00	T.	
	+0.32	Cmb 25	0.00	1	Verificato
641	+7.24e-03	Cmb 15	0.00	1	
	+0.02	Cmb 15	0.00	1	Verificato
642	+0.02	Cmb 25	0.00	1	
	+0.04	Cmb 25	0.00	1	Verificato
643	+0.03	Cmb 25	0.00	1	
	+0.10	Cmb 25	0.00	1	Verificato
644	+0.17	Cmb 25	0.00	1	
	+0.42	Cmb 25	0.00	1	Verificato
645	+3.04e-03	Cmb 12	0.00	1	
	+6.70e-03	Cmb 12	0.00	1	Verificato
646	+0.02	Cmb 26	0.00	T.	
	+0.03	Cmb 23	0.00	1	Verificato
647	+0.03	Cmb 26	0.00	T.	
	+0.09	Cmb 23	0.00	1	Verificato
648	+0.17	Cmb 26	0.00	T.	
	+0.41	Cmb 23	0.00	1	Verificato
649	+0.16	Cmb 25	0.00	1	
	+0.40	Cmb 25	0.00	1	Verificato
650	+0.16	Cmb 26	0.00	T.	
	+0.38	Cmb 23	0.00	1	Verificato
651	+0.01	Cmb 26	0.00	T.	
	+0.02	Cmb 23	0.00	1	Verificato
652	+3.36e-03	Cmb 25	0.00	1	
	+7.55e-03	Cmb 25	0.00	1	Verificato
653	+2.74e-03	Cmb 24	0.00	1	
	+7.82e-03	Cmb 24	0.00	1	Verificato
654	+5.73e-03	Cmb 25	0.00	1	
	+0.01	Cmb 25	0.00	1	Verificato
655	+0.01	Cmb 15	0.00	T.	
	+0.01	Cmb 12	0.00	1	Verificato
656	+0.03	Cmb 26	0.00	1	
	+0.07	Cmb 26	0.00	1	Verificato
657	+0.06	Cmb 15	0.00	T.	
	+0.07	Cmb 12	0.00	1	Verificato
658	+0.06	Cmb 15	0.00	1	
	+0.11	Cmb 15	0.00	1	Verificato
659	+5.77e-03	Cmb 25	0.00	1	
	+0.01	Cmb 25	0.00	1	Verificato
660	+0.04	Cmb 25	0.00	T.	
	+0.06	Cmb 24	0.00	1	Verificato
661	+0.03	Cmb 22	0.00	T.	
	+0.06	Cmb 12	0.00	1	Verificato
662	+0.03	Cmb 26	0.00	1	
	+0.07	Cmb 26	0.00	1	Verificato
663	+0.05	Cmb 15	0.00	1	
	+0.11	Cmb 15	0.00	1	Verificato
664	+0.06	Cmb 15	0.00	T.	
	+0.07	Cmb 12	0.00	1	Verificato
665	+0.03	Cmb 26	0.00	1	
	+0.05	Cmb 26	0.00	1	Verificato
666	+0.05	Cmb 26	0.00	T.	
	+0.09	Cmb 23	0.00	1	Verificato
667	+0.05	Cmb 25	0.00	1	
	+0.09	Cmb 25	0.00	1	Verificato
668	+0.05	Cmb 25	0.00	T.	
	+0.09	Cmb 24	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
669	+0.04	Cmb 23	0.00	1	
	+0.09	Cmb 23	0.00	1	Verificato
670	+0.03	Cmb 25	0.00	T.	
	+0.05	Cmb 24	0.00	1	Verificato
671	+0.14	Cmb 20	45.00	1	
	+0.20	Cmb 20	0.00	1	Verificato
672	+0.14	Cmb 20	45.00	1	
	+0.21	Cmb 20	0.00	1	Verificato
673	+0.14	Cmb 19	45.00	1	
	+0.21	Cmb 19	0.00	1	Verificato
674	+0.15	Cmb 20	45.00	1	
	+0.22	Cmb 20	0.00	1	Verificato
675	+0.02	Cmb 15	45.00	3	
	+0.06	Cmb 15	0.00	3	Verificato
676	+0.02	Cmb 15	0.00	3	
	+0.06	Cmb 15	0.00	3	Verificato
677	+0.02	Cmb 15	0.00	3	
	+0.06	Cmb 15	0.00	3	Verificato
678	+0.02	Cmb 15	45.00	3	
	+0.07	Cmb 15	0.00	3	Verificato
679	+0.17	Cmb 21	55.61	1	
	+0.37	Cmb 20	0.00	1	Verificato
680	+0.17	Cmb 21	55.61	1	
	+0.38	Cmb 20	0.00	1	Verificato
681	+0.17	Cmb 21	55.61	1	
	+0.38	Cmb 20	0.00	1	Verificato
682	+0.17	Cmb 22	55.61	1	
	+0.39	Cmb 20	0.00	1	Verificato
683	+0.18	Cmb 21	55.61	1	
	+0.36	Cmb 20	0.00	1	Verificato
684	+0.19	Cmb 22	55.61	1	
	+0.37	Cmb 20	0.00	1	Verificato
685	+0.19	Cmb 21	55.61	1	
	+0.37	Cmb 20	0.00	1	Verificato
686	+0.19	Cmb 22	55.61	1	
	+0.38	Cmb 19	0.00	1	Verificato
687	+0.18	Cmb 21	0.00	1	
	+0.36	Cmb 15	0.00	1	Verificato
688	+0.18	Cmb 22	0.00	1	
	+0.37	Cmb 12	0.00	1	Verificato
689	+0.19	Cmb 21	0.00	1	
	+0.37	Cmb 12	0.00	1	Verificato
690	+0.19	Cmb 15	55.61	1	
	+0.38	Cmb 15	0.00	1	Verificato
691	+0.21	Cmb 13	55.61	1	
	+0.41	Cmb 13	0.00	1	Verificato
692	+0.21	Cmb 13	55.61	1	
	+0.42	Cmb 13	0.00	1	Verificato
693	+0.21	Cmb 13	55.61	1	
	+0.42	Cmb 13	0.00	1	Verificato
694	+0.22	Cmb 13	55.61	1	
	+0.43	Cmb 13	0.00	1	Verificato
695	+0.21	Cmb 13	0.00	1	
	+0.42	Cmb 13	0.00	1	Verificato
696	+0.21	Cmb 13	0.00	1	
	+0.42	Cmb 13	0.00	1	Verificato
697	+0.21	Cmb 13	0.00	1	
	+0.42	Cmb 13	0.00	1	Verificato
698	+0.22	Cmb 13	0.00	1	
	+0.44	Cmb 13	0.00	1	Verificato
699	+0.19	Cmb 13	0.00	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.40	Cmb 13	0.00	1	Verificato
700	+0.20	Cmb 13	0.00	1	
	+0.40	Cmb 13	0.00	1	Verificato
701	+0.20	Cmb 13	0.00	1	
	+0.40	Cmb 13	0.00	1	Verificato
702	+0.20	Cmb 13	0.00	1	
	+0.41	Cmb 13	0.00	1	Verificato
703	+0.19	Cmb 1	0.00	1	
	+0.32	Cmb 1	0.00	1	Verificato
704	+0.19	Cmb 13	0.00	1	
	+0.32	Cmb 13	0.00	1	Verificato
705	+0.19	Cmb 13	0.00	1	
	+0.32	Cmb 13	0.00	1	Verificato
706	+0.19	Cmb 13	0.00	1	
	+0.33	Cmb 1	0.00	1	Verificato
707	+0.12	Cmb 1	0.00	1	
	+0.19	Cmb 2	0.00	1	Verificato
708	+0.12	Cmb 1	0.00	1	
	+0.19	Cmb 2	0.00	1	Verificato
709	+0.12	Cmb 1	0.00	1	
	+0.19	Cmb 2	0.00	1	Verificato
710	+0.13	Cmb 1	0.00	1	
	+0.20	Cmb 2	0.00	1	Verificato
711	+0.30	Cmb 15	55.61	1	
	+0.49	Cmb 15	0.00	1	Verificato
712	+0.31	Cmb 15	55.61	1	
	+0.50	Cmb 15	0.00	1	Verificato
713	+0.31	Cmb 15	55.61	1	
	+0.50	Cmb 15	0.00	1	Verificato
714	+0.32	Cmb 15	55.61	1	
	+0.52	Cmb 15	0.00	1	Verificato
715	+0.45	Cmb 15	41.90	1	
	+0.64	Cmb 15	0.00	1	Verificato
716	+0.45	Cmb 15	41.90	1	
	+0.65	Cmb 15	0.00	1	Verificato
717	+0.45	Cmb 15	41.90	1	
	+0.65	Cmb 15	0.00	1	Verificato
718	+0.47	Cmb 15	41.90	1	
	+0.67	Cmb 15	0.00	1	Verificato
719	+0.38	Cmb 15	0.00	1	
	+0.68	Cmb 15	0.00	1	Verificato
720	+0.39	Cmb 15	0.00	1	
	+0.69	Cmb 15	0.00	1	Verificato
721	+0.39	Cmb 15	0.00	1	
	+0.69	Cmb 15	0.00	1	Verificato
722	+0.40	Cmb 15	0.00	1	
	+0.71	Cmb 15	0.00	1	Verificato
723	+0.20	Cmb 15	0.00	1	
	+0.31	Cmb 15	0.00	1	Verificato
724	+0.20	Cmb 15	0.00	1	
	+0.31	Cmb 15	0.00	1	Verificato
725	+0.20	Cmb 15	0.00	1	
	+0.31	Cmb 15	0.00	1	Verificato
726	+0.21	Cmb 15	0.00	1	
	+0.33	Cmb 15	0.00	1	Verificato
727	+0.10	Cmb 15	55.61	1	
	+0.15	Cmb 15	0.00	1	Verificato
728	+0.10	Cmb 15	55.61	1	
	+0.15	Cmb 20	0.00	3	Verificato
729	+0.10	Cmb 15	55.61	1	
	+0.15	Cmb 19	0.00	3	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
730	+0.11	Cmb 15	55.61	1	
	+0.16	Cmb 15	0.00	1	Verificato
731	+0.21	Cmb 15	55.61	1	
	+0.36	Cmb 15	0.00	1	Verificato
732	+0.21	Cmb 15	55.61	1	
	+0.36	Cmb 15	0.00	1	Verificato
733	+0.21	Cmb 15	55.61	1	
	+0.36	Cmb 15	0.00	1	Verificato
734	+0.22	Cmb 15	55.61	1	
	+0.38	Cmb 15	0.00	1	Verificato
735	+0.25	Cmb 15	55.61	1	
	+0.49	Cmb 15	0.00	1	Verificato
736	+0.25	Cmb 15	55.61	1	
	+0.49	Cmb 15	0.00	1	Verificato
737	+0.25	Cmb 15	55.61	1	
	+0.49	Cmb 15	0.00	1	Verificato
738	+0.26	Cmb 15	55.61	1	
	+0.51	Cmb 15	0.00	1	Verificato
739	+0.29	Cmb 15	55.61	1	
	+0.57	Cmb 15	0.00	1	Verificato
740	+0.29	Cmb 15	55.61	1	
	+0.57	Cmb 15	0.00	1	Verificato
741	+0.29	Cmb 15	55.61	1	
	+0.57	Cmb 15	0.00	1	Verificato
742	+0.30	Cmb 15	55.61	1	
	+0.59	Cmb 15	0.00	1	Verificato
743	+0.45	Cmb 15	0.00	1	
	+0.47	Cmb 15	0.00	1	Verificato
744	+0.45	Cmb 15	0.00	1	
	+0.48	Cmb 15	0.00	1	Verificato
745	+0.45	Cmb 15	0.00	1	
	+0.48	Cmb 15	0.00	1	Verificato
746	+0.47	Cmb 15	0.00	1	
	+0.49	Cmb 15	0.00	1	Verificato
747	+0.09	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
748	+0.09	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
749	+0.09	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
750	+0.09	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
751	+0.17	Cmb 15	0.00	1	
	+0.31	Cmb 15	55.61	1	Verificato
752	+0.17	Cmb 15	0.00	1	
	+0.31	Cmb 15	55.61	1	Verificato
753	+0.17	Cmb 15	0.00	1	
	+0.30	Cmb 15	55.61	1	Verificato
754	+0.17	Cmb 15	0.00	1	
	+0.32	Cmb 15	55.61	1	Verificato
755	+0.18	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
756	+0.18	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
757	+0.18	Cmb 15	0.00	1	
	+0.37	Cmb 15	55.61	1	Verificato
758	+0.19	Cmb 15	0.00	1	
	+0.39	Cmb 15	55.61	1	Verificato
759	+0.20	Cmb 15	0.00	1	
	+0.41	Cmb 15	55.61	1	Verificato
760	+0.20	Cmb 15	0.00	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.41	Cmb 15	55.61	1	Verificato
761	+0.20	Cmb 15	0.00	1	
	+0.41	Cmb 15	55.61	1	Verificato
762	+0.21	Cmb 15	0.00	1	
	+0.43	Cmb 15	55.61	1	Verificato
763	+0.20	Cmb 15	55.61	1	
	+0.39	Cmb 15	55.61	1	Verificato
764	+0.20	Cmb 15	55.61	1	
	+0.39	Cmb 15	55.61	1	Verificato
765	+0.21	Cmb 15	55.61	1	
	+0.39	Cmb 15	55.61	1	Verificato
766	+0.21	Cmb 15	55.61	1	
	+0.40	Cmb 15	55.61	1	Verificato
767	+0.16	Cmb 15	55.61	1	
	+0.30	Cmb 15	55.61	1	Verificato
768	+0.16	Cmb 15	55.61	1	
	+0.30	Cmb 15	55.61	1	Verificato
769	+0.16	Cmb 15	55.61	1	
	+0.30	Cmb 15	55.61	1	Verificato
770	+0.17	Cmb 15	55.61	1	
	+0.31	Cmb 15	55.61	1	Verificato
771	+0.12	Cmb 6	55.61	1	
	+0.19	Cmb 6	55.61	1	Verificato
772	+0.12	Cmb 6	55.61	1	
	+0.19	Cmb 6	55.61	1	Verificato
773	+0.12	Cmb 6	55.61	1	
	+0.19	Cmb 6	55.61	1	Verificato
774	+0.13	Cmb 6	55.61	1	
	+0.19	Cmb 6	55.61	1	Verificato
775	+0.12	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
776	+0.12	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
777	+0.12	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
778	+0.12	Cmb 15	0.00	1	
	+0.17	Cmb 15	55.61	1	Verificato
779	+0.31	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
780	+0.31	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
781	+0.31	Cmb 15	0.00	1	
	+0.50	Cmb 15	55.61	1	Verificato
782	+0.32	Cmb 15	0.00	1	
	+0.52	Cmb 15	55.61	1	Verificato
783	+0.45	Cmb 15	0.00	1	
	+0.65	Cmb 15	41.90	1	Verificato
784	+0.45	Cmb 15	0.00	1	
	+0.65	Cmb 15	41.90	1	Verificato
785	+0.45	Cmb 15	0.00	1	
	+0.65	Cmb 15	41.90	1	Verificato
786	+0.47	Cmb 15	0.00	1	
	+0.67	Cmb 15	41.90	1	Verificato
787	+0.39	Cmb 15	55.61	1	
	+0.69	Cmb 15	55.61	1	Verificato
788	+0.39	Cmb 15	55.61	1	
	+0.69	Cmb 15	55.61	1	Verificato
789	+0.39	Cmb 15	55.61	1	
	+0.69	Cmb 15	55.61	1	Verificato
790	+0.40	Cmb 15	55.61	1	
	+0.72	Cmb 15	55.61	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
791	+0.20	Cmb 15	55.61	1	
	+0.32	Cmb 15	55.61	1	Verificato
792	+0.20	Cmb 15	55.61	1	
	+0.31	Cmb 15	55.61	1	Verificato
793	+0.20	Cmb 15	55.61	1	
	+0.31	Cmb 15	55.61	1	Verificato
794	+0.21	Cmb 15	55.61	1	
	+0.33	Cmb 15	55.61	1	Verificato
795	+0.10	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
796	+0.10	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
797	+0.10	Cmb 15	0.00	1	
	+0.14	Cmb 15	55.61	1	Verificato
798	+0.10	Cmb 15	0.00	1	
	+0.15	Cmb 15	55.61	1	Verificato
799	+0.21	Cmb 15	0.00	1	
	+0.36	Cmb 15	55.61	1	Verificato
800	+0.21	Cmb 15	0.00	1	
	+0.36	Cmb 15	55.61	1	Verificato
801	+0.21	Cmb 15	0.00	1	
	+0.36	Cmb 15	55.61	1	Verificato
802	+0.22	Cmb 15	0.00	1	
	+0.38	Cmb 15	55.61	1	Verificato
803	+0.25	Cmb 15	0.00	1	
	+0.49	Cmb 15	55.61	1	Verificato
804	+0.25	Cmb 15	0.00	1	
	+0.49	Cmb 15	55.61	1	Verificato
805	+0.25	Cmb 15	0.00	1	
	+0.49	Cmb 15	55.61	1	Verificato
806	+0.26	Cmb 15	0.00	1	
	+0.51	Cmb 15	55.61	1	Verificato
807	+0.29	Cmb 15	0.00	1	
	+0.57	Cmb 15	55.61	1	Verificato
808	+0.29	Cmb 15	0.00	1	
	+0.57	Cmb 15	55.61	1	Verificato
809	+0.29	Cmb 15	0.00	1	
	+0.57	Cmb 15	55.61	1	Verificato
810	+0.30	Cmb 15	0.00	1	
	+0.59	Cmb 15	55.61	1	Verificato
811	+0.45	Cmb 15	13.72	1	
	+0.48	Cmb 15	13.72	1	Verificato
812	+0.45	Cmb 15	13.72	1	
	+0.48	Cmb 15	13.72	1	Verificato
813	+0.45	Cmb 15	13.72	1	
	+0.48	Cmb 15	13.72	1	Verificato
814	+0.47	Cmb 15	13.72	1	
	+0.50	Cmb 15	13.72	1	Verificato
815	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
816	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
817	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
818	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
819	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
820	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
821	+0.58	Cmb 15	202.50	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.62	Cmb 15	0.00	1	Verificato
822	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
823	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
824	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
825	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
826	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
827	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
828	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
829	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
830	+0.62	Cmb 13	202.50	1	
	+0.67	Cmb 13	0.00	1	Verificato
831	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
832	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
833	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
834	+0.70	Cmb 13	202.50	1	
	+0.76	Cmb 13	0.00	1	Verificato
835	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
836	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
837	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
838	+0.61	Cmb 13	202.50	1	
	+0.65	Cmb 13	0.00	1	Verificato
839	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
840	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
841	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
842	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
843	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
844	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
845	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
846	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
847	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
848	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
849	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
850	+0.55	Cmb 15	202.50	1	
	+0.55	Cmb 15	0.00	1	Verificato
851	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
852	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
853	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
854	+0.30	Cmb 15	202.50	2	
	+0.32	Cmb 15	0.00	2	Verificato
855	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
856	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
857	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
858	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
859	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
860	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
861	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
862	+0.58	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
863	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
864	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
865	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
866	+0.58	Cmb 15	202.50	1	
	+0.63	Cmb 15	0.00	1	Verificato
867	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
868	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
869	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
870	+0.57	Cmb 15	202.50	1	
	+0.62	Cmb 15	0.00	1	Verificato
871	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
872	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
873	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
874	+0.57	Cmb 15	202.50	1	
	+0.61	Cmb 15	0.00	1	Verificato
875	+0.56	Cmb 15	202.50	1	
	+0.60	Cmb 15	0.00	1	Verificato
876	+0.56	Cmb 15	202.50	1	
	+0.60	Cmb 15	0.00	1	Verificato
877	+0.56	Cmb 15	202.50	1	
	+0.59	Cmb 15	0.00	1	Verificato
878	+0.56	Cmb 15	202.50	1	
	+0.60	Cmb 15	0.00	1	Verificato
879	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
880	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
881	+0.56	Cmb 15	202.50	1	
	+0.57	Cmb 15	0.00	1	Verificato
882	+0.56	Cmb 15	202.50	1	

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
	+0.57	Cmb 15	0.00	1	Verificato
883	+0.02	Cmb 25	0.00	T.	
	+0.03	Cmb 24	0.00	1	Verificato
884	+0.04	Cmb 25	0.00	1	
	+0.08	Cmb 25	0.00	1	Verificato
885	+0.02	Cmb 25	0.00	T.	
	+0.04	Cmb 24	0.00	1	Verificato
886	+0.05	Cmb 25	0.00	1	
	+0.09	Cmb 25	0.00	1	Verificato
887	+0.14	Cmb 24	0.00	1	
	+0.27	Cmb 24	0.00	1	Verificato
888	+0.16	Cmb 25	0.00	1	
	+0.32	Cmb 25	0.00	1	Verificato
889	+0.07	Cmb 25	0.00	T.	
	+0.13	Cmb 24	0.00	1	Verificato
890	+0.07	Cmb 26	0.00	T.	
	+0.13	Cmb 23	0.00	1	Verificato
891	+0.07	Cmb 26	0.00	T.	
	+0.13	Cmb 23	0.00	1	Verificato
892	+0.06	Cmb 25	0.00	T.	
	+0.13	Cmb 24	0.00	1	Verificato
893	+0.16	Cmb 23	0.00	1	
	+0.32	Cmb 23	0.00	1	Verificato
894	+0.14	Cmb 26	0.00	1	
	+0.27	Cmb 26	0.00	1	Verificato
895	+0.05	Cmb 26	0.00	T.	
	+0.09	Cmb 23	0.00	1	Verificato
896	+0.02	Cmb 25	0.00	T.	
	+0.04	Cmb 24	0.00	1	Verificato
897	+0.04	Cmb 26	0.00	T.	
	+0.09	Cmb 23	0.00	1	Verificato
898	+0.02	Cmb 25	0.00	T.	
	+0.03	Cmb 24	0.00	1	Verificato
899	+0.02	Cmb 25	0.00	T.	
	+0.04	Cmb 24	0.00	1	Verificato
900	+0.07	Cmb 24	0.00	T.	
	+0.13	Cmb 25	0.00	1	Verificato
901	+7.52e-03	Cmb 15	0.00	T.	
	+8.72e-03	Cmb 23	0.00	1	Verificato
902	+0.04	Cmb 25	0.00	1	
	+0.09	Cmb 25	0.00	1	Verificato
903	+0.05	Cmb 26	0.00	T.	
	+0.09	Cmb 23	0.00	1	Verificato
904	+6.16e-03	Cmb 26	0.00	T.	
	+0.01	Cmb 23	0.00	1	Verificato
905	+0.07	Cmb 26	0.00	T.	
	+0.13	Cmb 23	0.00	1	Verificato
906	+0.02	Cmb 25	0.00	T.	
	+0.04	Cmb 24	0.00	1	Verificato
907	+9.84e-03	Cmb 25	0.00	T.	
	+0.02	Cmb 24	0.00	1	Verificato
908	+0.04	Cmb 26	0.00	T.	
	+0.08	Cmb 23	0.00	1	Verificato
909	+0.05	Cmb 26	0.00	T.	
	+0.09	Cmb 23	0.00	1	Verificato
910	+9.67e-03	Cmb 25	0.00	T.	
	+0.02	Cmb 24	0.00	1	Verificato
911	+0.04	Cmb 25	0.00	T.	
	+0.07	Cmb 24	0.00	1	Verificato
912	+0.09	Cmb 25	0.00	1	
	+0.18	Cmb 25	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

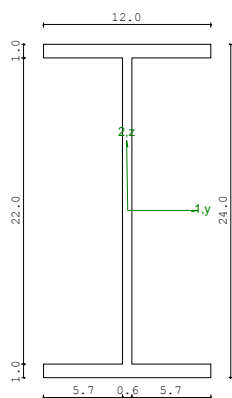
Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
913	+0.09	Cmb 26	0.00	T.	
	+0.18	Cmb 23	0.00	1	Verificato
914	+0.04	Cmb 26	0.00	1	
	+0.07	Cmb 26	0.00	1	Verificato
915	+0.10	Cmb 26	0.00	T.	
	+0.24	Cmb 23	0.00	1	Verificato
916	+0.08	Cmb 26	0.00	T.	
	+0.18	Cmb 23	0.00	1	Verificato
917	+0.06	Cmb 26	0.00	T.	
	+0.14	Cmb 23	0.00	1	Verificato
918	+0.04	Cmb 26	0.00	T.	
	+0.10	Cmb 23	0.00	1	Verificato
919	+0.10	Cmb 25	0.00	1	
	+0.25	Cmb 25	0.00	1	Verificato
920	+0.07	Cmb 25	0.00	1	
	+0.19	Cmb 25	0.00	1	Verificato
921	+0.06	Cmb 25	0.00	1	
	+0.14	Cmb 25	0.00	1	Verificato
922	+0.04	Cmb 25	0.00	1	
	+0.11	Cmb 25	0.00	1	Verificato
923	+0.10	Cmb 25	0.00	1	
	+0.25	Cmb 25	0.00	1	Verificato
924	+0.09	Cmb 25	0.00	1	
	+0.21	Cmb 25	0.00	1	Verificato
925	+0.05	Cmb 25	0.00	1	
	+0.13	Cmb 25	0.00	1	Verificato
926	+0.03	Cmb 25	0.00	1	
	+0.08	Cmb 25	0.00	1	Verificato
927	+0.10	Cmb 26	0.00	T.	
	+0.24	Cmb 23	0.00	1	Verificato
928	+0.08	Cmb 26	0.00	T.	
	+0.21	Cmb 23	0.00	1	Verificato
929	+0.05	Cmb 26	0.00	T.	
	+0.13	Cmb 23	0.00	1	Verificato
930	+0.03	Cmb 26	0.00	T.	
	+0.07	Cmb 23	0.00	1	Verificato
931	+0.01	Cmb 25	0.00	1	
	+0.03	Cmb 25	0.00	1	Verificato
932	+2.79e-03	Cmb 24	0.00	1	
	+6.96e-03	Cmb 24	0.00	1	Verificato
933	+3.72e-03	Cmb 25	0.00	1	
	+9.28e-03	Cmb 25	0.00	1	Verificato
934	+0.01	Cmb 23	0.00	1	
	+0.03	Cmb 23	0.00	1	Verificato
935	+0.03	Cmb 24	0.00	T.	
	+0.07	Cmb 25	0.00	1	Verificato
936	+5.27e-03	Cmb 15	0.00	T.	
	+4.16e-03	Cmb 6	0.00	1	Verificato
937	+0.03	Cmb 26	0.00	T.	
	+0.05	Cmb 23	0.00	1	Verificato
938	+0.03	Cmb 25	0.00	1	
	+0.06	Cmb 25	0.00	1	Verificato

Trave	Fatt.Res.	L.C.	Ascissa	Cl.	
	Fatt.Inst.	L.C.	Ascissa	Cl.	Stato
939	+0.04	Cmb 26	0.00	T.	
	+0.07	Cmb 23	0.00	1	Verificato
940	+5.28e-03	Cmb 22	0.00	T.	
	+8.07e-03	Cmb 19	0.00	1	Verificato
941	+0.03	Cmb 26	0.00	T.	
	+0.06	Cmb 23	0.00	1	Verificato
942	+0.03	Cmb 25	0.00	1	
	+0.05	Cmb 25	0.00	1	Verificato
943	+0.15	Cmb 25	0.00	T.	
	+0.37	Cmb 24	0.00	1	Verificato
944	+0.15	Cmb 26	0.00	1	
	+0.38	Cmb 26	0.00	1	Verificato
945	+0.26	Cmb 26	0.00	T.	
	+0.63	Cmb 23	0.00	1	Verificato
946	+0.25	Cmb 25	0.00	1	
	+0.64	Cmb 25	0.00	1	Verificato
947	+0.22	Cmb 25	0.00	1	
	+0.44	Cmb 25	0.00	1	Verificato
948	+0.19	Cmb 15	0.00	T.	
	+0.22	Cmb 12	0.00	1	Verificato
949	+0.17	Cmb 15	0.00	1	
	+0.33	Cmb 15	0.00	1	Verificato
950	+0.21	Cmb 26	0.00	T.	
	+0.31	Cmb 23	0.00	1	Verificato
951	+0.19	Cmb 25	0.00	1	
	+0.38	Cmb 25	0.00	1	Verificato
952	+0.14	Cmb 26	0.00	T.	
	+0.23	Cmb 23	0.00	1	Verificato
953	+0.07	Cmb 25	0.00	1	
	+0.15	Cmb 25	0.00	1	Verificato
954	+0.19	Cmb 26	0.00	T.	
	+0.36	Cmb 23	0.00	1	Verificato
955	+0.19	Cmb 15	0.00	1	
	+0.38	Cmb 15	0.00	1	Verificato
956	+0.19	Cmb 15	0.00	T.	
	+0.22	Cmb 12	0.00	1	Verificato
957	+0.17	Cmb 15	0.00	1	
	+0.33	Cmb 15	0.00	1	Verificato
958	+0.18	Cmb 15	0.00	T.	
	+0.24	Cmb 12	0.00	1	Verificato
959	+0.12	Cmb 26	0.00	1	
	+0.23	Cmb 26	0.00	1	Verificato
960	+0.11	Cmb 21	0.00	T.	
	+0.18	Cmb 20	0.00	1	Verificato
961	+0.06	Cmb 22	0.00	1	
	+0.13	Cmb 22	0.00	1	Verificato
962	+0.12	Cmb 25	0.00	T.	
	+0.20	Cmb 24	0.00	1	Verificato

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

PROP. 1 - BEAM n. 814 - SEZIONE IN X = 13.72

Grp.: Gruppo0 Trave: 814 Prop.: 1 Sez.in: 13.72	
Cmb 15	M1 = +36.12 M2 = -4.30e05
	N = -1004.92 V1 = -2.37
	V2 = -4390.40 MT = -5.41
Sez. a Doppio T	
D = 24.00 B1 = 12.00 T1 = 0.98 T2 = 0.98 T3 = 0.62	
B2 = 12.00	
Area = 3.91e01	
I11 = 3.89e03	
I22 = 2.84e02	



VERIFICA DI RESISTENZA:
Classe = Classe 1
FR-PF = 0.47
FR-v = 0.17
FR-T = 0.00
FR-t = 0.20

VERIFICA DI STABILITA':
Classe = Classe 1
FI-N = 0.01
FPF,y = 0.47
FPF,z = 0.50

PARAMETRI STATICI DELLA SEZIONE

Altezza totale	D =	24.00	cm
Base inferiore	B1 =	12.00	cm
Spessore flangia inferiore	T1 =	0.98	cm
Spessore flangia superiore	T2 =	0.98	cm
Spessore anima	T3 =	0.62	cm
Base superiore	B2 =	12.00	cm
Posizione del baricentro elastico	X _{1G,e1} =	6.00	cm
	X _{2G,e1} =	12.00	cm
Posizione del baricentro plastico	X _{1G,p1} =	6.00	cm
	X _{2G,p1} =	12.00	cm
Distanza baricentro - centro di taglio	X _{1CT} -X _{1G} =	0.00	cm
	X _{2CT} -X _{2G} =	0.00	cm
Area della sezione	A =	3.91e01	cm ²
Momento d'inerzia	asse 1	I ₁₁ =	3.89e03 cm ⁴
	asse 2	I ₂₂ =	2.84e02 cm ⁴
	asse 3	J =	9.28e00 cm ⁴
Momento polare rispetto il centro di taglio	I _p =	3953.64	cm ⁴
Costante di ingobbamento	I _ω =	37391.18	cm ⁶
Raggio giratore	asse 1	i ₁₁ =	9.98 cm
	asse 2	i ₂₂ =	2.70 cm
Modulo di resistenza elastico	superiore	W _{1 sup,e1} =	3.24e02 cm ³
	inferiore	W _{1 inf,e1} =	3.24e02 cm ³
Modulo di resistenza elastico	destro	W _{2 dx,e1} =	4.73e01 cm ³
	sinistro	W _{2 sx,e1} =	4.73e01 cm ³
Modulo di resistenza plastico	asse 1	W _{1,p1} =	346.01 cm ³
	asse 2	W _{2,p1} =	72.68 cm ³
Area di taglio	asse 1	A _{V1,p1} =	2.35e01 cm ²
	asse 2	A _{V2,p1} =	1.64e01 cm ²

CARATTERISTICHE DELL'ASTA:

Lunghezza		13.72	cm
Molt. per inflessione	asse 1	β ₁ =	8.00
	asse 2	β ₂ =	12.00
	asse 3	β ₃ =	8.00

Attributi per il calcolo di instabilità

	Diagramma	ψ	k _c	m _{IT}	C _m
Piano 1	Tipo 2	0.53	0.86	0.81	0.81
Piano 2	Tipo 2	0.86	0.96	0.94	0.94

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio	S275
Lavorazione	Laminata
Modulo di elasticità	E = 210.00 GPa
Tensione di snervamento	f _y = 2804.22 kgf/cm ²
Tensione di rottura	f _u = 4384.78 kgf/cm ²
Tensione di snervamento	f _y = 2600.28 kgf/cm ²

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Tensione di rottura	(t > 40mm)	$f_u = 4180.84$	kgf/cm ²
Coefficiente di sicurezza del materiale		$\gamma_{M0} = 1.05$	
Coefficiente di sicurezza all'instabilità		$\gamma_{M1} = 1.05$	

SOLLECITAZIONI:

Sforzo normale		AF = -1.00e03	kgf
Sforzo di taglio	direzione 1	V1 = -2.37e00	kgf
	direzione 2	V2 = -4.39e03	kgf
Momento flettente	direzione 1	M1 = 3.61e01	kgfcm
	direzione 2	M2 = -4.30e05	kgfcm
Momento torcente		MT = -5.41e00	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

Classe della sezione per la sollecitazione considerata:

		Cl =	Classe 1
Asse con inerzia maggiore		y-y =	1-1
Asse con inerzia minore		z-z =	2-2
Resistenza assiale		$N_{Rd} =$	1.04e05 kgf
Resistenza tagliante	asse y	$V_{pl,y,Rd} =$	25284.05 kgf
riduzione per la torsione		coeff =	1.00
		$V_{pl,y,T,Rd} =$	25280.30 kgf
Resistenza tagliante	asse z	$V_{pl,z,Rd} =$	36265.98 kgf
riduzione per la torsione		coeff =	1.00
		$V_{pl,z,T,Rd} =$	36260.60 kgf
Resistenza flessionale	asse y	$M_{y,Rd} =$	9.24e05 kgfcm
riduzione per il taglio		coeff =	1.00
		$M_{y,V,Rd} =$	9.24e05 kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} =$	1.94e05 kgfcm
riduzione per il taglio		coeff =	1.00
		$M_{z,V,Rd} =$	1.94e05 kgfcm
Resistenza torsionale elastica		$T_{Rd} =$	14601.68 kgfcm
Verifica di Resistenza plastica a Presso-Flessione		$F_{R-PF} =$	0.47 Verificato
$F_{R-PF}(N_{Ed}, M_{y,Ed}, M_{z,Ed}) \leq 1$		$F_{R-exp} =$	0.22
$ M_{y,Ed}/M_{Ny,Rd} ^\alpha + M_{z,Ed}/M_{Nz,Rd} ^\beta \leq 1$			
$\alpha = 2.00, \beta = 1.00$			
Verifica di Resistenza plastica a Taglio		$F_{R-V} =$	0.17 Verificato
$(V_{y,Ed}/V_{y,Rd}) + (V_{z,Ed}/V_{z,Rd}) \leq 1$			
Verifica di Resistenza elastica a Torsione		$F_{R-T} =$	0.00 Verificato
$(T_{Ed}/T_{Rd}) \leq 1$			
Verifica di Resistenza elastica delle tensioni tangenziali		$F_{R-t} =$	0.20 Verificato
$\tau_{Ed} \cdot \sqrt{(3) \cdot \gamma_{M0}/f_y} \leq 1$			

VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:

		Cl =	Classe 1
Sforzo normale		$N_{Ed} =$	-1.00e03 kgf
Momento flettente		$M_{z,Ed} =$	6.87e01 kgfcm
		$M_{y,Ed} =$	-4.30e05 kgfcm

Tabella dei carichi critici

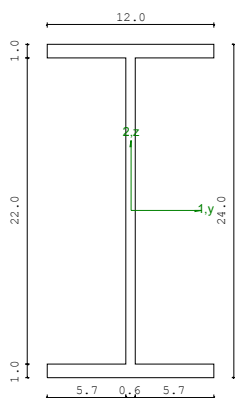
Asse	Carico critico	Lunghezza libera	Snellezza adimensionale	Coefficiente riduttivo
	P_{cr} [kgf]	ℓ_0 [cm]	λ^*	χ
y	3.04e06	164.60	0.19	1.00
z	4.98e05	109.74	0.47	0.90
θ	7.25e05	109.74	0.39	0.93
min	4.98e05		0.47	0.90
	M_{cr} [Nmm]	ℓ_0 [mm]	λ_{LT}^*	χ_{LT}
fless.tors.	6.46e06	109.74	0.39	0.96

Resistenza assiale	minimo	$N_{b,Rd} =$	9.37e04 kgf
	asse y	$N_{b,y,Rd} =$	1.04e05 kgf
	asse z	$N_{b,z,Rd} =$	9.37e04 kgf
Resistenza flessionale	asse y	$M_{b,y,Rd} =$	8.83e05 kgfcm
	asse z	$M_{z,Rd} =$	1.94e05 kgfcm
Coefficiente di interazione		$k_{yy} =$	0.94
		$k_{yz} =$	0.49
		$k_{zy} =$	1.00
		$k_{zz} =$	0.81
Verifica di Instabilità a Compressione		$F_{I-N} =$	0.01 (Verificato)
$N_{Ed}/N_{b,Rd} \leq 1$			
Verifica di Instabilità a Pressoflessione		$F_{R-PF,y} =$	0.47 (Verificato)
$(N_{Ed}/N_{b,y,Rd}) + k_{yy}(M_{y,Ed}/M_{b,y,Rd}) + k_{yz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PF,z} =$	0.50 (Verificato)
$(N_{Ed}/N_{b,z,Rd}) + k_{zy}(M_{y,Ed}/M_{b,y,Rd}) + k_{zz}(M_{z,Ed}/M_{z,Rd}) \leq 1$			

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

PROP. 1 - BEAM n. 790 - SEZIONE IN X = 55.61

Grp.: Gruppo0 Trave: 790 Prop.: 1 Sez.in: 55.61			
Cmb 15	M1 = +68.78	M2 = -3.70e05	
	N = -673.55	V1 = +0.44	
	V2 = -3200.69	MT = -3.68	
Sez. a Doppio T			
D = 24.00 B1 = 12.00 T1 = 0.98 T2 = 0.98 T3 = 0.62			
B2 = 12.00			
Area = 3.91e01			
I11 = 3.89e03			
I22 = 2.84e02			



VERIFICA DI RESISTENZA:

Classe = Classe 1
FR-PF = 0.40
FR-v = 0.13
FR-T = 0.00
FR-t = 0.15

VERIFICA DI STABILITA':

Classe = Classe 1
Fi-N = 0.03
FFf,y = 0.57
FFf,z = 0.72

PARAMETRI STATICI DELLA SEZIONE

Altezza totale	D =	24.00	cm
Base inferiore	B1 =	12.00	cm
Spessore flangia inferiore	T1 =	0.98	cm
Spessore flangia superiore	T2 =	0.98	cm
Spessore anima	T3 =	0.62	cm
Base superiore	B2 =	12.00	cm
Posizione del baricentro elastico	X _{1G,e1} =	6.00	cm
	X _{2G,e1} =	12.00	cm
Posizione del baricentro plastico	X _{1G,p1} =	6.00	cm
	X _{2G,p1} =	12.00	cm
Distanza baricentro - centro di taglio	X _{1CT} -X _{1G} =	0.00	cm
	X _{2CT} -X _{2G} =	0.00	cm
Area della sezione	A =	3.91e01	cm ²
Momento d'inerzia	asse 1	I ₁₁ =	3.89e03
	asse 2	I ₂₂ =	2.84e02
	asse 3	J =	9.28e00
Momento polare rispetto il centro di taglio	I _p =	3953.64	cm ⁴
Costante di ingobbamento	I _ω =	37391.18	cm ⁶
Raggio giratore	asse 1	i ₁₁ =	9.98
	asse 2	i ₂₂ =	2.70
Modulo di resistenza elastico	superiore	W _{1 sup,e1} =	3.24e02
	inferiore	W _{1 inf,e1} =	3.24e02
Modulo di resistenza elastico	destro	W _{2 dx,e1} =	4.73e01
	sinistro	W _{2 sx,e1} =	4.73e01
Modulo di resistenza plastico	asse 1	W _{1,p1} =	346.01
	asse 2	W _{2,p1} =	72.68
Area di taglio	asse 1	A _{V1,p1} =	2.35e01
	asse 2	A _{V2,p1} =	1.64e01

CARATTERISTICHE DELL'ASTA:

Lunghezza		55.61	cm
Molt. per inflessione	asse 1	β ₁ =	8.00
	asse 2	β ₂ =	12.00
	asse 3	β ₃ =	8.00

Attributi per il calcolo di instabilità

	Diagramma	ψ	k _c	m _{IT}	C _m
Piano 1	Tipo 2	0.65	0.90	0.86	0.86
Piano 2	Tipo 2	0.52	0.86	0.81	0.81

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio		S275	
Lavorazione		Laminata	
Modulo di elasticità		E =	210.00 GPa
Tensione di snervamento	(t < 40mm)	f _y =	2804.22 kgf/cm ²
Tensione di rottura	(t < 40mm)	f _u =	4384.78 kgf/cm ²
Tensione di snervamento	(t > 40mm)	f _y =	2600.28 kgf/cm ²

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Tensione di rottura	(t > 40mm)	$f_u = 4180.84$	kgf/cm ²
Coefficiente di sicurezza del materiale		$\gamma_{M0} = 1.05$	
Coefficiente di sicurezza all'instabilità		$\gamma_{M1} = 1.05$	

SOLLECITAZIONI:

Sforzo normale		AF = -6.74e02	kgf
Sforzo di taglio	direzione 1	V1 = 4.38e-01	kgf
	direzione 2	V2 = -3.20e03	kgf
Momento flettente	direzione 1	M1 = 6.88e01	kgfcm
	direzione 2	M2 = -3.70e05	kgfcm
Momento torcente		MT = -3.68e00	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

Classe della sezione per la sollecitazione considerata:			
		Cl =	Classe 1
Asse con inerzia maggiore		y-y =	1-1
Asse con inerzia minore		z-z =	2-2
Resistenza assiale		$N_{Rd} = 1.04e05$	kgf
Resistenza tagliante	asse y	$V_{pl,y,Rd} = 25284.05$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{pl,y,T,Rd} = 25281.50$	kgf
Resistenza tagliante	asse z	$V_{pl,z,Rd} = 36265.98$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{pl,z,T,Rd} = 36262.32$	kgf
Resistenza flessionale	asse y	$M_{y,Rd} = 9.24e05$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{y,V,Rd} = 9.24e05$	kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} = 1.94e05$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{z,V,Rd} = 1.94e05$	kgfcm
Resistenza torsionale elastica		$T_{Rd} = 14601.68$	kgfcm
Verifica di Resistenza plastica a Presso-Flessione			
$F_{R,PF}(N_{Ed}, M_{y,Ed}, M_{z,Ed}) \leq 1$		$F_{R-PP} = 0.40$	Verificato
$ M_{y,Ed}/M_{Ny,Rd} ^\alpha + M_{z,Ed}/M_{Nz,Rd} ^\beta \leq 1$		$F_{R-exp} = 0.16$	
$\alpha = 2.00, \beta = 1.00$			
Verifica di Resistenza plastica a Taglio			
$(V_{y,Ed}/V_{y,Rd}) + (V_{z,Ed}/V_{z,Rd}) \leq 1$		$F_{R-V} = 0.13$	Verificato
Verifica di Resistenza elastica a Torsione			
$(T_{Ed}/T_{Rd}) \leq 1$		$F_{R-T} = 0.00$	Verificato
Verifica di Resistenza elastica delle tensioni tangenziali			
$\tau_{Ed} \cdot \sqrt{3} \cdot \gamma_{M0} / f_y \leq 1$		$F_{R-\tau} = 0.15$	Verificato

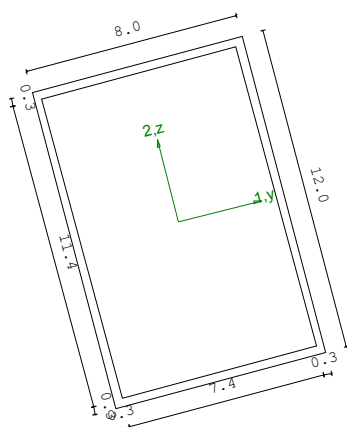
VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:			
		Cl =	Classe 1
Sforzo normale		$N_{ED} = -6.74e02$	kgf
Momento flettente		$M_{z,ED} = 6.88e01$	kgfcm
		$M_{y,ED} = -3.70e05$	kgfcm
Tabella dei carichi critici			
Asse	Carico critico	Lunghezza libera	Snellezza adimensionale
	P_{cr} [kgf]	ℓ_0 [cm]	λ^*
y	1.85e05	667.36	0.77
z	30323.29	444.91	1.90
θ	1.15e05	444.91	0.98
min	30323.29		1.90
	M_{cr} [Nmm]	ℓ_0 [mm]	λ^*_{LT}
fless.tors.	7.64e05	444.91	1.13
Resistenza assiale		minimo	$N_{b,Rd} = 2.39e04$
		asse y	$N_{b,y,Rd} = 8.48e04$
		asse z	$N_{b,z,Rd} = 2.39e04$
Resistenza flessionale		asse y	$M_{b,y,Rd} = 5.34e05$
		asse z	$M_{z,Rd} = 1.94e05$
Coefficiente di interazione			$k_{yy} = 0.81$
			$k_{yz} = 0.54$
			$k_{zy} = 0.99$
			$k_{zz} = 0.89$
Verifica di Instabilità a Compressione			
$N_{Ed}/N_{b,Rd} \leq 1$		$F_{I-N} = 0.03$	(Verificato)
Verifica di Instabilità a Pressoflessione			
$(N_{Ed}/N_{b,y,Rd}) + k_{yy}(M_{y,Ed}/M_{b,y,Rd}) + k_{yz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PP,y} = 0.57$	(Verificato)
$(N_{Ed}/N_{b,z,Rd}) + k_{zy}(M_{y,Ed}/M_{b,y,Rd}) + k_{zz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PP,z} = 0.72$	(Verificato)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

PROP. 2 - BEAM n. 201 - SEZIONE IN X = 202.50

Grp.: Gruppo0 Trave: 201 Prop.: 2 Sez.in: 202.50	
Cmb 13	M1 = +18450.83 M2 = +69089.00
	N = +0.00 V1 = +0.00
	V2 = +0.00 MT = +509.52
Sezione Rettangolare Cava	
D = 12.00 B = 8.00 T1 = 0.30 T2 = 0.30	
Area	= 1.16e01
I11	= 2.38e02
I22	= 1.27e02



VERIFICA DI RESISTENZA

Classe = Classe 1
FR-PF = 0.70
FR-V = 0.00
FR-T = 7.15e-03
FR-t = 7.15e-03

VERIFICA DI STABILITA'

Classe = Classe 1
F1-N = 0.00
FPP,y = 0.76
FPP,z = 0.59

PARAMETRI STATICI DELLA SEZIONE

Altezza	D =	12.00	cm
Base	B =	8.00	cm
Spessore base	T1 =	0.30	cm
Spessore altezza	T2 =	0.30	cm
Posizione del baricentro elastico	X1G,e1 =	4.00	cm
	X2G,e1 =	6.00	cm
Posizione del baricentro plastico	X1G,p1 =	4.00	cm
	X2G,p1 =	6.00	cm
Distanza baricentro - centro di taglio	X1CT-X1G =	0.00	cm
	X2CT-X2G =	0.00	cm
Area della sezione	A =	1.16e01	cm ²
Momento d'inerzia	asse 1	I11 =	2.38e02 cm ⁴
	asse 2	I22 =	1.27e02 cm ⁴
	asse 3	J =	2.51e02 cm ⁴
Momento polare rispetto il centro di taglio	Ip =	365.42	cm ⁴
Costante di ingobbamento	I _ω =	0.00	cm ⁶
Raggio giratore	asse 1	i11 =	4.53 cm
	asse 2	i22 =	3.30 cm
Modulo di resistenza elastico	superiore	W1 sup,e1 =	3.97e01 cm ³
	inferiore	W1 inf,e1 =	3.97e01 cm ³
Modulo di resistenza elastico	destro	W2 dx,e1 =	3.18e01 cm ³
	sinistro	W2 sx,e1 =	3.18e01 cm ³
Modulo di resistenza plastico	asse 1	W1,p1 =	47.57 cm ³
	asse 2	W2,p1 =	35.93 cm ³
Area di taglio	asse 1	AV1,p1 =	4.66e00 cm ²
	asse 2	AV2,p1 =	6.98e00 cm ²

CARATTERISTICHE DELL'ASTA:

Lunghezza		405.00	cm
Molt. per inflessione	asse 1	β ₁ =	1.00
	asse 2	β ₂ =	1.00
	asse 3	β ₃ =	1.00

Attributi per il calcolo di instabilità

	Diagramma	ψ	k _c	m _{LT}	C _m
Piano 1	Tipo 3	0.00	0.94	0.93	0.95
Piano 2	Tipo 3	0.00	0.94	0.93	0.95

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio	S235	
Lavorazione	Laminata	
Modulo di elasticità	E = 210.00	GPa
Tensione di snervamento	(t < 40mm) f _y = 2396.33	kgf/cm ²
Tensione di rottura	(t < 40mm) f _u = 3670.98	kgf/cm ²

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA**LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)****LAVORO: AMPLIAMENTO OSPEDALE "VAIO"**

Tensione di snervamento	(t > 40mm)	$f_y = 2192.39$	kgf/cm ²
Tensione di rottura	(t > 40mm)	$f_u = 3670.98$	kgf/cm ²
Coefficiente di sicurezza del materiale		$\gamma_{M0} = 1.05$	
Coefficiente di sicurezza all'instabilità		$\gamma_{M1} = 1.05$	

SOLLECITAZIONI:

Sforzo normale		AF = 0.00e00	kgf
Sforzo di taglio	direzione 1	V1 = 0.00e00	kgf
	direzione 2	V2 = 0.00e00	kgf
Momento flettente	direzione 1	M1 = 1.85e04	kgfcm
	direzione 2	M2 = 6.91e04	kgfcm
Momento torcente		MT = 5.10e02	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

Classe della sezione per la sollecitazione considerata:			
		Cl =	Classe 1
Asse con inerzia maggiore		y-y =	1-1
Asse con inerzia minore		z-z =	2-2
Resistenza assiale		$N_{Rd} = 26565.06$	kgf
Resistenza tagliante	asse y	$V_{p1,y,Rd} = 9202.41$	kgf
riduzione per la torsione		coeff = 0.99	
		$V_{p1,y,T,Rd} = 9136.58$	kgf
Resistenza tagliante	asse z	$V_{p1,z,Rd} = 6134.94$	kgf
riduzione per la torsione		coeff = 0.99	
		$V_{p1,z,T,Rd} = 6091.05$	kgf
Resistenza flessionale	asse y	$M_{y,Rd} = 1.09e05$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{y,V,Rd} = 1.09e05$	kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} = 82009.37$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{z,V,Rd} = 82009.37$	kgfcm
Resistenza torsionale elastica		$T_{Rd} = 71223.79$	kgfcm
Verifica di Resistenza plastica a Presso-Flessione			
		$F_{R-PF} = 0.70$	Verificato
		$F_{R-exp} = 0.56$	
		$\alpha = 1.66, \beta = 1.66$	
Verifica di Resistenza plastica a Taglio			
		$F_{R-V} = 0.00$	Verificato
Verifica di Resistenza elastica a Torsione			
		$F_{R-T} = 7.15e-03$	Verificato
Verifica di Resistenza elastica delle tensioni tangenziali			
		$F_{R-t} = 7.15e-03$	Verificato

VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:			
		Cl =	Classe 1
Sforzo normale		$N_{ED} = 0.00e00$	kgf
Momento flettente		$M_{z,ED} = 1.85e04$	kgfcm
		$M_{y,ED} = 6.91e04$	kgfcm
Tabella dei carichi critici			
Asse	Carico critico	Lunghezza libera	Snellezza adimensionale
	P_{cr} [kgf]	ℓ_0 [cm]	λ^*
y	30715.69	405.00	0.95
z	16368.89	405.00	1.31
θ	6.60e06	405.00	0.06
min	16368.89		1.31
	M_{cr} [Nmm]	ℓ_0 [mm]	λ_{LT}^*
fless.tors.	1.84e06	405.00	0.25
Resistenza assiale	minimo	$N_{b,Rd} = 1.24e04$	kgf
	asse y	$N_{b,y,Rd} = 1.85e04$	kgf
	asse z	$N_{b,z,Rd} = 1.24e04$	kgf
Resistenza flessionale	asse y	$M_{b,y,Rd} = 1.04e05$	kgfcm
	asse z	$M_{z,Rd} = 8.20e04$	kgfcm
Coefficiente di interazione			
		$k_{yy} = 0.95$	
		$k_{yz} = 0.57$	
		$k_{zy} = 0.57$	
		$k_{zz} = 0.95$	
Verifica di Instabilità a Compressione			
	$N_{Ed}/N_{b,Rd} \leq 1$	$F_{I-N} = 0.00$	(Verificato)
Verifica di Instabilità a Pressoflessione			
	$(N_{Ed}/N_{b,y,Rd}) + k_{yy} (M_{y,Ed}/M_{b,y,Rd}) + k_{yz} (M_{z,Ed}/M_{z,Rd}) \leq 1$	$F_{R-PF,y} = 0.76$	(Verificato)
	$(N_{Ed}/N_{b,z,Rd}) + k_{zy} (M_{y,Ed}/M_{b,y,Rd}) + k_{zz} (M_{z,Ed}/M_{z,Rd}) \leq 1$	$F_{R-PF,z} = 0.59$	(Verificato)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

PROP. 2 - BEAM n. 532 - SEZIONE IN X = 0.00

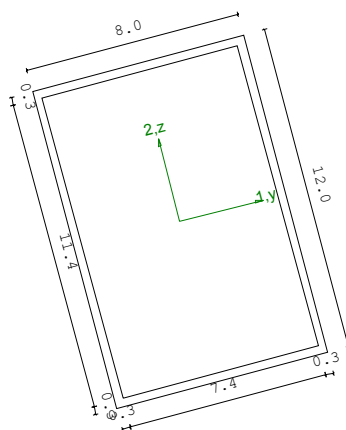
Grp.: Gruppo0 Trave: 532 Prop.: 2 Sez.in: 0.00		
Cmb 13	M1 = +0.00	M2 = +0.00
	N = +0.00	V1 = +182.23
	V2 = +682.36	MT = +0.00
Sezione Rettangolare Cava		
D = 12.00 B = 8.00 T1 = 0.30 T2 = 0.30		
Area = 1.16e01		
I11 = 2.38e02		
I22 = 1.27e02		

VERIFICA DI RESISTENZA

Classe = Tesa
FR-PF = 0.00
FR-V = 0.10
FR-T = 0.00
FR-t = 0.09

VERIFICA DI STABILITA'

Classe = Classe 1
FI-N = 0.00
FPF,y = 0.76
FPF,z = 0.59



PARAMETRI STATICI DELLA SEZIONE

Altezza	D =	12.00	cm
Base	B =	8.00	cm
Spessore base	T1 =	0.30	cm
Spessore altezza	T2 =	0.30	cm
Posizione del baricentro elastico	X1G,e1 =	4.00	cm
	X2G,e1 =	6.00	cm
Posizione del baricentro plastico	X1G,p1 =	4.00	cm
	X2G,p1 =	6.00	cm
Distanza baricentro - centro di taglio	X1CT-X1G =	0.00	cm
	X2CT-X2G =	0.00	cm
Area della sezione	A =	1.16e01	cm ²
Momento d'inerzia	asse 1	I11 =	2.38e02 cm ⁴
	asse 2	I22 =	1.27e02 cm ⁴
	asse 3	J =	2.51e02 cm ⁴
Momento polare rispetto il centro di taglio	Ip =	365.42	cm ⁴
Costante di ingobbamento	Iω =	0.00	cm ⁶
Raggio giratore	asse 1	i11 =	4.53 cm
	asse 2	i22 =	3.30 cm
Modulo di resistenza elastico	superiore	W1 sup,e1 =	3.97e01 cm ³
	inferiore	W1 inf,e1 =	3.97e01 cm ³
Modulo di resistenza elastico	destro	W2 dx,e1 =	3.18e01 cm ³
	sinistro	W2 sx,e1 =	3.18e01 cm ³
Modulo di resistenza plastico	asse 1	W1,p1 =	47.57 cm ³
	asse 2	W2,p1 =	35.93 cm ³
Area di taglio	asse 1	Av1,p1 =	4.66e00 cm ²
	asse 2	Av2,p1 =	6.98e00 cm ²

CARATTERISTICHE DELL'ASTA:

Lunghezza		405.00	cm
Molt. per inflessione	asse 1	β ₁ =	1.00
	asse 2	β ₂ =	1.00
	asse 3	β ₃ =	1.00
Attributi per il calcolo di instabilità			
	Diagramma	ψ	k _c
Piano 1	Tipo 3	0.00	0.94
Piano 2	Tipo 3	0.00	0.94
			m _{IT}
			0.93
			C _m
			0.95

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio	S235
Lavorazione	Laminata
Modulo di elasticità	E = 210.00 GPa
Tensione di snervamento	f _y = 2396.33 kgf/cm ²
Tensione di rottura	f _u = 3670.98 kgf/cm ²

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Tensione di snervamento	(t > 40mm)	$f_y = 2192.39$	kgf/cm ²
Tensione di rottura	(t > 40mm)	$f_u = 3670.98$	kgf/cm ²
Coefficiente di sicurezza del materiale		$\gamma_{M0} = 1.05$	
Coefficiente di sicurezza all'instabilità		$\gamma_{M1} = 1.05$	

SOLLECITAZIONI:

Sforzo normale		AF = 0.00e00	kgf
Sforzo di taglio	direzione 1	V1 = 1.82e02	kgf
	direzione 2	V2 = 6.82e02	kgf
Momento flettente	direzione 1	M1 = 0.00e00	kgfcm
	direzione 2	M2 = 0.00e00	kgfcm
Momento torcente		MT = 0.00e00	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

Classe della sezione per la sollecitazione considerata:			
		Cl = Tesa	
Asse con inerzia maggiore		y-y = 1-1	
Asse con inerzia minore		z-z = 2-2	
Resistenza assiale		$N_{Rd} = 26565.06$	kgf
Resistenza tagliante	asse y	$V_{p1,y,Rd} = 9202.41$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{p1,y,T,Rd} = 9202.41$	kgf
Resistenza tagliante	asse z	$V_{p1,z,Rd} = 6134.94$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{p1,z,T,Rd} = 6134.94$	kgf
Resistenza flessionale	asse y	$M_{y,Rd} = 1.09e05$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{y,V,Rd} = 1.09e05$	kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} = 82009.37$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{z,V,Rd} = 82009.37$	kgfcm
Resistenza torsionale elastica		$T_{Rd} = 71223.79$	kgfcm
Verifica di Resistenza plastica a Presso-Flessione			
		$F_{R,PF} = 0.00$	Verificato
		$F_{R-exp} = ---$	
		$\alpha = 1.66, \beta = 1.66$	
Verifica di Resistenza plastica a Taglio			
		$F_{R-V} = 0.10$	Verificato
Verifica di Resistenza elastica a Torsione			
		$F_{R-T} = 0.00$	Verificato
Verifica di Resistenza elastica delle tensioni tangenziali			
		$F_{R-t} = 0.09$	Verificato

VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:			
		Cl = Classe 1	
Sforzo normale		$N_{ED} = 0.00e00$	kgf
Momento flettente		$M_{z,ED} = 1.85e04$	kgfcm
		$M_{y,ED} = 6.91e04$	kgfcm
Tabella dei carichi critici			
Asse	Carico critico	Lunghezza libera	Snellezza adimensionale
	P_{cr} [kgf]	ℓ_0 [cm]	λ^*
y	30715.69	405.00	0.95
z	16368.89	405.00	1.31
θ	6.60e06	405.00	0.06
min	16368.89		1.31
	M_{cr} [Nmm]	ℓ_0 [mm]	λ_{LT}^*
fless.tors.	1.84e06	405.00	0.25
Resistenza assiale	minimo	$N_{b,Rd} = 1.24e04$	kgf
	asse y	$N_{b,y,Rd} = 1.85e04$	kgf
	asse z	$N_{b,z,Rd} = 1.24e04$	kgf
Resistenza flessionale	asse y	$M_{b,y,Rd} = 1.04e05$	kgfcm
	asse z	$M_{b,z,Rd} = 8.20e04$	kgfcm
Coefficiente di interazione			
		$k_{yy} = 0.95$	
		$k_{yz} = 0.57$	
		$k_{zy} = 0.57$	
		$k_{zz} = 0.95$	
Verifica di Instabilità a Compressione			
	$N_{Ed}/N_{b,Rd} \leq 1$	$F_{I-N} = 0.00$	(Verificato)
Verifica di Instabilità a Pressoflessione			
	$(N_{Ed}/N_{b,y,Rd}) + k_{yy} (M_{y,Ed}/M_{b,y,Rd}) + k_{yz} (M_{z,Ed}/M_{z,Rd}) \leq 1$	$F_{R-PF,y} = 0.76$	(Verificato)
	$(N_{Ed}/N_{b,z,Rd}) + k_{zy} (M_{y,Ed}/M_{b,y,Rd}) + k_{zz} (M_{z,Ed}/M_{z,Rd}) \leq 1$	$F_{R-PF,z} = 0.59$	(Verificato)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA

LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)

LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

PROP. 3 - BEAM n. 597 - SEZIONE IN X = 0.00

La verifica di resistenza dei controventi in tondo Ø16 è svolta attribuendo agli elementi una lunghezza libera di inflessione tale da "provocare" un fattore χ pari a 0.5; ciò equivale a raddoppiare lo sforzo nelle aste e quindi a verificare l'asta per gli sforzi realmente presenti considerando le aste reagenti solo a trazione.

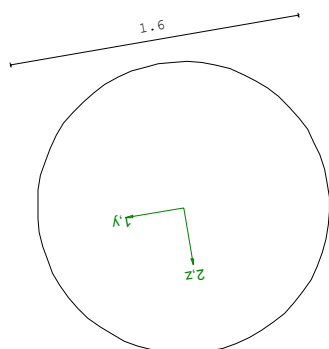
Grp.: Gruppo0 Trave: 597 Prop.: 3 Sez.in: 0.00			
Cmb 25	M1 = +0.00	M2 = +0.00	
	N = -1308.21	V1 = +0.00	
	V2 = +0.00	MT = +0.00	
Sezione Circolare			
D = 1.60			
Area	= 2.01e00		
I11	= 3.22e-01		
I22	= 3.22e-01		

VERIFICA DI RESISTENZA:

Classe = Classe 1
FR-PF = 0.29
FR-V = 0.00
FR-T = 0.00
FR-t = 0.00

VERIFICA DI STABILITA':

Classe = Classe 1
Ff-N = 0.57
FfF,y = 0.57
FfF,z = 0.57



PARAMETRI STATICI DELLA SEZIONE

Diametro	D	=	1.60	cm
Posizione del baricentro elastico	X1G,e1	=	0.80	cm
	X2G,e1	=	0.80	cm
Posizione del baricentro plastico	X1G,p1	=	0.80	cm
	X2G,p1	=	0.80	cm
Distanza baricentro - centro di taglio	X1CT-X1G	=	0.00	cm
	X2CT-X2G	=	0.00	cm
Area della sezione	A	=	2.01e00	cm ²
Momento d'inerzia	asse 1	I11 =	3.22e-01	cm ⁴
	asse 2	I22 =	3.22e-01	cm ⁴
	asse 3	J =	6.43e-01	cm ⁴
Momento polare rispetto il centro di taglio	I _p	=	0.64	cm ⁴
Costante di ingobbamento	I ₀	=	0.00	cm ⁶
Raggio giratore	asse 1	i11 =	0.40	cm
	asse 2	i22 =	0.40	cm
Modulo di resistenza elastico	superiore	W1 _{sup,e1} =	4.02e-01	cm ³
	inferiore	W1 _{inf,e1} =	4.02e-01	cm ³
Modulo di resistenza elastico	destro	W2 _{dx,e1} =	4.02e-01	cm ³
	sinistro	W2 _{sx,e1} =	4.02e-01	cm ³
Modulo di resistenza plastico	asse 1	W1,p1 =	0.68	cm ³
	asse 2	W2,p1 =	0.68	cm ³
Area di taglio	asse 1	AV1,p1 =	2.01e00	cm ²
	asse 2	AV2,p1 =	2.01e00	cm ²

CARATTERISTICHE DELL'ASTA:

Lunghezza			462.00	cm
Molt. per inflessione	asse 1	$\beta_1 =$	0.09	
	asse 2	$\beta_2 =$	0.09	
	asse 3	$\beta_3 =$	0.09	

Attributi per il calcolo di instabilità

	Diagramma	ψ	k_c	m_{IT}	C_m
Piano 1	Tipo 1	1.00	1.00	1.00	1.00
Piano 2	Tipo 1	1.00	1.00	1.00	1.00

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio	S235	
Lavorazione	Laminata	
Modulo di elasticità	E = 210.00	GPa
Tensione di snervamento	(t < 40mm) f _y = 2396.33	kgf/cm ²

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Tensione di rottura	(t < 40mm)	$f_u = 3670.98$	kgf/cm ²
Tensione di snervamento	(t > 40mm)	$f_y = 2192.39$	kgf/cm ²
Tensione di rottura	(t > 40mm)	$f_u = 3670.98$	kgf/cm ²
Coefficiente di sicurezza del materiale		$\gamma_{M0} = 1.05$	
Coefficiente di sicurezza all'instabilità		$\gamma_{M1} = 1.05$	

SOLLECITAZIONI:

Sforzo normale		AF = -1.31e03	kgf
Sforzo di taglio	direzione 1	V1 = 0.00e00	kgf
	direzione 2	V2 = 0.00e00	kgf
Momento flettente	direzione 1	M1 = 0.00e00	kgfcm
	direzione 2	M2 = 0.00e00	kgfcm
Momento torcente		MT = 0.00e00	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

Classe della sezione per la sollecitazione considerata:

		Cl =	Classe 1
Asse con inerzia maggiore		y-y =	2-2
Asse con inerzia minore		z-z =	1-1
Resistenza assiale		$N_{Rd} = 4588.68$	kgf
Resistenza tagliante	asse y	$V_{p1,y,Rd} = 2649.28$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{p1,y,T,Rd} = 2649.28$	kgf
Resistenza tagliante	asse z	$V_{p1,z,Rd} = 2649.28$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{p1,z,T,Rd} = 2649.28$	kgf
Resistenza flessionale	asse y	$M_{y,Rd} = 1558.00$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{y,V,Rd} = 1558.00$	kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} = 1558.00$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{z,V,Rd} = 1558.00$	kgfcm
Resistenza torsionale elastica		$T_{Rd} = 1059.71$	kgfcm
Verifica di Resistenza plastica a Presso-Flessione			
$F_{R,PF}(N_{Ed}, M_{y,Ed}, M_{z,Ed}) \leq 1$		$F_{R,PF} = 0.29$	Verificato
Verifica di Resistenza plastica a Taglio			
$(V_{y,Ed}/V_{y,Rd}) + (V_{z,Ed}/V_{z,Rd}) \leq 1$		$F_{R-V} = 0.00$	Verificato
Verifica di Resistenza elastica a Torsione			
$(T_{Ed}/T_{Rd}) \leq 1$		$F_{R-T} = 0.00$	Verificato
Verifica di Resistenza elastica delle tensioni tangenziali			
$\tau_{Ed} \cdot \sqrt{3} \cdot \gamma_{M0} / f_y \leq 1$		$F_{R-\tau} = 0.00$	Verificato

VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:

		Cl =	Classe 1
Sforzo normale		$N_{ED} = -1.31e03$	kgf
Momento flettente		$M_{z,ED} = 0.00e00$	kgfcm
		$M_{y,ED} = 0.00e00$	kgfcm
Tabella dei carichi critici			
	Carico	Lunghezza	Snellezza
Asse	critico	libera	adimensionale
	P_{cr} [kgf]	l_0 [cm]	λ^*
y	4249.41	40.00	1.06
z	4249.41	40.00	1.06
			Coefficiente
			riduttivo
			χ
			0.50
			0.50
Resistenza assiale		minimo	$N_{b,Rd} = 2.31e03$
		asse y	$N_{b,y,Rd} = 2.31e03$
		asse z	$N_{b,z,Rd} = 2.31e03$
Resistenza flessionale		asse y	$M_{b,y,Rd} = 1.56e03$
		asse z	$M_{b,z,Rd} = 1.56e03$
Coefficiente di interazione			$k_{yy} = 1.45$
			$k_{yz} = 0.87$
			$k_{zy} = 0.87$
			$k_{zz} = 1.45$
Verifica di Instabilità a Compressione			
$N_{Ed}/N_{b,Rd} \leq 1$		$F_{I-N} = 0.57$	(Verificato)
Verifica di Instabilità a Pressoflessione			
$(N_{Ed}/N_{b,y,Rd}) + k_{yy}(M_{y,Ed}/M_{b,y,Rd}) + k_{yz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PF,y} = 0.57$	(Verificato)
$(N_{Ed}/N_{b,z,Rd}) + k_{zy}(M_{y,Ed}/M_{b,y,Rd}) + k_{zz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PF,z} = 0.57$	(Verificato)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

PROP. 4 - BEAM n. 945 - SEZIONE IN X = 0.00

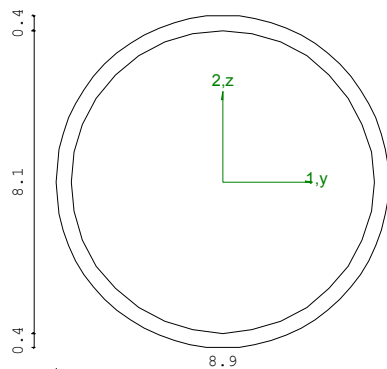
Grp.: Gruppo0 Trave: 945 Prop.: 4 Sez.in: 0.00			
Cmb 26	M1 = +0.00	M2 = +0.00	
	N = +6258.94	V1 = +0.00	
	V2 = +0.00	MT = +0.00	
Sezione Circolare cava			
D = 8.89 T1 = 0.40			
Area	= 1.07e01		
I11	= 9.63e01		
I22	= 9.63e01		

VERIFICA DI RESISTENZA:

Classe = Tesa
FR-PF = 0.26
FR-V = 0.00
FR-T = 0.00
FR-t = 0.00

VERIFICA DI STABILITA':

Classe = Tesa
FI-N = 0.00
FPP,y = 0.00
FPP,z = 0.00



PARAMETRI STATICI DELLA SEZIONE

Diametro	D =	8.89	cm
Spessore	T1 =	0.40	cm
Posizione del baricentro elastico	X1G,e1 =	4.45	cm
	X2G,e1 =	4.45	cm
Posizione del baricentro plastico	X1G,p1 =	4.45	cm
	X2G,p1 =	4.45	cm
Distanza baricentro - centro di taglio	X1CT-X1G =	0.00	cm
	X2CT-X2G =	0.00	cm
Area della sezione	A =	1.07e01	cm ²
Momento d'inerzia	asse 1	I11 =	9.63e01 cm ⁴
	asse 2	I22 =	9.63e01 cm ⁴
	asse 3	J =	1.93e02 cm ⁴
Momento polare rispetto il centro di taglio	I _p =	192.68	cm ⁴
Costante di ingobbamento	I _ω =	0.00	cm ⁶
Raggio giratore	asse 1	i11 =	3.00 cm
	asse 2	i22 =	3.00 cm
Modulo di resistenza elastico	superiore	W1 sup,e1 =	2.17e01 cm ³
	inferiore	W1 inf,e1 =	2.17e01 cm ³
Modulo di resistenza elastico	destro	W2 dx,e1 =	2.17e01 cm ³
	sinistro	W2 sx,e1 =	2.17e01 cm ³
Modulo di resistenza plastico	asse 1	W1,p1 =	28.85 cm ³
	asse 2	W2,p1 =	28.85 cm ³
Area di taglio	asse 1	Av1,p1 =	6.79e00 cm ²
	asse 2	Av2,p1 =	6.79e00 cm ²

CARATTERISTICHE DELL'ASTA:

Lunghezza		405.00	cm
Molt. per inflessione	asse 1	β ₁ =	1.00
	asse 2	β ₂ =	1.00
	asse 3	β ₃ =	1.00

Attributi per il calcolo di instabilità

	Diagramma	ψ	k _c	m _{IT}	C _m
Piano 1	Tipo 1	1.00	1.00	1.00	1.00
Piano 2	Tipo 1	1.00	1.00	1.00	1.00

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio	S235		
Lavorazione	Laminata		
Modulo di elasticità	E = 210.00	GPa	
Tensione di snervamento	(t < 40mm)	f _y = 2396.33	kgf/cm ²
Tensione di rottura	(t < 40mm)	f _u = 3670.98	kgf/cm ²
Tensione di snervamento	(t > 40mm)	f _y = 2192.39	kgf/cm ²

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Tensione di rottura	(t > 40mm)	$f_u = 3670.98$	kgf/cm ²
Coefficiente di sicurezza del materiale		$\gamma_{M0} = 1.05$	
Coefficiente di sicurezza all'instabilità		$\gamma_{M1} = 1.05$	

SOLLECITAZIONI:

Sforzo normale		AF = 6.26e03	kgf
Sforzo di taglio	direzione 1	V1 = 0.00e00	kgf
	direzione 2	V2 = 0.00e00	kgf
Momento flettente	direzione 1	M1 = 0.00e00	kgfcm
	direzione 2	M2 = 0.00e00	kgfcm
Momento torcente		MT = 0.00e00	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

Classe della sezione per la sollecitazione considerata:			
		Cl = Tesa	
Asse con inerzia maggiore		y-y = 2-2	
Asse con inerzia minore		z-z = 1-1	
Resistenza assiale		$N_{Rd} = 24348.68$	kgf
Resistenza tagliante	asse y	$V_{pl,y,Rd} = 8949.42$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{pl,y,T,Rd} = 8949.42$	kgf
Resistenza tagliante	asse z	$V_{pl,z,Rd} = 8949.42$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{pl,z,T,Rd} = 8949.42$	kgf
Resistenza flessionale	asse y	$M_{y,Rd} = 60554.31$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{y,V,Rd} = 60554.31$	kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} = 60554.31$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{z,V,Rd} = 60554.31$	kgfcm
Resistenza torsionale elastica		$T_{Rd} = 59675.01$	kgfcm
Verifica di Resistenza plastica a Presso-Flessione			
$F_{R,PF}(N_{Ed}, M_{y,Ed}, M_{z,Ed}) \leq 1$		$F_{R-PP} = 0.26$	Verificato
$ M_{y,Ed}/M_{Ny,Rd} ^\alpha + M_{z,Ed}/M_{Nz,Rd} ^\beta \leq 1$		$F_{R-exp} = ---$	
$\alpha = 2.00, \beta = 2.00$			
Verifica di Resistenza plastica a Taglio			
$(V_{y,Ed}/V_{y,Rd}) + (V_{z,Ed}/V_{z,Rd}) \leq 1$		$F_{R-V} = 0.00$	Verificato
Verifica di Resistenza elastica a Torsione			
$(T_{Ed}/T_{Rd}) \leq 1$		$F_{R-T} = 0.00$	Verificato
Verifica di Resistenza elastica delle tensioni tangenziali			
$\tau_{Ed} \cdot \sqrt{(3) \cdot \gamma_{M0}} / f_y \leq 1$		$F_{R-\tau} = 0.00$	Verificato

VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:			
		Cl = Tesa	
Sforzo normale		$N_{Ed} = 6.26e03$	kgf
Momento flettente		$M_{z,Ed} = 0.00e00$	kgfcm
		$M_{y,Ed} = 0.00e00$	kgfcm
Tabella dei carichi critici			
Asse	Carico critico	Lunghezza libera	Snellezza adimensionale
	P_{cr} [kgf]	ℓ_0 [cm]	λ^*
y	12413.50	405.00	1.44
z	12413.50	405.00	1.44
Resistenza assiale		minimo	$N_{b,Rd} = 9.77e03$ kgf
		asse y	$N_{b,y,Rd} = 9.77e03$ kgf
		asse z	$N_{b,z,Rd} = 9.77e03$ kgf
Resistenza flessionale		asse y	$M_{b,y,Rd} = 6.58e04$ kgfcm
		asse z	$M_{b,z,Rd} = 6.58e04$ kgfcm
Coefficiente di interazione			
		$k_{yy} = 1.00$	
		$k_{yz} = 0.60$	
		$k_{zy} = 0.60$	
		$k_{zz} = 1.00$	
Verifica di Instabilità a Compressione			
$N_{Ed}/N_{b,Rd} \leq 1$		$F_{I-N} = 0.00$	(Verificato)
Verifica di Instabilità a Pressoflessione			
$(N_{Ed}/N_{b,y,Rd}) + k_{yy}(M_{y,Ed}/M_{b,y,Rd}) + k_{yz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PP,y} = 0.00$	(Verificato)
$(N_{Ed}/N_{b,z,Rd}) + k_{zy}(M_{y,Ed}/M_{b,y,Rd}) + k_{zz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PP,z} = 0.00$	(Verificato)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

PROP. 4 - BEAM n. 946 - SEZIONE IN X = 0.00

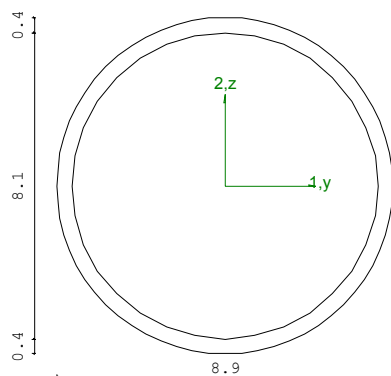
Grp.: Gruppo0 Trave: 946 Prop.: 4 Sez.in: 0.00		
Cmb 25	M1 = +0.00	M2 = +0.00
	N = -6204.23	V1 = +0.00
	V2 = +0.00	MT = +0.00
Sezione Circolare cava		
D = 8.89 T1 = 0.40		
Area	= 1.07e01	
I11	= 9.63e01	
I22	= 9.63e01	

VERIFICA DI RESISTENZA

Classe = Classe 1
FR-PF = 0.25
FR-V = 0.00
FR-T = 0.00
FR-t = 0.00

VERIFICA DI STABILITA'

Classe = Classe 1
FR-N = 0.64
FPF,y = 0.64
FPF,z = 0.64



PARAMETRI STATICI DELLA SEZIONE

Diametro	D =	8.89	cm
Spessore	T1 =	0.40	cm
Posizione del baricentro elastico	X1G,e1 =	4.45	cm
	X2G,e1 =	4.45	cm
Posizione del baricentro plastico	X1G,p1 =	4.45	cm
	X2G,p1 =	4.45	cm
Distanza baricentro - centro di taglio	X1CT-X1G =	0.00	cm
	X2CT-X2G =	0.00	cm
Area della sezione	A =	1.07e01	cm ²
Momento d'inerzia	asse 1	I11 =	9.63e01 cm ⁴
	asse 2	I22 =	9.63e01 cm ⁴
	asse 3	J =	1.93e02 cm ⁴
Momento polare rispetto il centro di taglio	I _p =	192.68	cm ⁴
Costante di ingobbamento	I ₀ =	0.00	cm ⁶
Raggio giratore	asse 1	i11 =	3.00 cm
	asse 2	i22 =	3.00 cm
Modulo di resistenza elastico	superiore	W1 sup,e1 =	2.17e01 cm ³
	inferiore	W1 inf,e1 =	2.17e01 cm ³
Modulo di resistenza elastico	destro	W2 dx,e1 =	2.17e01 cm ³
	sinistro	W2 sx,e1 =	2.17e01 cm ³
Modulo di resistenza plastico	asse 1	W1,p1 =	28.85 cm ³
	asse 2	W2,p1 =	28.85 cm ³
Area di taglio	asse 1	AV1,p1 =	6.79e00 cm ²
	asse 2	AV2,p1 =	6.79e00 cm ²

CARATTERISTICHE DELL'ASTA:

Lunghezza		405.00	cm
Molt. per inflessione	asse 1	β ₁ =	1.00
	asse 2	β ₂ =	1.00
	asse 3	β ₃ =	1.00

Attributi per il calcolo di instabilità

	Diagramma	ψ	k _c	m _{LT}	C _m
Piano 1	Tipo 1	1.00	1.00	1.00	1.00
Piano 2	Tipo 1	1.00	1.00	1.00	1.00

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio	S235
Lavorazione	Laminata
Modulo di elasticità	E = 210.00 GPa
Tensione di snervamento	(t < 40mm) f _y = 2396.33 kgf/cm ²
Tensione di rottura	(t < 40mm) f _u = 3670.98 kgf/cm ²
Tensione di snervamento	(t > 40mm) f _y = 2192.39 kgf/cm ²

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

Tensione di rottura	(t > 40mm)	$f_u = 3670.98$	kgf/cm ²
Coefficiente di sicurezza del materiale		$\gamma_{M0} = 1.05$	
Coefficiente di sicurezza all'instabilità		$\gamma_{M1} = 1.05$	

SOLLECITAZIONI:

Sforzo normale		AF = -6.20e03	kgf
Sforzo di taglio	direzione 1	V1 = 0.00e00	kgf
	direzione 2	V2 = 0.00e00	kgf
Momento flettente	direzione 1	M1 = 0.00e00	kgfcm
	direzione 2	M2 = 0.00e00	kgfcm
Momento torcente		MT = 0.00e00	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

Classe della sezione per la sollecitazione considerata:			
		Cl =	Classe 1
Asse con inerzia maggiore		y-y =	2-2
Asse con inerzia minore		z-z =	1-1
Resistenza assiale		$N_{Rd} = 24348.68$	kgf
Resistenza tagliante	asse y	$V_{pl,y,Rd} = 8949.42$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{pl,y,T,Rd} = 8949.42$	kgf
Resistenza tagliante	asse z	$V_{pl,z,Rd} = 8949.42$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{pl,z,T,Rd} = 8949.42$	kgf
Resistenza flessionale	asse y	$M_{y,Rd} = 60645.25$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{y,V,Rd} = 60645.25$	kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} = 60645.25$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{z,V,Rd} = 60645.25$	kgfcm
Resistenza torsionale elastica		$T_{Rd} = 59675.01$	kgfcm
Verifica di Resistenza plastica a Presso-Flessione			
$F_{R,PF}(N_{Ed}, M_{y,Ed}, M_{z,Ed}) \leq 1$		$F_{R-PP} = 0.25$	Verificato
$ M_{y,Ed}/M_{Ny,Rd} ^\alpha + M_{z,Ed}/M_{Nz,Rd} ^\beta \leq 1$		$F_{R-exp} = ---$	
$\alpha = 2.00, \beta = 2.00$			
Verifica di Resistenza plastica a Taglio			
$(V_{y,Ed}/V_{y,Rd}) + (V_{z,Ed}/V_{z,Rd}) \leq 1$		$F_{R-V} = 0.00$	Verificato
Verifica di Resistenza elastica a Torsione			
$(T_{Ed}/T_{Rd}) \leq 1$		$F_{R-T} = 0.00$	Verificato
Verifica di Resistenza elastica delle tensioni tangenziali			
$\tau_{Ed} \cdot \sqrt{(3) \cdot \gamma_{M0}} / f_y \leq 1$		$F_{R-\tau} = 0.00$	Verificato

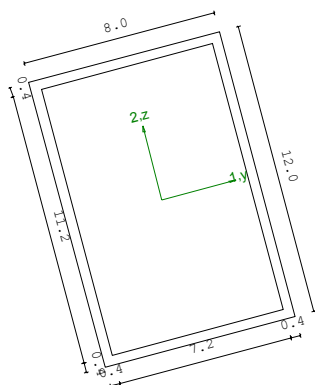
VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:			
		Cl =	Classe 1
Sforzo normale		$N_{Ed} = -6.20e03$	kgf
Momento flettente		$M_{z,Ed} = 0.00e00$	kgfcm
		$M_{y,Ed} = 0.00e00$	kgfcm
Tabella dei carichi critici			
Asse	Carico critico	Lunghezza libera	Snellezza adimensionale
	P_{cr} [kgf]	ℓ_0 [cm]	λ^*
y	12413.50	405.00	1.44
z	12413.50	405.00	1.44
Resistenza assiale		minimo	$N_{b,Rd} = 9.77e03$ kgf
		asse y	$N_{b,y,Rd} = 9.77e03$ kgf
		asse z	$N_{b,z,Rd} = 9.77e03$ kgf
Resistenza flessionale		asse y	$M_{b,y,Rd} = 6.58e04$ kgfcm
		asse z	$M_{b,z,Rd} = 6.58e04$ kgfcm
Coefficiente di interazione			
		$k_{yy} = 1.51$	
		$k_{yz} = 0.90$	
		$k_{zy} = 0.90$	
		$k_{zz} = 1.51$	
Verifica di Instabilità a Compressione			
$N_{Ed}/N_{b,Rd} \leq 1$		$F_{I-N} = 0.64$	(Verificato)
Verifica di Instabilità a Pressoflessione			
$(N_{Ed}/N_{b,y,Rd}) + k_{yy}(M_{y,Ed}/M_{b,y,Rd}) + k_{yz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PP,y} = 0.64$	(Verificato)
$(N_{Ed}/N_{b,z,Rd}) + k_{zy}(M_{y,Ed}/M_{b,y,Rd}) + k_{zz}(M_{z,Ed}/M_{z,Rd}) \leq 1$		$F_{R-PP,z} = 0.64$	(Verificato)

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

PROP. 5 - BEAM n. 530 - SEZIONE IN X = 219.50

Grp.: Gruppo0 Trave: 530 Prop.: 5 Sez.in: 219.50		
Cmb 13	M1 = +21915.04	M2 = +82060.74
	N = +0.00	V1 = +0.00
	V2 = +0.00	MT = -97.46
Sezione Rettangolare Cava		
D = 12.00 B = 8.00 T1 = 0.40 T2 = 0.40		
Area = 1.54e01		
I11 = 3.09e02		
I22 = 1.64e02		



VERIFICA DI RESISTENZA:

Classe = Classe 1
FR-PF = 0.64
FR-v = 0.00
FR-T = 1.05e-03
FR-t = 1.05e-03

VERIFICA DI STABILITA':

Classe = Classe 1
FI-N = 0.00
FPF,y = 0.69
FPF,z = 0.54

PARAMETRI STATICI DELLA SEZIONE

Altezza	D =	12.00	cm
Base	B =	8.00	cm
Spessore base	T1 =	0.40	cm
Spessore altezza	T2 =	0.40	cm
Posizione del baricentro elastico	X _{1G,e1} =	4.00	cm
	X _{2G,e1} =	6.00	cm
Posizione del baricentro plastico	X _{1G,p1} =	4.00	cm
	X _{2G,p1} =	6.00	cm
Distanza baricentro - centro di taglio	X _{1CT} -X _{1G} =	0.00	cm
	X _{2CT} -X _{2G} =	0.00	cm
Area della sezione	A =	1.54e01	cm ²
Momento d'inerzia	asse 1	I ₁₁ =	3.09e02 cm ⁴
	asse 2	I ₂₂ =	1.64e02 cm ⁴
	asse 3	J =	3.24e02 cm ⁴
Momento polare rispetto il centro di taglio	I _p =	472.68	cm ⁴
Costante di ingobbamento	I _ω =	0.00	cm ⁶
Raggio giratore	asse 1	i ₁₁ =	4.49 cm
	asse 2	i ₂₂ =	3.26 cm
Modulo di resistenza elastico	superiore	W _{1 sup,e1} =	5.15e01 cm ³
	inferiore	W _{1 inf,e1} =	5.15e01 cm ³
Modulo di resistenza elastico	destro	W _{2 dx,e1} =	4.09e01 cm ³
	sinistro	W _{2 sx,e1} =	4.09e01 cm ³
Modulo di resistenza plastico	asse 1	W _{1,p1} =	62.21 cm ³
	asse 2	W _{2,p1} =	46.85 cm ³
Area di taglio	asse 1	Av _{1,p1} =	6.14e00 cm ²
	asse 2	Av _{2,p1} =	9.22e00 cm ²

CARATTERISTICHE DELL'ASTA:

Lunghezza		439.00	cm
Molt. per inflessione	asse 1	β ₁ =	1.00
	asse 2	β ₂ =	1.00
	asse 3	β ₃ =	1.00

Attributi per il calcolo di instabilità

	Diagramma	ψ	k _c	M _{L,T}	C _m
Piano 1	Tipo 3	0.00	0.94	0.93	0.95
Piano 2	Tipo 3	0.00	0.94	0.93	0.95

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio		S235	
Lavorazione		Laminata	
Modulo di elasticità		E =	210.00 GPa
Tensione di snervamento	(t < 40mm)	f _y =	2396.33 kgf/cm ²
Tensione di rottura	(t < 40mm)	f _u =	3670.98 kgf/cm ²
Tensione di snervamento	(t > 40mm)	f _y =	2192.39 kgf/cm ²
Tensione di rottura	(t > 40mm)	f _u =	3670.98 kgf/cm ²

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Coefficiente di sicurezza del materiale $\gamma_{M0} = 1.05$
 Coefficiente di sicurezza all'instabilità $\gamma_{M1} = 1.05$

SOLLECITAZIONI:

Sforzo normale		AF =	0.00e00	kgf
Sforzo di taglio	direzione 1	V1 =	0.00e00	kgf
	direzione 2	V2 =	0.00e00	kgf
Momento flettente	direzione 1	M1 =	2.19e04	kgfcm
	direzione 2	M2 =	8.21e04	kgfcm
Momento torcente		MT =	-9.75e01	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

Classe della sezione per la sollecitazione considerata:

		Cl =	Classe 1	
Asse con inerzia maggiore		y-y =	1-1	
Asse con inerzia minore		z-z =	2-2	
Resistenza assiale		$N_{Rd} =$	35054.93	kgf
Resistenza tagliante	asse y	$V_{p1,y,Rd} =$	12143.38	kgf
riduzione per la torsione		coeff =	1.00	
		$V_{p1,y,T,Rd} =$	12130.65	kgf
Resistenza tagliante	asse z	$V_{p1,z,Rd} =$	8095.59	kgf
riduzione per la torsione		coeff =	1.00	
		$V_{p1,z,T,Rd} =$	8087.10	kgf
Resistenza flessionale	asse y	$M_{y,Rd} =$	1.42e05	kgfcm
riduzione per il taglio		coeff =	1.00	
		$M_{y,V,Rd} =$	1.42e05	kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} =$	1.07e05	kgfcm
riduzione per il taglio		coeff =	1.00	
		$M_{z,V,Rd} =$	1.07e05	kgfcm
Resistenza torsionale elastica		$T_{Rd} =$	92930.62	kgfcm
Verifica di Resistenza plastica a Presso-Flessione		$F_{R-PF} =$	0.64	Verificato
$F_{R-PF}(N_{Ed}, M_{y,Ed}, M_{z,Ed}) \leq 1$		$F_{R-exp} =$	0.47	
$ M_{y,Ed}/M_{Ny,Rd} ^\alpha + M_{z,Ed}/M_{Nz,Rd} ^\beta \leq 1$				
$\alpha = 1.66, \beta = 1.66$				
Verifica di Resistenza plastica a Taglio		$F_{R-V} =$	0.00	Verificato
$(V_{y,Ed}/V_{y,Rd}) + (V_{z,Ed}/V_{z,Rd}) \leq 1$				
Verifica di Resistenza elastica a Torsione		$F_{R-T} =$	1.05e-03	Verificato
$(T_{Ed}/T_{Rd}) \leq 1$				
Verifica di Resistenza elastica delle tensioni tangenziali		$F_{R-t} =$	1.05e-03	Verificato
$\tau_{Ed} \cdot \sqrt{3} \cdot \gamma_{M0} / f_y \leq 1$				

VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:

		Cl =	Classe 1	
Sforzo normale		$N_{Ed} =$	0.00e00	kgf
Momento flettente		$M_{z,Ed} =$	2.19e04	kgfcm
		$M_{y,Ed} =$	8.21e04	kgfcm

Tabella dei carichi critici

Asse	Carico critico	Lunghezza libera	Snellezza adimensionale	Coefficiente riduttivo
	P_{cr} [kgf]	ℓ_0 [cm]	λ^*	χ
y	33891.32	439.00	1.04	0.64
z	17945.11	439.00	1.43	0.40
θ	8.69e06	439.00	0.07	1.00
min	17945.11		1.43	0.40
	M_{cr} [Nmm]	ℓ_0 [mm]	λ^*_{LT}	χ_{LT}
fless.tors.	2.19e06	439.00	0.26	0.95

Resistenza assiale	minimo	$N_{b,Rd} =$	1.41e04	kgf
	asse y	$N_{b,y,Rd} =$	2.23e04	kgf
	asse z	$N_{b,z,Rd} =$	1.41e04	kgf
Resistenza flessionale	asse y	$M_{b,y,Rd} =$	1.35e05	kgfcm
	asse z	$M_{z,Rd} =$	1.07e05	kgfcm
Coefficiente di interazione		$k_{yy} =$	0.95	
		$k_{yz} =$	0.57	
		$k_{zy} =$	0.57	
		$k_{zz} =$	0.95	

Verifica di Instabilità a Compressione

$N_{Ed}/N_{b,Rd} \leq 1$ $F_{I-N} = 0.00$ (Verificato)

Verifica di Instabilità a Pressoflessione

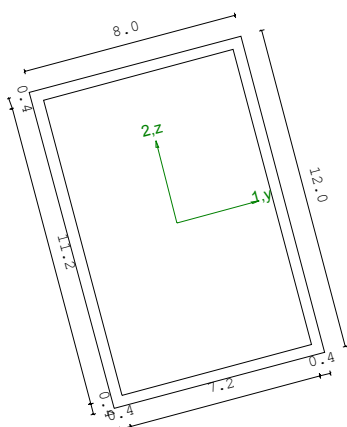
$(N_{Ed}/N_{b,y,Rd}) + k_{yy}(M_{y,Ed}/M_{b,y,Rd}) + k_{yz}(M_{z,Ed}/M_{z,Rd}) \leq 1$ $F_{R-PF,y} = 0.69$ (Verificato)

$(N_{Ed}/N_{b,z,Rd}) + k_{zy}(M_{y,Ed}/M_{b,y,Rd}) + k_{zz}(M_{z,Ed}/M_{z,Rd}) \leq 1$ $F_{R-PF,z} = 0.54$ (Verificato)

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PROP. 5 - BEAM n. 530 - SEZIONE IN X = 0.00

Grp.: Gruppo0 Trave: 530 Prop.: 5 Sez.in: 0.00		
Cmb 13	M1 = +0.00	M2 = +0.00
	N = +0.00	V1 = +199.68
	V2 = +747.71	MT = -97.46
Sezione Rettangolare Cava		
D = 12.00 B = 8.00 T1 = 0.40 T2 = 0.40		
Area = 1.54e01		
I11 = 3.09e02		
I22 = 1.64e02		



VERIFICA DI RESISTENZA

Classe = Tesa
FR-PF = 0.00
FR-V = 0.09
FR-T = 1.05e-03
FR-t = 0.07

VERIFICA DI STABILITA'

Classe = Classe 1
F1-N = 0.00
FPP,y = 0.69
FPP,z = 0.54

PARAMETRI STATICI DELLA SEZIONE

Altezza	D =	12.00	cm
Base	B =	8.00	cm
Spessore base	T1 =	0.40	cm
Spessore altezza	T2 =	0.40	cm
Posizione del baricentro elastico	X1G,e1 =	4.00	cm
	X2G,e1 =	6.00	cm
Posizione del baricentro plastico	X1G,p1 =	4.00	cm
	X2G,p1 =	6.00	cm
Distanza baricentro - centro di taglio	X1CT-X1G =	0.00	cm
	X2CT-X2G =	0.00	cm
Area della sezione	A =	1.54e01	cm ²
Momento d'inerzia	asse 1	I11 =	3.09e02 cm ⁴
	asse 2	I22 =	1.64e02 cm ⁴
	asse 3	J =	3.24e02 cm ⁴
Momento polare rispetto il centro di taglio	I _p =	472.68	cm ⁴
Costante di ingobbamento	I _θ =	0.00	cm ⁶
Raggio giratore	asse 1	i11 =	4.49 cm
	asse 2	i22 =	3.26 cm
Modulo di resistenza elastico	superiore	W1 sup,e1 =	5.15e01 cm ³
	inferiore	W1 inf,e1 =	5.15e01 cm ³
Modulo di resistenza elastico	destro	W2 dx,e1 =	4.09e01 cm ³
	sinistro	W2 sx,e1 =	4.09e01 cm ³
Modulo di resistenza plastico	asse 1	W1,p1 =	62.21 cm ³
	asse 2	W2,p1 =	46.85 cm ³
Area di taglio	asse 1	AV1,p1 =	6.14e00 cm ²
	asse 2	AV2,p1 =	9.22e00 cm ²

CARATTERISTICHE DELL'ASTA:

Lunghezza		439.00	cm
Molt. per inflessione	asse 1	β ₁ =	1.00
	asse 2	β ₂ =	1.00
	asse 3	β ₃ =	1.00

Attributi per il calcolo di instabilità

	Diagramma	ψ	k _c	m _{1T}	C _m
Piano 1	Tipo 3	0.00	0.94	0.93	0.95
Piano 2	Tipo 3	0.00	0.94	0.93	0.95

CARATTERISTICHE DEL MATERIALE:

Tipo di acciaio		S235	
Lavorazione		Laminata	
Modulo di elasticità		E =	210.00 GPa
Tensione di snervamento	(t < 40mm)	f _y =	2396.33 kgf/cm ²
Tensione di rottura	(t < 40mm)	f _u =	3670.98 kgf/cm ²

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Tensione di snervamento	(t > 40mm)	$f_y = 2192.39$	kgf/cm ²
Tensione di rottura	(t > 40mm)	$f_u = 3670.98$	kgf/cm ²
Coefficiente di sicurezza del materiale		$\gamma_{M0} = 1.05$	
Coefficiente di sicurezza all'instabilità		$\gamma_{M1} = 1.05$	

SOLLECITAZIONI:

Sforzo normale		AF = 0.00e00	kgf
Sforzo di taglio	direzione 1	V1 = 2.00e02	kgf
	direzione 2	V2 = 7.48e02	kgf
Momento flettente	direzione 1	M1 = 0.00e00	kgfcm
	direzione 2	M2 = 0.00e00	kgfcm
Momento torcente		MT = -9.75e01	kgfcm

VERIFICA DI RESISTENZA (N.T.C.2008 - § 4.2.4.1.2):

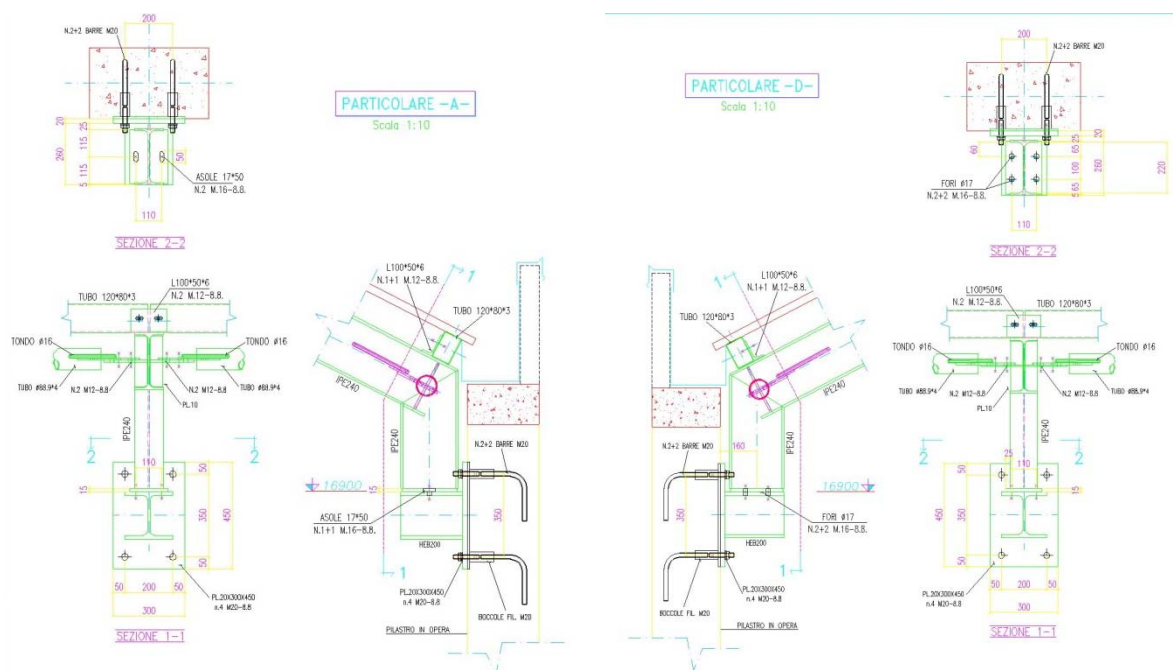
Classe della sezione per la sollecitazione considerata:			
		Cl = Tesa	
Asse con inerzia maggiore		y-y = 1-1	
Asse con inerzia minore		z-z = 2-2	
Resistenza assiale		$N_{Rd} = 35054.93$	kgf
Resistenza tagliante	asse y	$V_{p1,y,Rd} = 12143.38$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{p1,y,T,Rd} = 12130.65$	kgf
Resistenza tagliante	asse z	$V_{p1,z,Rd} = 8095.59$	kgf
riduzione per la torsione		coeff = 1.00	
		$V_{p1,z,T,Rd} = 8087.10$	kgf
Resistenza flessionale	asse y	$M_{y,Rd} = 1.42e05$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{y,V,Rd} = 1.42e05$	kgfcm
Resistenza flessionale	asse z	$M_{z,Rd} = 1.07e05$	kgfcm
riduzione per il taglio		coeff = 1.00	
		$M_{z,V,Rd} = 1.07e05$	kgfcm
Resistenza torsionale elastica		$T_{Rd} = 92930.62$	kgfcm
Verifica di Resistenza plastica a Presso-Flessione			
		$F_{R,PF} = 0.00$	Verificato
		$F_{R-exp} = ---$	
		$ M_{y,Ed}/M_{Ny,Rd} ^\alpha + M_{z,Ed}/M_{Nz,Rd} ^\beta \leq 1$	
		$\alpha = 1.66, \beta = 1.66$	
Verifica di Resistenza plastica a Taglio			
		$F_{R-V} = 0.09$	Verificato
Verifica di Resistenza elastica a Torsione			
		$F_{R-T} = 1.05e-03$	Verificato
Verifica di Resistenza elastica delle tensioni tangenziali			
		$F_{R-t} = 0.07$	Verificato

VERIFICA DI STABILITÀ (N.T.C.2008 - § 4.2.4.1.3):

Classe della sezione per la sollecitazione considerata:			
		Cl = Classe 1	
Sforzo normale		$N_{ED} = 0.00e00$	kgf
Momento flettente		$M_{z,ED} = 2.19e04$	kgfcm
		$M_{y,ED} = 8.21e04$	kgfcm
Tabella dei carichi critici			
Asse	Carico critico	Lunghezza libera	Snellezza adimensionale
	P_{cr} [kgf]	ℓ_0 [cm]	λ^*
y	33891.32	439.00	1.04
z	17945.11	439.00	1.43
θ	8.69e06	439.00	0.07
min	17945.11		1.43
	M_{cr} [Nmm]	ℓ_0 [mm]	λ_{LT}^*
fless.tors.	2.19e06	439.00	0.26
Resistenza assiale	minimo	$N_{b,Rd} = 1.41e04$	kgf
	asse y	$N_{b,y,Rd} = 2.23e04$	kgf
	asse z	$N_{b,z,Rd} = 1.41e04$	kgf
Resistenza flessionale	asse y	$M_{b,y,Rd} = 1.35e05$	kgfcm
	asse z	$M_{b,z,Rd} = 1.07e05$	kgfcm
Coefficiente di interazione			
		$k_{yy} = 0.95$	
		$k_{yz} = 0.57$	
		$k_{zy} = 0.57$	
		$k_{zz} = 0.95$	
Verifica di Instabilità a Compressione			
	$N_{Ed}/N_{b,Rd} \leq 1$	$F_{I-N} = 0.00$	(Verificato)
Verifica di Instabilità a Pressoflessione			
	$(N_{Ed}/N_{b,y,Rd}) + k_{yy} (M_{y,Ed}/M_{b,y,Rd}) + k_{yz} (M_{z,Ed}/M_{z,Rd}) \leq 1$	$F_{R-PF,y} = 0.69$	(Verificato)
	$(N_{Ed}/N_{b,z,Rd}) + k_{zy} (M_{y,Ed}/M_{b,y,Rd}) + k_{zz} (M_{z,Ed}/M_{z,Rd}) \leq 1$	$F_{R-PF,z} = 0.54$	(Verificato)

2.10.3. VERIFICHE DEI COLLEGAMENTI

PARTICOLARE -A- / -D-



I particolari A e D sono gli appoggi destro e sinistro della trave ad arco sui pilastri in c.a.; il particolare A è relativo ad un carrello mentre il particolare B schematizza una cerniera fissa; l'unica cosa che li differenzia è il collegamento fra la mensola in HEB200 e la trave IPE240 realizzato in un caso mediante 2 bulloni M16 in foro asolato e nell'altro mediante 4 bulloni M16 in fori normali; di seguito si verifica la mensola in HEB200 sottoposta a sforzo assiale taglio verticale e momento flettente dovuto all'eccentricità di carico. La verifica è svolta mediante il software Steelcon.

$$N_{\max} = 27 \text{ kN}$$

$$T_{\max} = 28 \text{ kN}$$

$$M = T \cdot e = 28 \times 0.16 = 4.48 \approx 5 \text{ kNm}$$

1.1 Generali

Questa categoria include i giunti delle colonne con fondazioni in calcestruzzo. I tipi di giunti il quale programma calcola sono i seguenti:

- Giunto a cerniera con piatto di fondazione
- Giunto fisso con piatto di fondazione
- Giunto fisso con piatto di fondazione e nervature

La soluzione del giunto descritto sopra è basata sul "metodo delle componenti". Questo metodo calcola le forze finali dei giunti dalla resistenza del suo "metodo delle componenti".

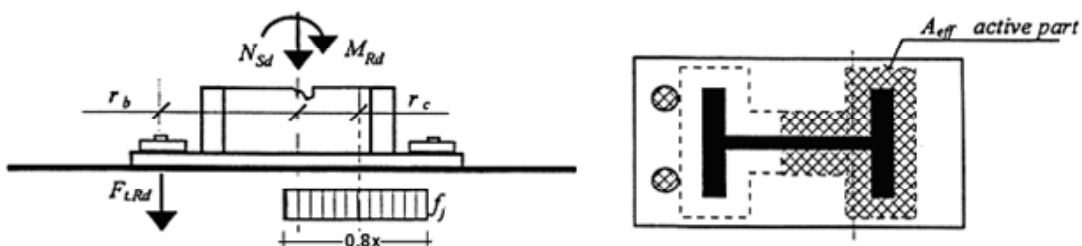
Il "metodo delle componenti" per questi giunti sono:

1.2 Resistenza del calcestruzzo a compressione

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Resistenza del calcestruzzo a compressione ottenuta dalla relazione:

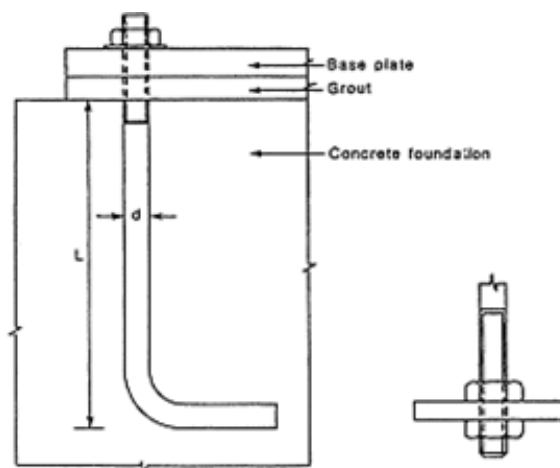
$$f_j = \beta_j \cdot k_j \cdot f_{cd}$$

L'area effettiva della fondazione ottenuta dalla relazione:

$$c = t \left(\frac{f_y}{3 \cdot f_j \cdot \gamma_{M0}} \right)^{0.5}$$

Con l'area effettiva, le forze e il momento applicate, il programma calcola la lunghezza dell'area compressa del giunto la quale è utilizzata per calcolare la forza di compressione applicata ad entrambi sulla fondazione in calcestruzzo e l'equivalente Elemento-T.

1.3 Resistenza del tirafondi a trazione

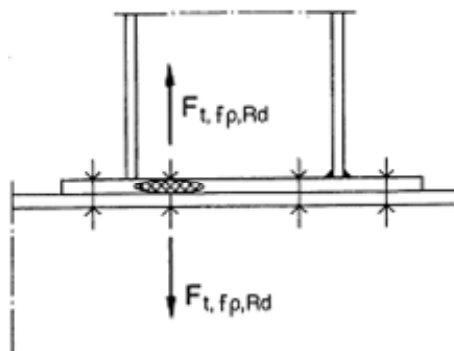


Resistenza di uno dei tirafondi è ottenuta dalla relazione:

$$F_{t,Rd} = 0.9 \cdot f_{u,a} \cdot A_s / \gamma_{M2} \dots (\text{Tabella 6.5.3.})$$

Il controllo dei tirafondi a trazione è eseguita dalla forza a trazione applicata conosciuta in precedenza. Anche la lunghezza dell'ancoraggio è stato calcolato usando le normative dell'EC2.

1.4 Resistenza del piatto di base a flessione



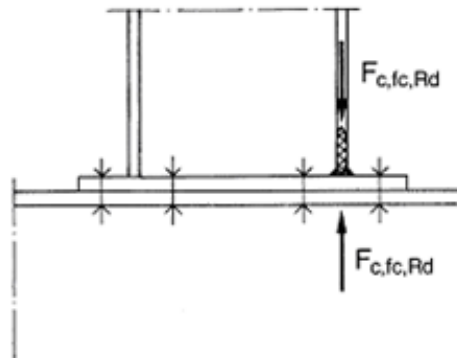
La resistenza del piatto di base a flessione assieme con i tirafondi associati a trazione è ottenuta utilizzando l'equivalente metodo Elemento-T per entrambi:

- 1 Ogni fila di bulloni individuale necessaria a resistere a trazione
- 2 Ogni gruppo di file di bulloni necessaria a resistere a trazione

Altri dettagli per l'equivalente metodo Elemento-T può essere trovato in questo manuale nella parte relative "trave-Colonna".

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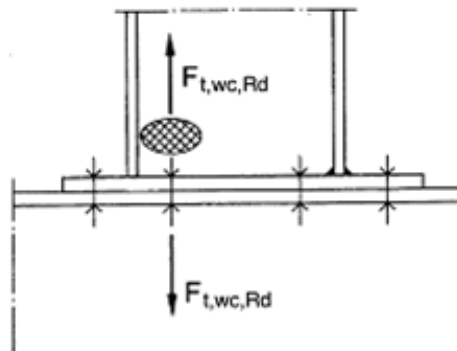
1.5 Ali e anima della colonna a compressione



La resistenza delle ali e anima della colonna a compressione è ottenuta dalla formula:

$$F_{c,fc,Rd} = M_{c,Rd} / (h - t_{fc}) \quad (5.2.6.7)$$

1.6 Anima della colonna a trazione



La resistenza dell'anima della colonna a trazione è ottenuta dalla formula:

$$F_{t,wc,Rd} = \omega b_{eff,twc} \cdot t_{wc} \cdot f_{y,wc} \cdot k_{wc} / \gamma_{Mo} \dots (5.2.6.3)$$

1.7 Resistenza della saldature

In aggiunta alla verifica del "metodo delle componenti" per i giunti la resistenza delle saldature è stata verificata (colonne-piatto di base, nervature ecc) in relazione con le sollecitazioni applicate. La verifica della saldature è ottenuta utilizzando la seguente relazione dell'EC3 (Annex M):

$$\sqrt{\sigma_{\perp}^2 + 3 \cdot (\tau_{\perp}^2 + \tau_{\parallel}^2)} \leq f_u / (\beta_w \cdot \gamma_{Mw}) \quad \sigma_{\perp} \leq f_u / \gamma_{Mw} \quad \text{dove } \sigma_{\perp} = N_{sd} / A_w + M_{y,sd} / w_y + M_{z,sd} / w_z \quad \tau_{\perp} = V_{z,sd} / A_w$$

$$\tau_{\parallel} = V_{y,sd} / A_w$$

1.8 Resistenza a taglio del giunto

Riguarda la resistenza del giunto a taglio e vengono eseguite le seguenti verifiche:

- a) resistenza dei tirafondi a taglio (quando non esiste l'elemento a taglio)
- b) resistenza del piatto di base a rifollamento (quando non esiste l'elemento a taglio)
- c) resistenza dell'elemento a taglio a flessione e taglio

La resistenza a taglio di ogni tirafondo è stata calcolata usando le formule dell'EC3:

$$f_{v,Rd} = \frac{0,6 f_{ua} f_s}{\gamma_{mb}} \quad , \text{ per classe bullone 4.6 / 5.6 / 8.8}$$

$$f_{v,Rd} = \frac{0,5 f_{ua} f_s}{\gamma_{mb}} \quad , \text{ per classe bullone 4.8 / 5.8 / 10.9}$$

$$f_{v,Rd} = \frac{0,6 f_{ua} f}{\gamma_{mb}}$$

per tutte le classi dei bulloni quando il piano di taglio passa attraverso una parte non filettata del bullone.

La resistenza del piatto di base a rifollamento per ogni posizione del tirafondo è stata calcolata utilizzando la seguente formula:

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$$f_{b,Rd} = \frac{2,5 \cdot \alpha \cdot f_{ua} \cdot t}{\gamma_{mb}}$$

Per i tirafondi i quali combinano taglio e trazione la resistenza a taglio è ridotta secondo la seguente formula:

$$\frac{F_{v,Sd}}{F_{v,Rd}} + \frac{F_{t,Sd}}{1,4 \cdot F_{t,Rd}} \leq 1,0$$

La resistenza a taglio per ogni fila di tirafondi è il minimo risultato del controllo sopra e la resistenza finale a taglio del giunto è trovata aggiungendo la resistenza di tutte le file dei tirafondi del giunto.

Quando esiste un elemento a taglio tutte le forze a taglio applicate sono considerate per agire su di esse e tutte le verifiche di sopra per i tirafondi sono omesse, invece di loro le seguenti verifiche dell'elemento a taglio sono eseguite secondo l'EC3:

$$M_{pl,Rd} = \frac{W \cdot f_y}{\gamma_{m0}}, V_{pl,Rd} = \frac{A_v \cdot f_y}{\sqrt{3} \gamma_{m0}}$$

2. Dati del giunto inseriti

2.1. Basi di progetto

Regola:..... D.M.2008 - COSTRUZIONI
CEN/TS? 1992-4-1 2009 (Design of fastenings for use in concrete, part 4- 1 General)
CEN/TS? 1992-4-2 2009 (Design of fastenings for use in concrete, part 4- 2 Headed Bolts)
Gm0:..... 1,05
Gm1:..... 1,05
Gm2:..... 1,25

2.2. Dati della colonna

Tipo..... HEB200
Materiale..... S275
Altezza..... 200 mm
Larghezza..... 200 mm
Spessore anima..... 9 mm
Spessore ala..... 15 mm

2.3. Dettagli giunto

Tipo giunto..... Giunto di fondazione - 2 file/2 colonne
Materiale..... S275
Lunghezza piatto di base..... 450 mm
Larghezza piatto di base..... 300 mm
Spessore piatto di base..... 20 mm
Spessore saldatura Af..... 8 mm
Spessore saldatura Aw..... 5 mm
Usa bassa resistenza di saldatura..... NO

2.4. Tirafondi

Tipo tirafondo..... Definito da utente
d0..... 20 mm
Materiale tirafondi..... S355
Il piano di taglio attraversa la parte filettata del bullone..... NO
Verifica tramite resistenza T-Stub..... NO
Gli ancoraggi sono conformi a EN1090..... SI

2.5. Dati di fondazione

Gli ancoraggi sono conformi a EN1090..... SI
Materiale di fondazione..... C30/37
Il calcestruzzo è considerato fessurato..... NO
Il calcestruzzo è considerato fessurato..... NO
Distanza Ar..... 500 mm
Distanza Br..... 400 mm
Altezza di fondazione H..... 350 mm
Lato di fondazione A..... 1500 mm
Lato di fondazione B..... 1000 mm
Spessore della malta..... 1 mm
Materiale della malta..... C30/37

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3. Risultati della resistenza - Nodi : -99 LC : -99

3.1. Resistenza del giunto a flessione biassiale

3.2. Momenti e Forze applicate

Momento My..... -5,00 KNm
Momento Mz..... 0,00 KNm
Taglio Vz..... 28,00 kN
Taglio Vy..... 0,00 kN
Sforzo assiale..... 27,00 kN

3.3. Resistenza tirafondi

Resistenza tirafondi a trazione..... 83,06 kN
Resistenza tirafondi a taglio..... 37,53 kN
Taglio applicato..... 30,78 kN
(Taglio applicato / Resistenza a taglio) = (30,78 / 37,53) = 0,82 < 1..... **O.K.**

Ancoraggio

Lunghezza minima tirafondi..... 441,00 mm
Resistenza dello spigolo di calcestruzzo per ogni ancoraggio..... 32,83 kN
Resistenza richiesta per lo spigolo in calcestruzzo per ogni ancora.... 30,78 kN
(Resistenza richiesta / Resistenza dello spigolo di calcestruzzo) = 0,93 < 1.. **O.K.**

3.4. Resistenza piatto di base

Piatto di base portante - direzione yy..... 1146,67 kN
Taglio applicato - direzione yy..... 0,00 kN
(Taglio applicato / Resistenza a taglio) = (0,00 / 1146,67) = 0,00 < 1..... **O.K.**
Piatto di base portante - direzione zz..... 1376,00 kN
Taglio applicato - direzione zz..... 28,00 kN
(Taglio applicato / Resistenza a taglio) = (28,00 / 1376,00) = 0,02 < 1..... **O.K.**
Resistenza portante del calcestruzzo Fj..... 0,01 kN/mm²

3.5. Resistenza delle saldature

I seguenti risultati sono applicati per le saldature ad alta resistenza.

Resistenza delle saldature..... 0,23 kN/mm²
Sollecitazioni risultanti applicate delle saldature per i carichi di.... 0,01 kN/mm²
Controllo delle saldature per i carichi di progetto (criterio di von.... 0,06 **O.K.**
Sollecitazioni localizzate delle saldature causate dagli ancoraggi i.... 0,09 kN/mm²
Controllo delle saldature per le sollecitazioni localizzate (azioni 0,37 **O.K.**

3.6. Resistenza della colonna a flessione e taglio

Resistenza a taglio in direzione yy..... 907,26 kN
Taglio applicato - direzione yy..... 0,00 kN
(Taglio applicato / Resistenza a taglio) = (0,00 / 907,26) = 0,00 < 1..... **O.K.**
Resistenza a taglio in direzione zz..... 375,76 kN
Taglio applicato - direzione zz..... 28,00 kN
(Taglio applicato / Resistenza a taglio) = (28,00 / 375,76) = 0,07 < 1..... **O.K.**
Resistenza a flessione per il momento principale..... 168,40 KNm
Momento principale applicato..... -5,00 KNm
Resistenza a flessione per il momento secondario..... 79,47 KNm
Momento secondario applicato..... 0,00 KNm
Rapporto di interazione tra forza assiale e flessione biassiale..... 0,00 **O.K.**

3.7. Resistenza del giunto

Resistenza a flessione nell'asse yy..... 46,69 KNm
Braccio di leva plastico - yy axis..... 281,06 mm
Resistenza a flessione nell'asse zz..... 36,71 KNm
Braccio di leva plastico - zz axis..... 221,00 mm
Resistenza a trazione..... 332,23 kN
Resistenza a compressione..... 903,43 KNm

Asse plastico in mezzeria - direzione yy

Resistenza a flessione..... 65,26 KNm
Resistenza assiale a compressione..... 303,95 kN

Asse plastico in mezzeria - direzione zz

Resistenza a flessione..... 49,35 KNm
Resistenza assiale a compressione..... 303,95 kN

Resistenza finale del giunto

Coefficiente di utilizzazione per la flessione principale..... 0,11 **O.K.**
Coefficiente di utilizzazione per la flessione secondaria..... 0,00 **O.K.**
Coefficiente di utilizzazione per la forza assiale..... 0,08 **O.K.**
Rapporto del giunto..... 0,19 **O.K.**

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4. Riassunto

4.1. Tavola riassuntiva

Nodi	Carichi	Massimo	WdVMHS	WTStub	WdVMLS	WMSBP1	WMSBP1	ConCon	Split	
CEdge	BPBrY	BPBrZ								
	-99	-99	0,94	0,06	0,37	--	--	--	--	
	0,94	0,00	0,02							
	AncShr	SNBiax	SNShrY	SNShrZ	ConBeaY	ConBeaZ	MaSBen	MaSShr	MiSBen	MiSShr
	ClBiax	ClShrY	ClShrZ							
	0,19	--	--	--	--	--	--	--	--	
	0,00	0,00	0,07							
	ConnRt									
	0,19									

4.2. Legenda

- Massimo -> Tasso massimo
- WdVMHS -> Controllo saldature per i carichi di verifica - criterio di Von Mises (Saldatura ad Alta Resistenza)
- WTStub -> Saldature al di sotto della sollecitazione localizzata - azione T-stub (Saldatura ad Alta Resistenza)
- WdVMLS -> Controllo saldature per i carichi di verifica - criterio di Von Mises (Saldatura a Bassa Resistenza)
- WMSBP1 -> Saldature tra la nervatura principale ed il piatto di base
- WMSBP1 -> Saldature tra la nervatura secondaria ed il piatto di base
- ConCon -> Rottura del Cono di Calcestruzzo
- Split -> Rottura per strappamento
- CEdge -> Rottura dello spigolo di calcestruzzo
- BPBrY -> Piatto di base portante - direzione yy
- BPBrZ -> Piatto di base portante - direzione zz
- AncShr -> Ancoraggio a taglio
- SNBiax -> Cordolo a flessione biassiale
- SNShrY -> Cordolo a taglio - direzione yy
- SNShrZ -> Cordolo a taglio - direzione zz
- ConBeaY -> Calcestruzzo portante - direzione yy
- ConBeaZ -> Calcestruzzo portante - direzione zz
- MaSBen -> Nervatura principale a flessione
- MaSShr -> Nervatura principale a taglio
- MiSBen -> Nervatura secondaria a flessione
- MiSShr -> Nervatura secondaria a taglio
- ClBiax -> Colonna con forza assiale e flessione biassiale
- ClShrY -> Colonna a taglio - direzione yy
- ClShrZ -> Colonna a taglio - direzione zz
- ConnRt -> Giunto con forza assiale e flessione biassiale

I 4 bulloni M16 devono resistere ad una forza tagliante pari a 27 kN e ad un tiro di 17 kN (in caso di solo vento in depressione).

$27/4 = 6.75 \text{ kN}$

$17/4 = 4.25 \text{ kN}$

Resistenza di progetto dei bulloni - EC3 (edizione 1992) #6.5.5.

Classe bullone: 8.8 diametro d: 16 f_{yb} : 640 f_{ub} : 800 N/mm²

Sezione filettata Sezione lorda

Area: 157.0 mm²

Resistenza a taglio (per piano di taglio): $F_{v,Rd}$: 60.29 kN

Resistenza a trazione: $F_{t,Rd}$: 90.43 kN

Taglio e Trazione - EC3 #6.5.5.(5)

$F_{v,Sd}$: 6.75 $F_{t,Sd}$: 4.25 kN

$$\frac{F_{v,Sd}}{F_{v,Rd}} + \frac{F_{t,Sd}}{1.4 F_{t,Rd}} = 0.112 + 0.034 = 0.146$$

Rifollamento

Acciaio: S275 (Fe430) f_u : 430 N/mm²

spessore t: 15 mm

diametro foro d_o : 18 mm

distanze bordo e_1 : 50 e_2 : 50

passo p_1 : 350 p_2 : 200

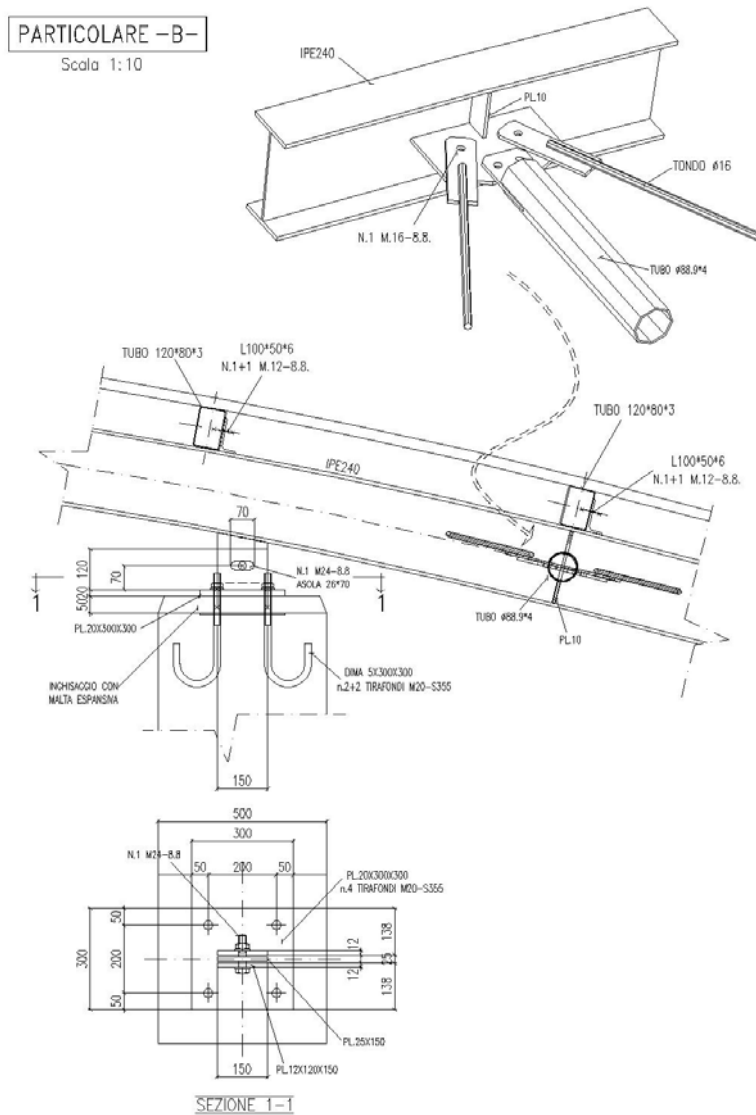
α : 0.926

Resistenza a rifollamento $F_{b,Rd}$: 191.1 kN

Osservazioni

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PARTICOLARE -B-



Il particolare -B- riguarda i due appoggi centrali monodirezionali della trave ad arco; il dettaglio è realizzato mediante un perno M24 cl.8.8 alloggiato in un foro asolato orizzontalmente in modo da trasferire solo il carico verticale pari al massimo a 79 kN. La verifica del perno, nel rispetto delle NTC2008 e EN1993-1-8 è svolta mediante un foglio excel.

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$F_{b,Ed}$	=	80	kN	forza di progetto SLU					
$F_{b,Ed,ser}$	=	55	kN	forza di progetto SLE					
d_p	=	24	mm	diámetro perno					
d_0	=	26	mm	diámetro foro perno					OK
	=			acciaio perno					
f_{yp}	=	800	N/mm ²	trazione ultima perno					
f_{up}	=	640	N/mm ²	snervamento perno					
	=			acciaio piatti collegati					
f_{yk}	=	275	N/mm ²	trazione ultima piatti					
f_{uk}	=	430	N/mm ²	snervamento piatti					
A_p	=	452	mm ²	area della sezione trasversale del perno					
$W_{el,p}$	=	1357	mm ³	modulo elastico di resistenza					
$J_{el,p}$	=	16286	mm ⁴						
t_{cen}	=	15	mm	>	12,2	mm	$t \geq 0,7 \sqrt{\frac{F_{Ed} \gamma_{MO}}{f_u}}$		OK
a_{cen}	=	40	mm	>	27,5	mm	$a \geq \frac{F_{Ed} \gamma_{MO}}{2t f_y} + \frac{2d_0}{3}$		OK
c_{cen}	=	40	mm	>	18,8	mm	$c \geq \frac{F_{Ed} \gamma_{MO}}{2t f_y} + \frac{d_0}{3}$		OK
t_{lat}	=	12	mm	>	8,7	mm			OK
a_{lat}	=	40	mm	>	23,7	mm			OK
c_{lat}	=	40	mm	>	15,0	mm			OK
c	=	5	mm						

VERIFICHE DI RESISTENZA ALLO S.L.U. DEL PERNO E DELLE PIASTRE

$F_{V,Ed}$	=	138,97	kN	>	$F_{V,Rd}$	=	40	kN	OK	resistenza a taglio del perno SLU
M_{Ed}	=	1,551	kNm	>	M_{Ed}	=	0,59	kNm	OK	resistenza a flessione del perno SLU
$F_{b,Rd,lat}$	=	113,14	kN	>	$F_{b,Ed,lat}$	=	40	kN	OK	resistenza a rifollamento per contatto perno-piatto laterale SLU
$F_{b,Rd,cen}$	=	141,43	kN	>	$F_{b,Ed,cen}$	=	80	kN	OK	resistenza a rifollamento per contatto perno-piatto centrale SLU
$\left[\frac{M_{Ed}}{M_{Rd}} \right]^2 + \left[\frac{F_{V,Ed}}{F_{V,Rd}} \right]^2$	=	0,23		<	1				OK	verifica per combinazione taglio flessione SLU

VERIFICHE DI RESISTENZA ALLO S.L.E. DEL PERNO E DELLE PIASTRE

$M_{Ed,ser}$	=	0,869	kNm	>	$M_{Ed,ser}$	=	0,41	kNm	OK	resistenza a flessione del perno SLE
$F_{b,Rd,lat,ser}$	=	47,520	kN	>	$F_{b,Ed,lat,ser}$	=	27,5	kN	OK	resistenza a rifollamento per contatto perno-piatto laterale SLU
$F_{b,Rd,cen,ser}$	=	59,400	kN	>	$F_{b,Ed,cen,ser}$	=	55	kN	OK	resistenza a rifollamento per contatto perno-piatto centrale SLU

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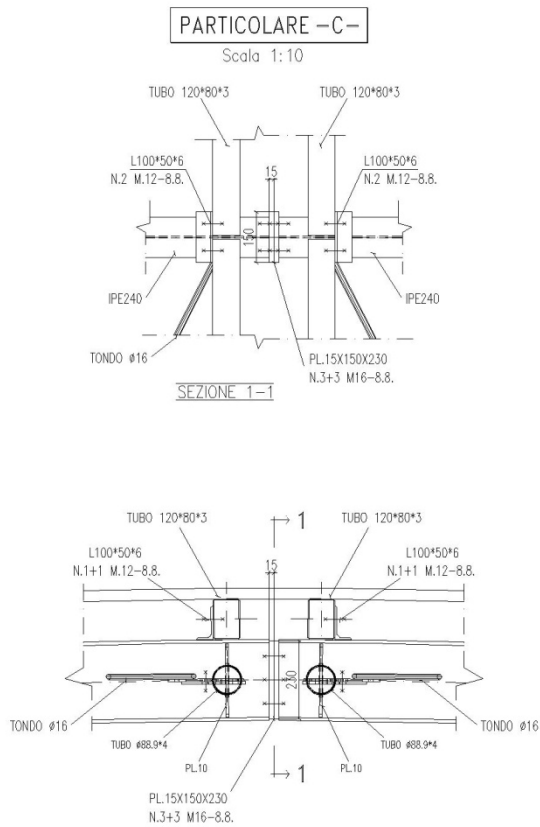
PARTICOLARE -C-

Il particolare C riguarda la flangia centrale della trave ad arco. Esso è sottoposto a:

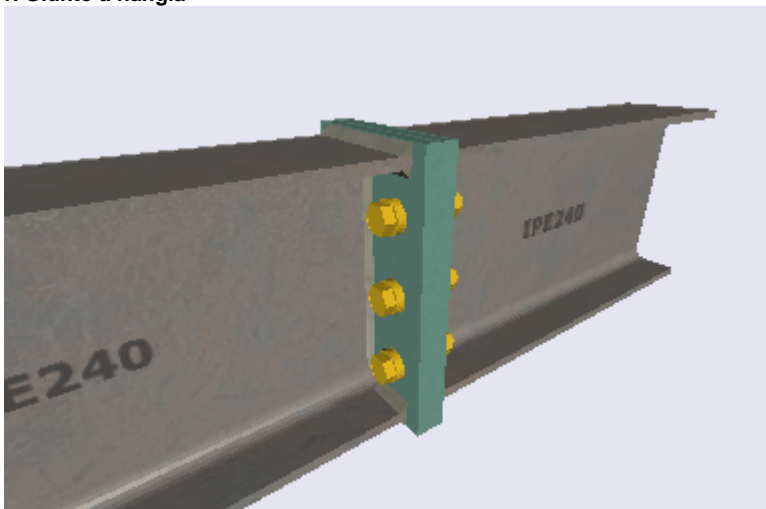
$N_{max} = 22 \text{ kN}$

$T_{max} = 7 \text{ kN}$

$M_{max} = 28 \text{ kNm}$



1. Giunto a flangia



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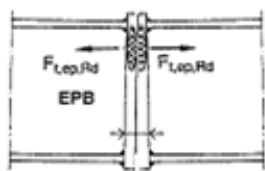
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

1.1 Generale

Questo è basato sul "metodo delle componenti". Questo metodo calcola le forze finali dei giunti dalla resistenza del suo "metodo delle componenti".

I "componenti base" sono:

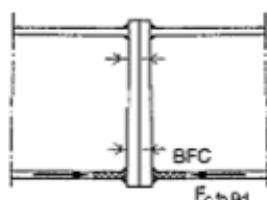
a) Flangia a flessione



La resistenza e il modo di rottura della flangia a flessione assieme con i bulloni associati a trazione è considerato simile a quelli degli equivalenti Elemento-T per entrambi:

- 1 Ogni fila di bulloni individuale necessaria a resistere a trazione
- 2 Ogni gruppo di file di bulloni necessaria a resistere a trazione

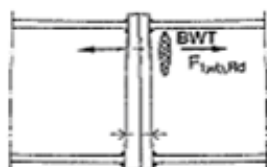
b) Ala e anima della trave a compressione



La resistenza dell'ala della trave e la zona compressa adiacente dell'anima della trave è ottenuta dalla formula:

$$F_{c,fb,Rd} = M_{b,Rd} / (h - t_{fb}) \quad (J 3.5.7)$$

c) Anima della trave a trazione



Nel caso di giunti bullonati la resistenza delle'anima della trave a trazione è ottenuta dalla formula:

$$F_{t,wb,Rd} = b_{eff,t,wb} * t_{wb} * f_{y,wb} / \gamma_{mo} \quad (J 3.5.8)$$

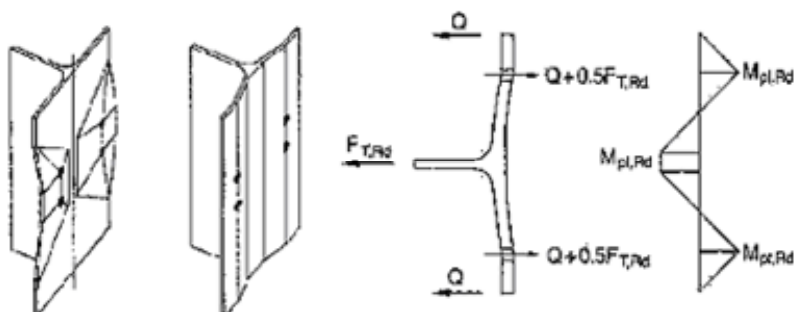
Dove la larghezza effettiva $b_{eff,t,wb}$ dell'anima è presa come uguale all'effettiva lunghezza dell'equivalente Elemento-T rappresentando la flangia a flessione.

1.2 Equivalente Elemento-T

Come detto prima la modellazione di un equivalente Elemento-T è utilizzato per calcolare la resistenza di alcuni dei giunti "metodo delle componenti". I componenti del giunto sono modellati come Elemento-T ed esaminati individualmente o come dei gruppi di bulloni.

Tre possibili modi rottura sono presi in considerazione i quali sono i seguenti:

a) Completo cedimento dell'ala



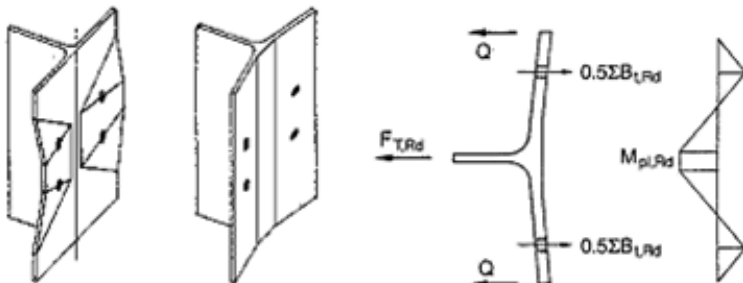
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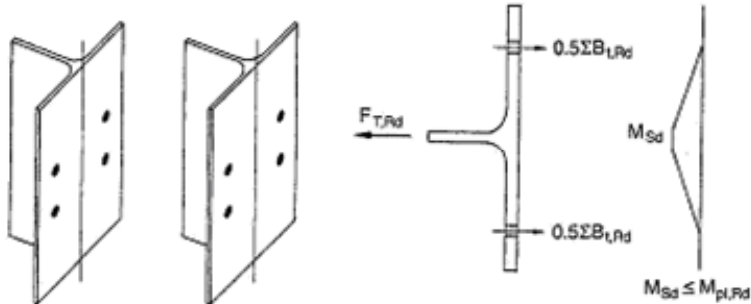
$$F_{T,Rd} = \frac{4 \cdot M_{pl1,Rd}}{m}$$

b) Rottura dei bulloni con cedimento dell'ala



$$F_{T,Rd} = \frac{2 \cdot M_{pl2,Rd} + n \cdot \Sigma B_{t,Rd}}{m+n}$$

c) Rottura dei bulloni



$$F_{T,Rd} = \Sigma B_{t,Rd}$$

1.3 Saldature

In aggiunta alla verifica del "metodo delle componenti" la verifica della resistenza delle saldature tra la trave e la flangia è stata eseguita di conseguenza, utilizzando le seguenti formule (EC3 Annex M):

$$\sqrt{\sigma_{\perp}^2 + 3 \cdot (\tau_{\perp}^2 + \tau_{//}^2)} \leq f_u / (\beta_w \cdot \gamma_{Mw})$$

$$\sigma_{\perp} \leq f_u / \gamma_{Mw}$$

dove:

$$\sigma_{\perp} = N_{sd} / A_w + M_{y,sd} / w_y + M_{z,sd} / w_z$$

$$\tau_{\perp} = V_{z,sd} / A_w$$

$$\tau_{//} = V_{y,sd} / A_w$$

1.4 Resistenza a momento

La resistenza finale del momento del giunto è ottenuta dalla formula:

$$M_{j,Rd} = \sum_r h_r \cdot F_{tr,Rd}$$

dove:

$F_{tr,Rd}$ la resistenza a trazione effettiva della file dei bulloni r

h_r è la distanza della file del bullone r dal centro della compressione

1.5 Resistenza a taglio

Riguarda la resistenza del giunto a taglio e vengono eseguite le seguenti verifiche:

- resistenza dei bulloni a taglio
- resistenza dei piatti a rifollamento
- resistenza ad attrito (bulloni precaricati)

La resistenza del bullone a taglio è stata calcolata usando le formule dell'EC3:

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$$f_{v,Rd} = \frac{0,6 f_{nb} f_s}{\gamma_{mb}}, \text{ 4.6 / 5.6 / 8.8 per classe bullone}$$

$$f_{v,Rd} = \frac{0,5 f_{nb} f_s}{\gamma_{mb}}, \text{ 4.8 / 5.8 / 10.9 per classe bullone}$$

$$f_{v,Rd} = \frac{0,6 f_{nb} f}{\gamma_{mb}}, \text{ per tutte le classi dei bulloni quando il piano di taglio passa attraverso una parte non filettata del bullone}$$

La resistenza della flangia a rifollamento è stata calcolata utilizzando la seguente formula:

$$f_{b,Rd} = \frac{2,5 \cdot \alpha \cdot f_{nb} \cdot t}{\gamma_{mb}}$$

The contribution of one bolt to the strength of the connection in slipping is being calculated by using the following EC3 formula:

$$f_{s,Rd} = \frac{k_s \cdot n \cdot \mu \cdot f_{p,Cd}}{\gamma_{ms}}$$

La resistenza a taglio dei bulloni che sono contemporaneamente sollecitati a trazione e taglio è stata ridotta come segue:

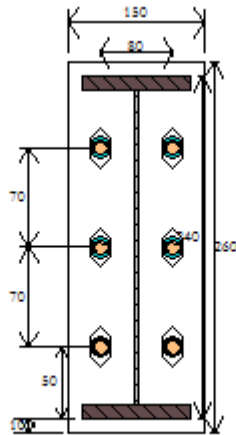
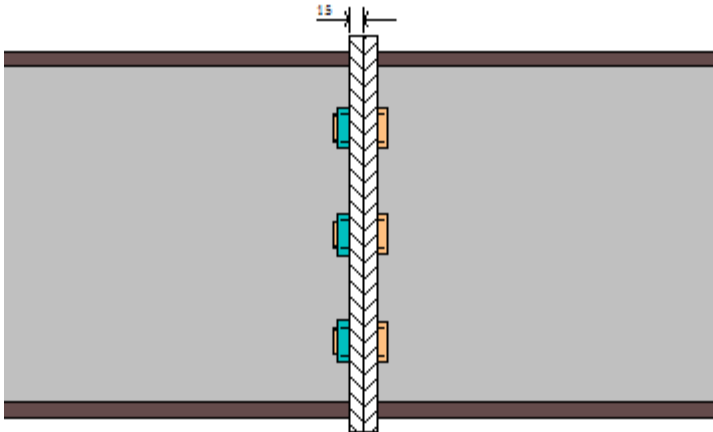
$$\frac{F_{v,Sd}}{F_{v,Rd}} + \frac{F_{t,Sd}}{1,4 \cdot F_{t,Rd}} \leq 1,0, \text{ per bulloni non precaricati}$$

$$f_{s,Rd,ser} = \frac{k_s \cdot n \cdot \mu \cdot (F_{p,Cd} - 0,8 * F_{t,Sd,ser})}{\gamma_{M,ser}}, \text{ per bulloni precaricati (categoria B)}$$

$$f_{s,Rd} = \frac{k_s \cdot n \cdot \mu \cdot (F_{p,Cd} - 0,8 * F_{t,Sd})}{\gamma_{M,ult}}, \text{ per bulloni precaricati (categoria C)}$$

La resistenza a taglio per ogni fila dei bulloni è il minimo risultato della verifica sopra e la resistenza finale del giunto a taglio viene trovata aggiungendo la resistenza di tutte le file del bullone del giunto.

2. Dati del giunto inseriti



2.1. Basi di progetto

Regola:.....	D.M.2008 - COSTRUZIONI
Gm0:.....	1,05
Gm1:.....	1,05
Gm2:.....	1,25

2.2. Dati della trave

Tipo.....	IPE240
Materiale.....	S275
Altezza.....	240 mm
Larghezza.....	120 mm
Spessore anima.....	6.2 mm
Spessore ala.....	9.8 mm

2.3. Dettagli giunto

Tipo giunto.....	GIUNTO IN COSTRUZIONE
Numero di travi.....	2
Materiale.....	S275
Altezza flangia.....	260 mm
Larghezza flangia.....	150 mm
Spessore flangia.....	15 mm
Spessore saldatura Af.....	6 mm
Spessore saldatura Aw.....	4 mm

2.4. Bulloni

Tipo bulloni.....	M16
Classe bulloni.....	8,8
Numero file bulloni.....	3
Numero colonne bulloni.....	2
Distanza W.....	80 mm
Distanza bordo.....	35 mm
Distanza H(1).....	70 mm
Distanza H(2).....	70 mm

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Distance bordo superiore.....	50 mm
Distanza bordo inferiore.....	70 mm

3. Risultati della resistenza - Nodi : -99 LC : -99

3.1. Momenti e Forze applicate

Momento sinistro (KNm) = 28,00
 Taglio sinistro = -7,00
 Sforzo assiale sinistro = 22,00

Momento destro (KNm) = 0,00
 Taglio destro = 0,00
 Sforzo assiale destro = 0,00

3.3. Ala e anima delle travi a compressione - Risultati completi

Av,b.....	1721,24 mm ²
VplbRd.....	260,27 kN
McRd.....	90621,21 kNm
FcfbRd.....	393,66 kN
FcfbRd(1).....	84,45 kN
FcfbRd(2).....	212,80 kN
FcfbRd(3).....	393,66 kN

3.4. Piatto a flessione - Risultati completi

Fila bulloni 1 (Altra fila bullone)

Parametri geometrici

Ec.....	960,00 mm
Ep.....	35,00 mm
Emin.....	35,00 mm
ex.....	0,00 mm
Mp.....	32,37 mm
Mxp.....	43,21 mm
P.....	70,00 mm
m.....	32,37 mm
n.....	35,00 mm

Lunghezza effettiva calcolata come fila individuale di bulloni

Schema circolare per fila 1

2*PI*Mp.....	203,42 mm
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Altro schema per fila 1

4*Mp + 1.25*Ep.....	173,25 mm
---------------------	-----------

Mpl1,Rd.....	2552,32 kNm
Mpl2,Rd.....	2552,32 kNm
Fmode1.....	315,35 kN
Fmode2.....	169,72 kN
Fmode3.....	180,86 kN

Fmin.....	169,72 kN
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Lunghezza effettiva calcolata come elemento del gruppo di bulloni

Schema circolare per fila 1

PI*Mp + P.....	171,71 mm
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Altro schema per fila 1

2*Mp + 0.625*Ep + 0.5*p.....	121,62 mm
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Gruppo di bulloni dalla fila 3 alla fila 1

Lunghezza effettiva del schema circolare.....	483,42 mm
Lunghezza effettiva di un'altro schema.....	399,00 mm

Mpl1,Rd.....	5878,07 kNm
Mpl2,Rd.....	5878,07 kNm
Fmode1.....	726,26 kN
Fmode2.....	456,36 kN
Fmode3.....	542,59 kN

Fmin.....	456,36 kN
Fmin-FtRd(3-2).....	147,14 kN

Gruppo di bulloni dalla fila 2 alla fila 1

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Lunghezza effettiva del schema circolare.....	311,71	mm
Lunghezza effettiva di un'altro schema.....	191,62	mm
Mpl1,Rd.....	2823,03	kNmm
Mpl2,Rd.....	2823,03	kNmm
Fmodel.....	348,80	kN
Fmode2.....	271,71	kN
Fmode3.....	361,73	kN
Fmin.....	271,71	kN
Fmin-FtRd(2).....	143,36	kN

Resistenza finale FtepbRd (1)..... 143,36 kN

Fila bulloni 2 (Altra fila bullone interna)

Parametri geometrici

Ec.....	960,00	mm
Ep.....	35,00	mm
Emin.....	35,00	mm
ex.....	0,00	mm
Mp.....	32,37	mm
Mxp.....	43,21	mm
P.....	70,00	mm
m.....	32,37	mm
n.....	35,00	mm

Lunghezza effettiva calcolata come fila individuale di bulloni

Schema circolare per fila 2		
2*PI*Mp.....	203,42	mm
Altro schema per fila 2		
4*Mp + 1.25*Ep.....	173,25	mm
Mpl1,Rd.....	2552,32	kNmm
Mpl2,Rd.....	2552,32	kNmm
Fmodel.....	315,35	kN
Fmode2.....	169,72	kN
Fmode3.....	180,86	kN
Fmin.....	169,72	kN

Lunghezza effettiva calcolata come elemento del gruppo di bulloni

Schema circolare per fila 2		
2*P.....	140,00	mm
Altro schema per fila 2		
P.....	70,00	mm

Gruppo di bulloni dalla fila 3 alla fila 2

Lunghezza effettiva del schema circolare.....	311,71	mm
Lunghezza effettiva di un'altro schema.....	277,37	mm
Mpl1,Rd.....	4086,29	kNmm
Mpl2,Rd.....	4086,29	kNmm
Fmodel.....	504,88	kN
Fmode2.....	309,21	kN
Fmode3.....	361,73	kN
Fmin.....	309,21	kN
Fmin-FtRd(3).....	128,35	kN

Resistenza finale FtepbRd (2)..... 128,35 kN

Fila bulloni 3 (Prima fila di bulloni inferiore dell'ala tesa della trave)

Parametri geometrici

Ec.....	960,00	mm
Ep.....	35,00	mm
Emin.....	35,00	mm
ex.....	0,00	mm
Mp.....	32,37	mm
Mxp.....	43,21	mm
P.....	70,00	mm
m.....	32,37	mm
n.....	35,00	mm

Lunghezza effettiva calcolata come fila individuale di bulloni

Lamdal.....	0,48	
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Lamda2.....	0,50
alpha.....	8,00
Schema circolare per fila 3	
2*PI*Mp.....	203,42 mm
Altro schema per fila 3	
alfa*Mp.....	259,00 mm
Mp11,Rd.....	2996,74 kNmm
Mp12,Rd.....	3815,57 kNmm
Fmodel.....	370,26 kN
Fmode2.....	207,22 kN
Fmode3.....	180,86 kN
Fmin.....	180,86 kN
Lunghezza effettiva calcolata come elemento del gruppo di bulloni	
Schema circolare per fila 3	
PI*Mp + P.....	171,71 mm
Altro schema per fila 3	
0.5*p + alfa*Mp - (2*Mp + 0.625*Ep).....	207,37 mm

Resistenza finale FtepbRd (3)..... 180,86 kN**3.5. Anima delle travi a trazione - Risultati completi****Fila bulloni 1**

Lunghezza effettiva.....	173,25 mm
FtwbRd.....	281,32 kN
Gruppo di bulloni dalla fila 3 alla fila 1	
Lunghezza effettiva.....	399,00 mm
Fmin.....	647,89 kN
Fmin-FtRd(3-2).....	338,68 kN
Gruppo di bulloni dalla fila 2 alla fila 1	
Lunghezza effettiva.....	191,62 mm
Fmin.....	311,16 kN
Fmin-FtRd(2).....	182,81 kN

Resistenza finale FtwbRd (1)..... 182,81 kN**Fila bulloni 2**

Lunghezza effettiva.....	173,25 mm
FtwbRd.....	281,32 kN
Gruppo di bulloni dalla fila 3 alla fila 2	
Lunghezza effettiva.....	277,37 mm
Fmin.....	450,40 kN
Fmin-FtRd(3).....	269,54 kN

Resistenza finale FtwbRd (2)..... 269,54 kN**Fila bulloni 3**

Lunghezza effettiva.....	203,42 mm
FtwbRd.....	330,31 kN

Resistenza finale FtwbRd (3)..... 330,31 kN**3.6. Risultati di resistenza (My)**

Ala e anima della trave a compressione Fc,fb,Rd(1).....	84,450 kN
Piatto a flessione Ft,ep,Rd(1).....	143,365 kN
Tipi di rottura.....	2
Anima della trave a trazione Ft,wb,Rd(1).....	182,812 kN
Resistenza a trazione Ftr,Rd delle file dei bulloni 1.....	44,07 kN
Ala e anima della trave a compressione Fc,fb,Rd(2).....	212,799 kN
Piatto a flessione Ft,ep,Rd(2).....	128,349 kN
Tipi di rottura.....	2
Anima della trave a trazione Ft,wb,Rd(2).....	269,536 kN
Resistenza a trazione Ftr,Rd delle file dei bulloni 2.....	112,47 kN

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Ala e anima della trave a compressione $F_c, f_b, R_d(3)$	393,663 kN
Piatto a flessione $F_t, e_p, R_d(3)$	180,864 kN
Tipi di rottura.....	3
Anima della trave a trazione $F_t, w_b, R_d(3)$	330,307 kN
Resistenza a trazione F_{tr}, R_d delle file dei bulloni 3.....	180,86 kN
Resistenza bulloni a trazione.....	90,432 kN
Controllo a compressione abilitato per l'anima e ali della trave.....	SI
Momento applicato M_y, s_d	28,00 KNm
Resistenza di progetto del momento M_y, R_d	48,41 KNm
$(M_y, S_d / M_y, r_d) = (28,00 / 48,41) = 0,58 < 1$	O.K.

3.7. Resistenza finale del giunto

$$\Rightarrow (M_y, s_d / M_y, R_d) + (M_z, s_d / M_z, R_d) = 0,58 + 0,00 = 0,58 < 1 \quad \mathbf{O.K.}$$

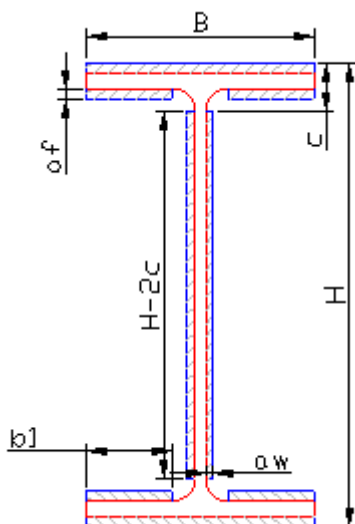
3.8. Risultati di resistenza (V_z)

$V_z, r_d(1)$ =.....	99,591 kN
$V_z, r_d(2)$ =.....	67,021 kN
$V_z, r_d(3)$ =.....	34,450 kN
Resistenza bulloni a taglio.....	60,288 kN
Resistenza bulloni a rifollamento.....	191,111 kN
Taglio applicato V_z, s_d	-7,00 kN
Resistenza di progetto a taglio V_z, R_d, b	103,35 kN
$(V_z, S_d / V_z, r_d) = (-7,00 / 103,35) = 0,07 < 1$	O.K.

3.9. Resistenza finale del giunto (V)

$$\Rightarrow (V_z, s_d / V_z, R_d) + (V_y, s_d / V_y, R_d) = 0,07 + 0,00 = 0,07 < 1 \quad \mathbf{O.K.}$$

3.10. Resistenza saldature



Per momenti M_y, s_d M_z, s_d :

$A_w = 2*B*af + 2*(H - 2*c)*aw + 4*b1*af$	3968,80 mm ²
$t_{tot} = ((V_y, S_d / A_w)^2 + (V_z, S_d / A_w)^2)^{1/2}$	0,002 kN/mm ²
W_{wy}	301197,60 mm ³
W_{wz}	57503,52 mm ³
$s_{perp} = M_y, S_d / W_{wy} + M_z, S_d / W_{wz} + N_{sd} / A_w$	0,099 kN/mm ²

$$\Rightarrow s_{perp} = 0,099 < f_u / \gamma_w = 0,344 \dots \mathbf{O.K.}$$

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$$\sigma_{tot} = (3 * (\sigma_{tot}^2 + \sigma_{perp}^2))^{\frac{1}{2}} \dots\dots\dots 0,099 \text{ kN/mm}^2$$

$$B_w (J 6.6.5.3(5)) \dots\dots\dots 0,85$$

=> $\sigma_{tot} = 0,099 < f_u/B_w * w = 0,405 \dots\dots\dots$ O.K.

=>> Il controllo della saldatura è OK O.K.

Per momenti $M_{y,Rd} = 1,7 * M_{j,Rd} = 82,30 \text{ kNm}$ (AnnexJ 3.1.3(4)) :
 $S_w = 0,273 < f_u / w = 0,344$
 Il controllo della saldatura è OK

4. Riassunto

4.1. Tavola riassuntiva

Nodi	Carichi	Massimo	Mysd/My	Vzsd/Vz	Mzsd/Mz	Vysd/Vy	Biax.Mo	Biax.Sh	BstC	
-	-99	-99	0,58	0,58	0,07	--	--	0,58	--	--

4.2. Legenda

- Massimo -> Tasso massimo
- Mysd/Myrd -> Resistenza giunti nell'asse maggiore a momento
- Vzsd/Vzrd -> Resistenza giunti nell'asse maggiore a taglio
- Mzsd/Mzrd -> Resistenza giunti nell'asse minore a momento
- Vysd/Vyrd -> Resistenza giunti nell'asse minore a taglio
- Biax.Mom -> Resistenza giunti nel piano a flessione
- Biax.Shr -> Resistenza giunti nel piano a taglio
- BstC -> Beams Web in Compression at Haunch Area

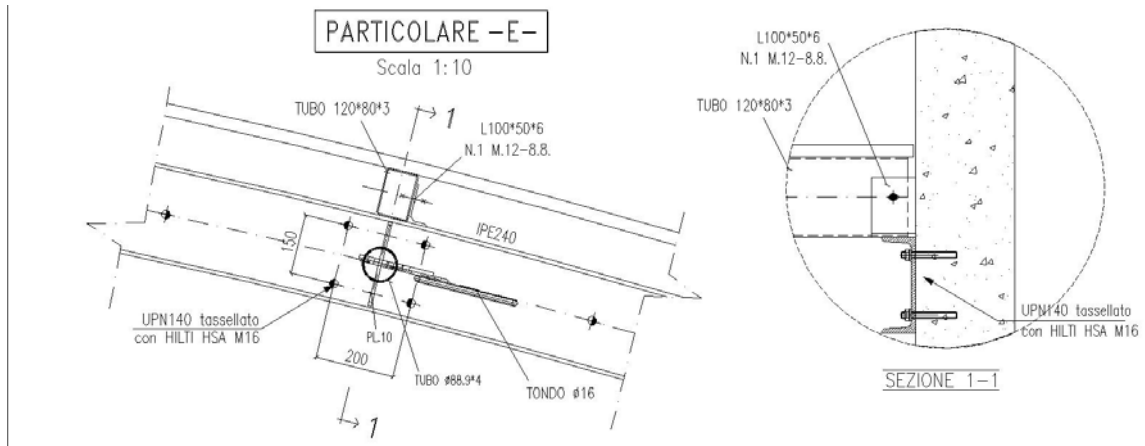
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PARTICOLARE -E-

Il particolare E riguarda il collegamento tassellato fra la trave di correa ed il setto in c.a. di controventamento.

Lo sforzo assiale massimo trasmesso dal Tubo $\varnothing 88.9 \times 4$ è pari a 71 kN.

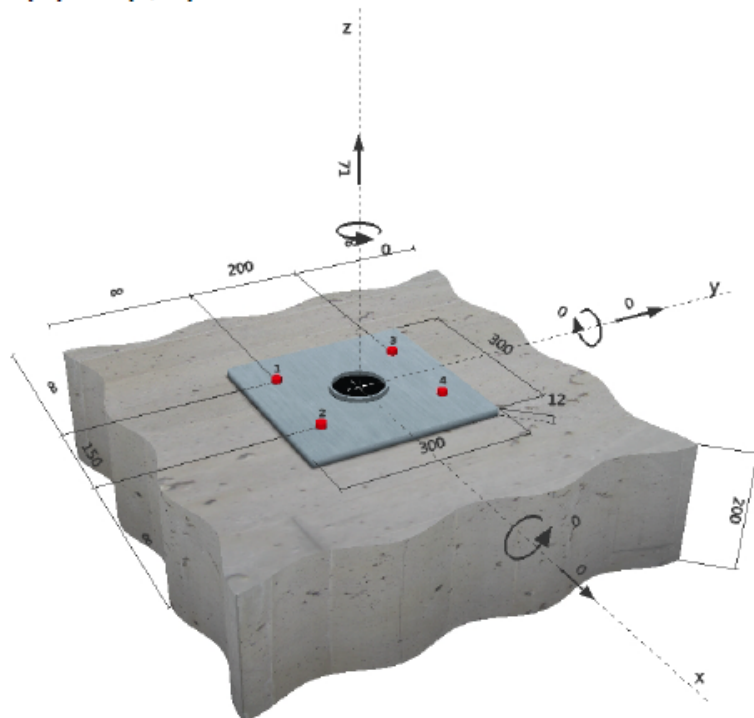
Il calcolo è svolto mediante il software Hilti – Profis Anchor.



1 Dati da inserire

Tipo e dimensione dell'ancorante:	HSA M16	
Profondità di posa effettiva:	$h_{eff} = 84 \text{ mm}$, $h_{con} = 115 \text{ mm}$	
Materiale:		
Certificazione No.:	ETA 99/0001	
Emesso / Valido:	13/03/2008 13/03/2013	
Verifica:	metodo di calcolo ETAG Nr. 001 Allegato C(2010)	
Fissaggio distanziato:	$e_s = 0 \text{ mm}$ (Senza distanziamento); $t = 12 \text{ mm}$	
Piastra d'ancoraggio:	$l_y \times l_x \times t = 300 \text{ mm} \times 300 \text{ mm} \times 12 \text{ mm}$; (Spessore della piastra raccomandato: non calcolato)	
Profilo:	Tubolare; $(L \times W \times T) = 89 \text{ mm} \times 89 \text{ mm} \times 4 \text{ mm}$	
Materiale base:	non fessurato Calcestruzzo, C30/37, $f_{cm} = 37,00 \text{ N/mm}^2$; $h = 200 \text{ mm}$	
Armatura:	nessuna armatura o interasse tra le armature $\rightarrow 150 \text{ mm}$ (qualunque \varnothing) o $\rightarrow 100 \text{ mm}$ ($\varnothing \leftrightarrow 10 \text{ mm}$) senza armatura di bordo longitudinale	

Geometria [mm] & Carichi [kN, kNm]



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2 Condizione di carico/Carichi risultanti sull'ancorante

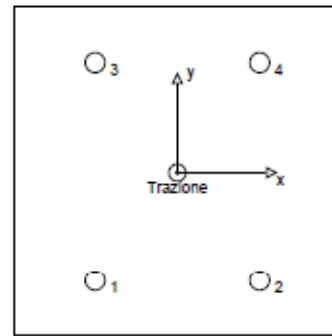
Condizione di carico: Carichi di progetto

Carichi sull'ancorante [kN]

Trazione: (+ Trazione, - Compressione)

Ancorante	Trazione	Taglio	Taglio in dir. x	Taglio in dir. y
1	17,750	0,000	0,000	0,000
2	17,750	0,000	0,000	0,000
3	17,750	0,000	0,000	0,000
4	17,750	0,000	0,000	0,000

Compressione max. nel calcestruzzo: - [%]
 Max sforzo di compressione nel calcestruzzo: - [N/mm²]
 risultante delle forze di trazione nel (x/y)=(0/0): 71,000 [kN]
 risultante delle forze di compressione (x/y)=(0/0): 0,000 [kN]



3 Carico di trazione (ETAG, Allegato C, Sezione 5.2.2)

	carico [kN]	Resistenza [kN]	Utilizzo β_s [%]	stato
Rottura dell'acciaio*	17,750	50,667	36	OK
Rottura per sfiliamento	N/A	N/A	N/A	N/A
Rottura conica del calcestruzzo**	71,000	90,222	79	OK
Fessurazione	N/A	N/A	N/A	N/A

*ancorante più sollecitato **gruppo di ancoranti (ancoranti sollecitati)

3.1 Rottura dell'acciaio

$N_{Rd,s}$ [kN]	$\gamma_{M,s}$	$N_{Rd,x}$ [kN]	$N_{Rd,y}$ [kN]
76,000	1,500	50,667	17,750

3.2 Rottura conica del calcestruzzo

$A_{c,N}$ [mm ²]	$A_{c,N}^0$ [mm ²]	$c_{cr,N}$ [mm]	$\epsilon_{cr,N}$ [mm]	$\psi_{cr,N}$	$\psi_{cr,N}$	k_s
181704	63504	126	252			
$e_{cr,N}$ [mm]	$\psi_{cr1,N}$	$e_{cr2,N}$ [mm]	$\psi_{cr2,N}$	$\psi_{cr,N}$	$\psi_{cr,N}$	k_s
0	1,000	0	1,000	1,000	1,000	10,100
$N_{Rd,c}^0$ [kN]	$\gamma_{M,c}$	$N_{Rd,c}$ [kN]	N_{Rd} [kN]			
47,298	1,500	90,222	71,000			

4 Carico di taglio (ETAG, Allegato C, Sezione 5.2.3)

	carico [kN]	Resistenza [kN]	Utilizzo β_v [%]	stato
Rottura dell'acciaio (senza braccio di leva)	N/A	N/A	N/A	N/A
Rottura dell'acciaio (con braccio di leva)	N/A	N/A	N/A	N/A
Rottura per pryout	N/A	N/A	N/A	N/A
Rottura del bordo del calcestruzzo in direzione	N/A	N/A	N/A	N/A

*ancorante più sollecitato **gruppo di ancoranti (ancoranti specifici)

5 Spostamento (ancorante più sollecitato)

Carichi di breve periodo:

N_{sk} = 13,148 [kN]	δ_N = 0,227 [mm]
V_{sk} = 0,000 [kN]	δ_V = 0,000 [mm]
	δ_{wV} = 0,227 [mm]

Carichi di lungo periodo:

N_{sk} = 13,148 [kN]	δ_N = 0,907 [mm]
V_{sk} = 0,000 [kN]	δ_V = 0,000 [mm]
	δ_{wV} = 0,907 [mm]

Commenti: Gli spostamenti a trazione sono validi con metà della coppia di serraggio necessaria all'installazione per non fessurato calcestruzzo! Gli spostamenti a taglio sono validi senza attrito tra il calcestruzzo e la piastra d'ancoraggio! Lo spazio dovuto alla tolleranza tra il foro perforato e il foro passante non sono inclusi in questo calcolo!

Gli spostamenti ammissibili dipendono dalla struttura fissata e devono essere definiti dal progettista!

6 Attenzione

- Si assume una piastra di ancoraggio sufficientemente rigida in modo che non risulti deformabile sotto l'azione di carichi.
- La verifica del trasferimento dei carichi al materiale base è necessaria in accordo con l'ETAG (2010)sezione 7!
- Il calcolo è valido solo se le dimensioni dei fori sulla piastra non superano i valori indicati nella tabella 4.1 dell'ETAG 001, Annex C! Per diametri dei fori superiori vedere il capitolo 1.1 dell'ETAG 001, Annex C!

L'ancoraggio risulta verificato!

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2.11. VERIFICHE AGLI STATI LIMITE DI ESERCIZIO

Vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

I risultati sulle deformazioni sono riportati al capitolo 2.8.2.

Le deformazioni massime verticali degli arcarecci di copertura sono inferiori a 1/200 della luce essendo lo spostamento verticale assoluto massimo pari a 2.28cm e lo spostamento verticale delle travi principali pari a 0.77 cm; lo spostamento relativo è quindi pari a $1.51\text{cm} < 405/200 = 2.02\text{ cm}$.

Le deformazioni massime verticali delle travi principali sono inferiori a 1/300 della luce essendo lo spostamento verticale massimo pari a $0.77\text{cm} = 1/896\text{ L}$.

Gli spostamenti orizzontali massimi allo SLD sono pari 0.26 cm

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3. RELAZIONE SUI MATERIALI

La relazione sui materiali deve essere redatta secondo le prescrizioni e le indicazioni riportate nel cap. 10 e nel cap. 11 delle NTC-08, tenendo conto delle indicazioni fornite nelle relative parti della "Circolare Ministeriale".

3.1.ELENCO DEI MATERIALI IMPIEGATI E LORO MODALITÀ DI POSA IN OPERA

Vengono indicati i materiali impiegati e la motivazione delle scelte compiute in relazione agli aspetti connessi alla durabilità al fine di garantire le caratteristiche fisiche e meccaniche durante tutta la vita utile prevista per la struttura, indicando anche le eventuali protezioni aggiuntive previste per soddisfare i requisiti.

Vengono altresì indicate le modalità della posa in opera dei materiali in relazione agli accorgimenti che devono essere adottati affinché le prescrizioni progettuali siano garantite nella fase di esecuzione della costruzione.

3.1.1. OPERE IN ELEVAZIONE IN CARPENTERIA METALLICA

Tutti i profili previsti in acciaio S275JR e S235JR verranno trattati con procedimento di zincatura a caldo, previo processo di decapaggio, sgrassaggio e flussaggio. I collegamenti realizzati in officina sono realizzati con saldature di seconda classe, quelli di cantiere in fase di montaggio tramite bulloni di classe 8.8. I tirafondi verranno realizzati in acciaio S355JR.

3.2.VALORI DI CALCOLO

Vengono riepilogati i valori di calcolo per ogni tipologia di materiale impiegato, sulla base delle caratteristiche di resistenza e dei coefficienti parziali di sicurezza previsti dalle NTC-08.

3.2.1. ACCIAIO DA CARPENTERIA

γ =	Peso specifico	=	7850	kg/m ³
E =	Modulo di Young (Modulo di elasticità normale)	=	210 000	MPa
G =	Modulo di elasticità tangenziale)	=	80 769	MPa
ν =	Coefficiente di Poisson	=	0.300	
α	Coefficiente di dilatazione termica	=	1.2e-005	(1/°C)
γ_{M0}	=	1.05		
γ_{M1}	=	1.05		
S235				
f_y =	Tensione di snervamento	=	235	MPa
f_u =	Tensione di rottura	=	360	Mpa
S275				
f_y =	Tensione di snervamento	=	275	MPa
f_u =	Tensione di rottura	=	430	MPa
S355				
f_y =	Tensione di snervamento	=	355	MPa
f_u =	Tensione di rottura	=	510	MPa

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3.2.2. BULLONERIA

Bulloni classe 8.8 zincati elettroliticamente

$f_{y,b}$ = Tensione di snervamento = 640 MPa

$f_{u,b}$ = Tensione di rottura = 800 Mpa

γ_{M2} = 1.25

Inoltre per garantire la durabilità, così come tutte le prestazioni attese, è necessario che si ponga adeguata cura sia nell'esecuzione che nella manutenzione e gestione della struttura e si utilizzino tutti gli accorgimenti utili alla conservazione delle caratteristiche fisiche e dinamiche dei materiali e delle strutture. La qualità dei materiali e le dimensioni degli elementi sono coerenti con tali obiettivi.

Durante le fasi di costruzione il direttore dei lavori implementerà severe procedure di controllo sulla qualità dei materiali, sulle metodologie di lavorazione e sulla conformità delle opere eseguite al progetto esecutivo nonché alle prescrizioni contenute nelle "Norme Tecniche per le Costruzioni" DM 14.01.2008. e relative Istruzioni.

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4. ELABORATI GRAFICI ESECUTIVI E PARTICOLARI COSTRUTTIVI

Gli elaborati grafici devono essere organizzati in tavole in modo razionale, ordinato e comprensibile, con tutte le necessarie quote, didascalie, particolari costruttivi e, ove occorra, i richiami alle corrispondenti parti della Relazione di calcolo. Gli elaborati grafici vengono articolati nelle parti di seguito definite.

4.1.ES RILIEVO GEOMETRICO-STRUTTURALE

Per gli interventi sulle costruzioni esistenti, gli elaborati di rilievo geometrico-strutturale devono essere redatti secondo quanto riportato ai punti 8.5.2 ed 8.7 delle NTC-08, tenendo presenti le indicazioni delle relative parti della "Circolare Ministeriale".

Trattandosi di nuovo intervento, il paragrafo non è sviluppato.

4.2.ES DOCUMENTAZIONE FOTOGRAFICA

Viene riportata una adeguata documentazione fotografica, sia di insieme che delle parti maggiormente significative, opportunamente referenziata (in pianta e in elevazione), estesa all'unità strutturale (ed all'eventuale aggregato) nel suo insieme ed agli aspetti di dettaglio per le parti oggetto di intervento e/o di valutazione di sicurezza.

Trattandosi di nuovo intervento, il paragrafo non è sviluppato.

4.3.ES QUADRO FESSURATIVO E/O DI DEGRADO

Viene restituito, mediante documentazione grafica e fotografica (adeguatamente referenziata) il quadro fessurativo e/o di degrado (se esistente) ricostruendo, per quanto possibile, quello pregresso e "nascosto" da interventi, volti o meno alla riparazione di danni strutturali.

Trattandosi di nuovo intervento, il paragrafo non è sviluppato.

4.4.ELABORATI GRAFICI GENERALI

Gli elaborati grafici generali del progetto esecutivo riguardante le strutture sono redatti tenendo conto delle indicazioni riportate al punto 3.1 del paragrafo C10.1 della "Circolare Ministeriale".

Si faccia riferimento alle tavole 683-03-01P+03P.

4.5.PARTICOLARI COSTRUTTIVI

I particolari costruttivi del progetto esecutivo riguardante le strutture sono redatti tenendo conto delle indicazioni riportate al punto 3.2 del paragrafo C10.1 della "Circolare Ministeriale".

Si faccia riferimento alla tavola 683-03-03P.

COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

5. PIANO DI MANUTENZIONE DELLA PARTE STRUTTURALE DELL'OPERA

Il piano di manutenzione della parte strutturale dell'opera viene redatto tenendo conto delle indicazioni riportate al punto 4.1 del paragrafo C10.1 della "Circolare Ministeriale".

Si faccia riferimento all'allegato 683-03r03 Piano di Manutenzione.

6. RELAZIONE SUI RISULTATI SPERIMENTALI-INDAGINI SPECIALISTICHE

Contiene una relazione del progettista sui criteri seguiti per la definizione del piano delle indagini, con relativa motivazione delle scelte compiute. Viene altresì riportato un riepilogo sintetico dei risultati acquisiti, rimandando alle parti che seguono per gli aspetti di dettaglio.

6.1.RELAZIONE GEOLOGICA: INDAGINI, CARATTERIZZAZIONE E MODELLAZIONE GEOLOGICA DEL SITO

Indicazioni sui contenuti della relazione geologica sono disponibili nel paragrafo C6.2.1 della "Circolare Ministeriale". Tali indicazioni devono essere integrate con quelle relative alla valutazione della stabilità geologica del sito (contenute nel capitolo 7, paragrafi 7.1 e 7.11, delle NTC-08) in condizioni sismiche e post-sismiche nei confronti di fenomeni quali movimenti di faglia, movimenti franosi, fenomeni amplificativi, densificazione dei depositi, subsidenza e liquefazione.

Si faccia riferimento all'allegato specifico.

6.2.RELAZIONE GEOTECNICA: INDAGINI, CARATTERIZZAZIONE E MODELLAZIONE DEL VOLUME SIGNIFICATIVO DI TERRENO

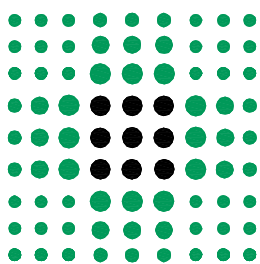
Si intende compresa in questo elaborato la relazione sulla fondazione, prevista dall'art. 93, comma 5 del D.P.R. n. 380/2001.

Indicazioni sui contenuti della relazione geotecnica sono disponibili nel paragrafo C6.2.2, e in particolare nel paragrafo C6.2.2.5, della "Circolare Ministeriale". Per gli aspetti riguardanti le problematiche sismiche, indicazioni sui contenuti della relazione geotecnica sono contenute nei paragrafi 7.1 e 7.11 delle NTC-08.

6.3.ES RELAZIONE SULLA CARATTERIZZAZIONE MECCANICA DEI MATERIALI

La caratterizzazione meccanica dei materiali deve essere effettuata nel rispetto dei principi riportati al punto 8.5.3 delle NTC-08, tenendo conto, nei limiti di applicabilità al caso in esame, delle indicazioni contenute nelle relative parti della "Circolare Ministeriale". Nella presente parte vengono illustrati i criteri seguiti e le scelte operate per la definizione delle proprietà meccaniche dei materiali esistenti, nonché i risultati delle eventuali indagini sperimentali condotte.

Trattandosi di nuovo intervento, il paragrafo non è sviluppato.



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OSPEDALE DI FIDENZA-SAN SECONDO

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**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 11
STRUTTURE METALLICHE - PIANO DI MANUTENZIONE**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
Via Aristotele n. 5
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ELABORATO

RS. 12

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Boni P.	Dott. ing. Boni P.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

Corpo d'Opera: 01

Strutture Metalliche Copertura

Unità Tecnologiche:

° 01.02 Strutture in elevazione in acciaio

° 01.03 Unioni

Unità Tecnologica: 01.02

Strutture in elevazione in acciaio

Si definiscono strutture in elevazione gli insiemi degli elementi tecnici del sistema edilizio aventi la funzione di resistere alle azioni di varia natura agenti sulla parte di costruzione fuori terra, trasmettendole alle strutture di fondazione e quindi al terreno. In particolare le strutture verticali sono costituite da aste rettilinee snelle collegate fra loro in punti detti nodi secondo una disposizione geometrica realizzata in modo da formare un sistema rigidamente indeformabile. Le strutture in acciaio si possono distinguere in: strutture in carpenteria metallica e sistemi industrializzati. Le prime, sono caratterizzate dall'impiego di profilati e laminati da produzione siderurgica e successivamente collegati mediante unioni (bullonature, saldature, ecc.); le seconde sono caratterizzate da un numero ridotto di componenti base assemblati successivamente a seconde dei criteri di compatibilità.

REQUISITI E PRESTAZIONI (UT)

01.02.R01 Resistenza agli agenti aggressivi

Classe di Requisiti: Protezione dagli agenti chimici ed organici

Classe di Esigenza: Sicurezza

Le strutture di elevazione non debbono subire dissoluzioni o disgregazioni e mutamenti di aspetto a causa dell'azione di agenti aggressivi chimici.

Prestazioni:

Le strutture di elevazione dovranno conservare nel tempo, sotto l'azione di agenti chimici (anidride carbonica, solfati, ecc.) presenti in ambiente, le proprie caratteristiche funzionali.

Livello minimo della prestazione:

Per i livelli minimi si rimanda alle prescrizioni di legge e di normative vigenti in materia. In particolare: D.M. 14.1.2008 (Norme tecniche per le costruzioni) e Circolare 2.2.2009, n.617 (Istruzioni per l'applicazione delle «Nuove norme tecniche per le costruzioni» di cui al decreto ministeriale 14.1.2008).

01.02.R02 (Attitudine al) controllo delle dispersioni elettriche

Classe di Requisiti: Protezione elettrica

Classe di Esigenza: Sicurezza

Le strutture di elevazione dovranno in modo idoneo impedire eventuali dispersioni elettriche.

Prestazioni:

Tutte le parti metalliche facenti parte delle strutture di elevazione dovranno essere connesse ad impianti di terra mediante dispersori. In modo che esse vengano a trovarsi allo stesso potenziale elettrico del terreno.

Livello minimo della prestazione:

Essi variano in funzione delle modalità di progetto.

01.02.R03 Resistenza meccanica

Classe di Requisiti: Di stabilità

Classe di Esigenza: Sicurezza

Le strutture di elevazione dovranno essere in grado di contrastare le eventuali manifestazioni di deformazioni e cedimenti rilevanti dovuti all'azione di determinate sollecitazioni (carichi, forze sismiche, ecc.).

Prestazioni:

Le strutture di elevazione, sotto l'effetto di carichi statici, dinamici e accidentali devono assicurare stabilità e resistenza.

Livello minimo della prestazione:

Per i livelli minimi si rimanda alle prescrizioni di legge e di normative vigenti in materia. In particolare D.M. 14.1.2008 (Norme tecniche per le costruzioni) e la Circolare 2.2.2009, n.617 (Istruzioni per l'applicazione delle «Nuove norme tecniche per le costruzioni» di cui al decreto ministeriale 14.1.2008).

01.02.R04 Resistenza al fuoco

Classe di Requisiti: Protezione antincendio

Classe di Esigenza: Sicurezza

La resistenza al fuoco rappresenta l'attitudine degli elementi che costituiscono le strutture a conservare, in un tempo determinato, la stabilità (R), la tenuta (E) e l'isolamento termico (I). Essa è intesa come il tempo necessario affinché la struttura raggiunga uno dei due stati limite di stabilità e di integrità, in corrispondenza dei quali non è più in grado sia di reagire ai carichi applicati sia di impedire la propagazione dell'incendio.

Prestazioni:

Gli elementi delle strutture di elevazione devono presentare una resistenza al fuoco (REI) non inferiore a quello determinabile in funzione del carico d'incendio, secondo le modalità specificate nel D.M. 9.3.2007.

Livello minimo della prestazione:

In particolare gli elementi costruttivi delle strutture di elevazione devono avere la resistenza al fuoco indicata di seguito, espressa in termini di tempo entro il quale le strutture di elevazioni conservano stabilità, tenuta alla fiamma, ai fumi ed isolamento termico:

- altezza antincendio (m): da 12 a 32 - Classe REI (min) = 60;
- altezza antincendio (m): da oltre 32 a 80 - Classe REI (min) = 90;
- altezza antincendio (m): oltre 80 - Classe REI (min) = 120.

01.02.R05 Resistenza al gelo

Classe di Requisiti: Protezione dagli agenti chimici ed organici

Classe di Esigenza: Sicurezza

Le strutture di elevazione non dovranno subire disgregazioni e variazioni dimensionali e di aspetto in conseguenza della formazione di ghiaccio.

Prestazioni:

Le strutture di elevazione dovranno conservare nel tempo le proprie caratteristiche funzionali se sottoposte a cause di gelo e disgelo. In particolare all'insorgere di pressioni interne che ne provocano la degradazione.

Livello minimo della prestazione:

I valori minimi variano in funzione del materiale impiegato. La resistenza al gelo viene determinata secondo prove di laboratorio su provini di calcestruzzo (provenienti da getti effettuati in cantiere, confezionato in laboratorio o ricavato da calcestruzzo già indurito) sottoposti a cicli alternati di gelo (in aria raffreddata) e disgelo (in acqua termostattizzata). Le misurazioni della variazione del modulo elastico, della massa e della lunghezza ne determinano la resistenza al gelo.

01.02.R06 Resistenza al vento

Classe di Requisiti: Di stabilità

Classe di Esigenza: Sicurezza

Le strutture di elevazione debbono resistere alle azioni e depressioni del vento tale da non compromettere la stabilità e la funzionalità degli elementi che le costituiscono.

Prestazioni:

Le strutture di elevazione devono resistere all'azione del vento tale da assicurare durata e funzionalità nel tempo senza compromettere la sicurezza dell'utenza. L'azione del vento da considerare è quella prevista dal D.M. 14.1.2008 (che divide convenzionalmente il territorio italiano in zone), tenendo conto dell'altezza della struttura e del tipo di esposizione.

Livello minimo della prestazione:

I valori minimi variano in funzione del tipo di struttura in riferimento ai seguenti parametri dettati dal D.M. 14.1.2008. Il vento, la cui direzione si considera generalmente orizzontale, esercita sulle costruzioni azioni che variano nel tempo provocando, in generale, effetti dinamici.

Per le costruzioni usuali tali azioni sono convenzionalmente ricondotte alle azioni statiche equivalenti. Peraltro, per costruzioni di forma o tipologia inusuale, oppure di grande altezza o lunghezza, o di rilevante snellezza e leggerezza, o di notevole flessibilità e ridotte capacità dissipative, il vento può dare luogo ad effetti la cui valutazione richiede l'uso di metodologie di calcolo e sperimentali adeguate allo stato dell'arte e che tengano conto della dinamica del sistema.

- Velocità di riferimento La velocità di riferimento V_b è il valore caratteristico della velocità del vento a 10 m dal suolo su un terreno di categoria di esposizione II (vedi tab. 3.3.II), mediata su 10 minuti e riferita ad un periodo di ritorno di 50 anni. In mancanza di specifiche ed adeguate indagini statistiche v_b è data dall'espressione:

$$V_b = V_{b,0} \text{ per } A_s \leq A_0$$

$V_b = V_{b,0} + K_a (A_s - A_0)$ A_s per $A_s > A_0$ dove:

$V_{b,0}$, A_0 , K_a sono parametri forniti nella Tab. 3.3.I e legati alla regione in cui sorge la costruzione in esame, in funzione delle zone; A_s è l'altitudine sul livello del mare (in m) del sito ove sorge la costruzione.

Tabella 3.3.I Zona: 1: Valle d'Aosta, Piemonte, Lombardia, Trentino-Alto Adige, Veneto, Friuli-Venezia Giulia (con l'eccezione della Provincia di Trieste); $V_{ref,0}$ (m/s) = 25; A_0 (m) = 1000; K_a (1/s) = 0.010 Zona: 2: Emilia-Romagna; $V_{b,0}$ (m/s) = 25; A_0 (m) = 750; K_a (1/s) = 0.015 Zona: 3: Toscana, Marche, Umbria, Lazio, Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria (esclusa la Provincia di Reggio Calabria); $V_{ref,0}$ (m/s) = 27; A_0 (m) = 500; K_a (1/s) = 0.020 Zona: 4: Sicilia e provincia di Reggio Calabria; $V_{ref,0}$ (m/s) = 28; A_0 (m) = 500; K_a (1/s) = 0.020 Zona: 5: Sardegna (zona a oriente della retta congiungente Capo Teulada con l'isola di La Maddalena); $V_{ref,0}$ (m/s) = 28; A_0 (m) = 750; K_a (1/s) = 0.015 Zona: 6: Sardegna (zona occidente della retta congiungente Capo Teulada con l'isola di La Maddalena); $V_{ref,0}$ (m/s) = 28; A_0 (m) = 500; K_a (1/s) = 0.020 Zona: 7: Liguria; $V_{ref,0}$ (m/s) = 29; A_0 (m) = 1000; K_a (1/s) = 0.015 Zona: 8: Provincia di Trieste; $V_{ref,0}$ (m/s) = 31; A_0 (m) = 1500; K_a (1/s) = 0.010 Zona: 9: Isole (con l'eccezione di Sicilia e Sardegna) e mare aperto; $V_{ref,0}$ (m/s) = 31; A_0 (m) = 500; K_a (1/s) = 0.020 Per altitudini superiori a 1500 m sul livello del mare si potrà fare riferimento alle condizioni locali di clima e di esposizione. I valori della velocità di riferimento possono essere ricavati da dati supportati da opportuna documentazione o da indagini statistiche adeguatamente comprovate. Fatte salve tali valutazioni, comunque raccomandate in prossimità di vette e crinali, i valori utilizzati non dovranno essere minori di quelli previsti per 1500 m di altitudine.

- Azioni statiche equivalenti Le azioni statiche del vento sono costituite da pressioni e depressioni agenti normalmente alle superfici, sia esterne che interne, degli elementi che compongono la costruzione.

L'azione del vento sul singolo elemento viene determinata considerando la combinazione più gravosa della pressione agente sulla superficie esterna e della pressione agente sulla superficie interna dell'elemento.

Nel caso di costruzioni o elementi di grande estensione, si deve inoltre tenere conto delle azioni tangenti esercitate dal vento.

L'azione d'insieme esercitata dal vento su una costruzione è data dalla risultante delle azioni sui singoli elementi, considerando come direzione del vento, quella corrispondente ad uno degli assi principali della pianta della costruzione; in casi particolari, come ad esempio per le torri a base quadrata o rettangolare, si deve considerare anche l'ipotesi di vento spirante secondo la direzione di una delle diagonali.

- Pressione del vento La pressione del vento è data dall'espressione:

$P = Q_b C_e C_p C_d$ dove:

Q_b è la pressione cinetica di riferimento; C_e è il coefficiente di esposizione; C_p è il coefficiente di forma (o coefficiente aerodinamico), funzione della tipologia e della geometria della costruzione e del suo orientamento rispetto alla direzione del vento.

Il suo valore può essere ricavato da dati suffragati da opportuna documentazione o da prove sperimentali in galleria del vento; C_d è il coefficiente dinamico con cui si tiene conto degli effetti riduttivi associati alla non contemporaneità delle massime pressioni locali e degli effetti amplificativi dovuti alle vibrazioni strutturali.

- Azione tangente del vento L'azione tangente per unità di superficie parallela alla direzione del vento è data dall'espressione:

$P_f = Q_b C_e C_f$ dove:

C_f è il coefficiente d'attrito funzione della scabrezza della superficie sulla quale il vento esercita l'azione tangente. Il suo valore può essere ricavato da dati suffragati da opportuna documentazione o da prove sperimentali in galleria del vento.

- Pressione cinetica di riferimento La pressione cinetica di riferimento Q_b (in N/m²) è data dall'espressione:

$Q_b = \frac{1}{2} \rho V_b^2$ dove:

V_b è la velocità di riferimento del vento (in m/s); ρ è la densità dell'aria assunta convenzionalmente costante e pari a 1,25 kg/cm³

- Coefficiente di esposizione Il coefficiente di esposizione C_e dipende dall'altezza Z sul suolo del punto considerato, dalla topografia del terreno, e dalla categoria

di esposizione del sito ove sorge la costruzione. In assenza di analisi specifiche che tengano in conto la direzione di provenienza del vento e l'effettiva scabrezza e topografia del terreno che circonda la costruzione, per altezze sul suolo non maggiori di $Z = 200$ m, esso è dato dalla formula:

$C_e(Z) = K_r^2 C_t \ln(Z/Z_0) [7 + C_t \ln(Z/Z_0)]$ per $Z \geq Z_{min}$ $C_e(Z) = C_e(Z_{min})$ per $Z < Z_{min}$ dove:

K_r , Z_0 , Z_{min} sono assegnati in Tab. 3.3.II in funzione della categoria di esposizione del sito ove sorge la costruzione; C_t è il coefficiente di topografia.

Tabella 3.3.II Categoria di esposizione del sito: I; $K_r = 0,17$; Z_0 (m) = 0,01; Z_{min} (m) = 2 Categoria di esposizione del sito: II; $K_r = 0,19$; Z_0 (m) = 0,05; Z_{min} (m) = 4 Categoria di esposizione del sito: III; $K_r = 0,20$; Z_0 (m) = 0,10; Z_{min} (m) = 5 Categoria di esposizione del sito: IV; $K_r = 0,22$; Z_0 (m) = 0,30; Z_{min} (m) = 8 Categoria di esposizione del sito: V; $K_r = 0,23$; Z_0 (m) = 0,70; Z_{min} (m) = 12

In mancanza di analisi che tengano in conto sia della direzione di provenienza del vento sia delle variazioni di rugosità del terreno, la categoria di esposizione è assegnata in funzione della posizione geografica del sito ove sorge la costruzione e della classe di rugosità del terreno definita in Tabella 3.3.III. Il coefficiente di topografia C_t è posto di regola pari a 1 sia per le zone pianeggianti sia per quelle ondulate, collinose, montane. Nel caso di costruzioni ubicate presso la sommità di colline o pendii isolati il coefficiente di topografia ci deve essere valutato con analisi più approfondite.

Tabella 3.3.III Classe di rugosità del terreno: A; Aree urbane in cui almeno il 15% della superficie sia coperto da edifici la cui altezza media superi i 15 m.

Classe di rugosità del terreno: B; Aree urbane (non di classe A), suburbane, industriali e boschive Classe di rugosità del terreno: C; Aree con ostacoli diffusi (alberi, case, muri, recinzioni, ecc.); aree con rugosità non riconducibile alle classi A, B, D.

Classe di rugosità del terreno: D; Aree prive di ostacoli o con al più rari ostacoli isolati (aperta campagna, aeroporti, aree agricole, pascoli, zone paludose o sabbiose, superfici innevate o ghiacciate, mare, laghi, ecc).

Nota:

L'assegnazione della classe di rugosità non dipende dalla conformazione orografica e topografica del terreno. Affinché una costruzione possa dirsi ubicata in classe di rugosità A o B è necessario che la situazione che contraddistingue la classe permanga intorno alla costruzione per non meno di 1 km e comunque non meno di 20 volte l'altezza della costruzione. Laddove sussistano dubbi sulla scelta della classe di rugosità, a meno di analisi rigorose, verrà assegnata la classe più sfavorevole.

01.02.R07 Durata della vita nominale (periodo di riferimento per l'azione sismica)

Classe di Requisiti: Durabilità tecnologica

Classe di Esigenza: Durabilità

La vita nominale di un'opera strutturale V_N è intesa come il numero di anni nel quale la struttura, purché soggetta alla manutenzione ordinaria, deve potere essere usata per lo scopo al quale è destinata.

Prestazioni:

Il periodo di riferimento V_R di una costruzione, valutato moltiplicando la vita nominale V_N (espressa in anni) per il coefficiente d'uso della costruzione C_u ($V_R = V_N C_u$), riveste notevole importanza in quanto, assumendo che la legge di ricorrenza dell'azione sismica sia un processo Poissoniano, è utilizzato per valutare, fissata la probabilità di superamento $P(V_R)$ corrispondente allo stato limite considerato (Tabella 3.2.1 della NTC), il periodo di ritorno T_r dell'azione sismica cui fare riferimento per la verifica. Per assicurare alle costruzioni un livello di sicurezza antisismica minimo irrinunciabile le NTC impongono, se $V_R \leq 35$ anni, di assumere comunque $V_R = 35$ anni.

Livello minimo della prestazione:

La vita nominale delle opere varia in funzione delle classi d'uso definite di seguito. In particolare la tabella mostra i valori di V_R corrispondenti ai valori di V_N che individuano le frontiere tra i tre tipi di costruzione considerati (tipo 1, tipo 2, tipo 3); valori di V_N intermedi tra detti valori di frontiera (e dunque valori di V_R intermedi tra quelli mostrati in tabella) sono consentiti ed i corrispondenti valori dei parametri a_g , F_0 e T_c necessari a definire l'azione sismica sono ricavati utilizzando le formule d'interpolazione fornite nell'Allegato A alle NTC. Gli intervalli di valori attribuiti a V_R al variare di V_N e Classe d'uso sono:

- Classe d'uso = I e $V_N \leq 10$ allora $V_R = 35$;
- Classe d'uso = I e $V_N \geq 50$ allora $V_R \geq 35$;
- Classe d'uso = I e $V_N \geq 100$ allora $V_R \geq 70$;
- Classe d'uso = II e $V_N \leq 10$ allora $V_R = 35$;
- Classe d'uso = II e $V_N \geq 50$ allora $V_R \geq 50$;

- Classe d'uso = II e $V_n \geq 100$ allora $V_r \geq 100$;
- Classe d'uso = III e $V_n \leq 10$ allora $V_r = 35$;
- Classe d'uso = III e $V_n \geq 50$ allora $V_r \geq 75$;
- Classe d'uso = III e $V_n \geq 100$ allora $V_r \geq 150$;
- Classe d'uso = IV e $V_n \leq 10$ allora $V_r = 35$;
- Classe d'uso = IV e $V_n \geq 50$ allora $V_r \geq 100$;
- Classe d'uso = IV e $V_n \geq 100$ allora $V_r \geq 200$.

dove per classe d'uso si intende:

- Classe I: Costruzioni con presenza solo occasionale di persone, edifici agricoli;
- Classe II: Costruzioni il cui uso preveda normali affollamenti, senza contenuti pericolosi per l'ambiente e senza funzioni pubbliche e sociali essenziali. Industrie con attività non pericolose per l'ambiente. Ponti, opere infrastrutturali, reti viarie non ricadenti in Classe d'uso III o in Classe d'uso IV, reti ferroviarie la cui interruzione non provochi situazioni di emergenza. Dighe il cui collasso non provochi conseguenze rilevanti;
- Classe III: Costruzioni il cui uso preveda affollamenti significativi. Industrie con attività pericolose per l'ambiente. Reti viarie extraurbane non ricadenti in Classe d'uso IV. Ponti e reti ferroviarie la cui interruzione provochi situazioni di emergenza. Dighe rilevanti per le conseguenze di un loro eventuale collasso;
- Classe IV: Costruzioni con funzioni pubbliche o strategiche importanti, anche con riferimento alla gestione della protezione civile in caso di calamità. Industrie con attività particolarmente pericolose per l'ambiente. Reti viarie di tipo A o B, di cui al D.M. 5 novembre 2001, n. 6792, "Norme funzionali e geometriche per la costruzione delle strade", e di tipo C quando appartenenti ad itinerari di collegamento tra capoluoghi di provincia non altresì serviti da strade di tipo A o B. Ponti e reti ferroviarie di importanza critica per il mantenimento delle vie di comunicazione, particolarmente dopo un evento sismico. Dighe connesse al funzionamento di acquedotti e a impianti di produzione di energia elettrica.

L'Unità Tecnologica è composta dai seguenti Elementi Manutenibili:

° 01.02.01 Travi

° 01.02.02 Pilastrini

° 01.02.03 Arcarecci o Terzere

° 01.02.04 Controventi

° 01.02.05 Controventi non verticali

Elemento Manutenibile: 01.02.01

Travi

Unità Tecnologica: 01.02
Strutture in elevazione in acciaio

Le travi sono elementi strutturali, che si pongono in opera in posizione orizzontale o inclinata per sostenere il peso delle strutture sovrastanti, con una dimensione predominante che trasferiscono, le sollecitazioni di tipo trasversale al proprio asse geometrico, lungo tale asse, dalle sezioni investite dal carico fino ai vincoli, garantendo l'equilibrio esterno delle travi in modo da assicurare il contesto circostante. Le travi in acciaio sono realizzate mediante profilati (IPE, HE, C, L, ecc.) . Il loro impiego diffuso è dovuto dalla loro maggiore efficienza a carichi flessionali, infatti la concentrazione del materiale sulle ali, le parti più distanti dal punto baricentrico della sezione, ne aumentano la loro rigidezza flessionale. Vengono generalmente utilizzate nella realizzazione di telai in acciaio, per edifici, ponti, ecc..

ANOMALIE RISCONTRABILI

01.02.01.A01 Corrosione

Decadimento degli elementi metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.02.01.A02 Deformazioni e spostamenti

Deformazioni e spostamenti dovuti a cause esterne che alterano la normale configurazione dell'elemento.

01.02.01.A03 Imbozzamento

Deformazione dell'elemento che si localizza in prossimità dell'ala e/o dell'anima.

01.02.01.A04 Snervamento

Deformazione dell'elemento che si può verificare, quando all'aumentare del carico, viene meno il comportamento perfettamente elastico dell'acciaio.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.01.C01 Controllo di deformazioni e/o spostamenti

Cadenza: ogni 12 mesi

Tipologia: Controllo a vista

Controllare eventuali deformazioni e/o spostamenti dell'elemento strutturale dovuti a cause esterne che ne alterano la normale configurazione.

Requisiti da verificare: 1) *Resistenza agli agenti aggressivi*; 2) *Resistenza meccanica*.

Anomalie riscontrabili: 1) *Corrosione*; 2) *Deformazioni e spostamenti*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.01.I01 Interventi sulle strutture

Cadenza: a guasto

Gli interventi riparativi dovranno effettuarsi a secondo del tipo di anomalia riscontrata e previa diagnosi delle cause del difetto accertato.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.02.02

Pilastrì

Unità Tecnologica: 01.02
Strutture in elevazione in acciaio

I pilastrì in acciaio sono elementi strutturali verticali portanti, in genere profilati e/o profilati cavi, che trasferiscono i carichi della sovrastruttura alle strutture di ricezione delle parti sottostanti indicate a riceverli, posizionate e collegate con piattì di fondazione e tirafondi. Sono generalmente trasportati in cantiere e montati mediante unioni (bullonature, chiodature, saldature, ecc.). Rappresentano una valida alternativa ai pilastrì in c.a. realizzati in opera.

ANOMALIE RISCONTRABILI

01.02.02.A01 Corrosione

Decadimento degli elementi metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.02.02.A02 Deformazioni e spostamenti

Deformazioni e spostamenti dovuti a cause esterne che alterano la normale configurazione dell'elemento.

01.02.02.A03 Imbozzamento

Deformazione dell'elemento che si localizza in prossimità dell'ala e/o dell'anima.

01.02.02.A04 Snervamento

Deformazione dell'elemento che si può verificare, quando all'aumentare del carico, viene meno il comportamento perfettamente elastico dell'acciaio.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.02.C01 Controllo di deformazioni e/o spostamenti

Cadenza: ogni 12 mesi

Tipologia: Controllo a vista

Controllare eventuali deformazioni e/o spostamenti dell'elemento strutturale dovuti a cause esterne che ne alterano la normale configurazione.

Requisiti da verificare: 1) *Resistenza meccanica*; 2) *Resistenza agli agenti aggressivi*.

Anomalie riscontrabili: 1) *Corrosione*; 2) *Deformazioni e spostamenti*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.02.I01 Interventi sulle strutture

Cadenza: a guasto

Gli interventi riparativi dovranno effettuarsi a secondo del tipo di anomalia riscontrata e previa diagnosi delle cause del difetto accertato.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.02.03

Arcarecci o Terzere

Unità Tecnologica: 01.02
Strutture in elevazione in acciaio

Si tratta di elementi strutturali impiegati negli schemi delle coperture a struttura metallica caratterizzati generalmente dal fatto di essere inflessi e di riportare il carico verticale che agisce in copertura alle travi principali. Vengono impiegati normalmente profili IPE, a C, ecc., piegati a freddo e in alcuni casi ad omega.

ANOMALIE RISCONTRABILI

01.02.03.A01 Corrosione

Decadimento degli elementi metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.02.03.A02 Deformazioni e spostamenti

Deformazioni e spostamenti dovuti a cause esterne che alterano la normale configurazione dell'elemento.

01.02.03.A03 Imbozzamento

Deformazione dell'elemento che si localizza in prossimità dell'ala e/o dell'anima.

01.02.03.A04 Snervamento

Deformazione dell'elemento che si può verificare, quando all'aumentare del carico, viene meno il comportamento perfettamente elastico dell'acciaio.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.03.C01 Controllo di deformazioni e/o spostamenti

Cadenza: ogni 12 mesi

Tipologia: Controllo a vista

Controllare eventuali deformazioni e/o spostamenti dell'elemento strutturale dovuti a cause esterne che ne alterano la normale configurazione.

Requisiti da verificare: 1) *Resistenza agli agenti aggressivi*; 2) *Resistenza meccanica*.

Anomalie riscontrabili: 1) *Corrosione*; 2) *Deformazioni e spostamenti*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.03.I01 Interventi sulle strutture

Cadenza: quando occorre

Gli interventi riparativi dovranno effettuarsi a secondo del tipo di anomalia riscontrata e previa diagnosi delle cause del difetto accertato.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.02.04

Controventi

Unità Tecnologica: 01.02
Strutture in elevazione in acciaio

Si tratta di elementi strutturali verticali costituiti da aste progettate per dare una maggiore stabilità a particolari costruzioni. Vi sono tipologie strutturali diverse di controventi; quelli di tipo verticali, sono destinati a ricevere le risultanti costituenti le forze orizzontali per ogni piano.

ANOMALIE RISCONTRABILI

01.02.04.A01 Corrosione

Decadimento degli elementi metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.02.04.A02 Deformazioni e spostamenti

Deformazioni e spostamenti dovuti a cause esterne che alterano la normale configurazione dell'elemento.

01.02.04.A03 Imbozzamento

Deformazione dell'elemento che si localizza in prossimità dell'ala e/o dell'anima.

01.02.04.A04 Snervamento

Deformazione dell'elemento che si può verificare, quando all'aumentare del carico, viene meno il comportamento perfettamente elastico dell'acciaio.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.04.C01 Controllo di deformazioni e/o spostamenti

Cadenza: ogni 12 mesi

Tipologia: Controllo a vista

Controllare eventuali deformazioni e/o spostamenti dell'elemento strutturale dovuti a cause esterne che ne alterano la normale configurazione.

Requisiti da verificare: 1) *Resistenza agli agenti aggressivi*; 2) *Resistenza meccanica*.

Anomalie riscontrabili: 1) *Corrosione*; 2) *Deformazioni e spostamenti*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.04.I01 Interventi sulle strutture

Cadenza: quando occorre

Gli interventi riparativi dovranno effettuarsi a secondo del tipo di anomalia riscontrata e previa diagnosi delle cause del difetto accertato.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.02.05

Controventi non verticali

Unità Tecnologica: 01.02
Strutture in elevazione in acciaio

Si tratta di elementi strutturali costituiti da aste progettate per dare una maggiore stabilità a particolari costruzioni. Vi sono tipologie strutturali diverse di controventi:

- di tipo orizzontali, se disposti nel piano degli orizzontamenti e delle coperture per assicurare la indeformabilità nel loro piano;
- di tipo a falda, se disposti sulle testate e/o lungo il perimetro delle strutture di copertura per inon permettere lo svergolamento e/o il ribaltamento delle principali strutture di copertura come travi, capriate, ecc..

ANOMALIE RISCONTRABILI

01.02.05.A01 Corrosione

Decadimento degli elementi metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.02.05.A02 Deformazioni e spostamenti

Deformazioni e spostamenti dovuti a cause esterne che alterano la normale configurazione dell'elemento.

01.02.05.A03 Imbozzamento

Deformazione dell'elemento che si localizza in prossimità dell'ala e/o dell'anima.

01.02.05.A04 Snervamento

Deformazione dell'elemento che si può verificare, quando all'aumentare del carico, viene meno il comportamento perfettamente elastico dell'acciaio.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.05.C01 Controllo di deformazioni e/o spostamenti

Cadenza: ogni 12 mesi

Tipologia: Controllo a vista

Controllare eventuali deformazioni e/o spostamenti dell'elemento strutturale dovuti a cause esterne che ne alterano la normale configurazione.

Requisiti da verificare: 1) *Resistenza agli agenti aggressivi*; 2) *Resistenza meccanica*.

Anomalie riscontrabili: 1) *Corrosione*; 2) *Deformazioni e spostamenti*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.02.05.I01 Interventi sulle strutture

Cadenza: quando occorre

Gli interventi riparativi dovranno effettuarsi a secondo del tipo di anomalia riscontrata e previa diagnosi delle cause del difetto accertato.

Ditte specializzate: *Specializzati vari.*

Unità Tecnologica: 01.03

Unioni

Le unioni sono costituite da elementi che per materiale e tecniche diverse consentono la realizzazione di collegamenti tra elementi delle strutture nel rispetto delle normative vigenti. Le unioni rappresentano una caratteristica fondamentale nelle costruzioni in legno, acciaio, miste, ecc.. Esse hanno lo scopo di unire le parti, definite in sede progettuale, per realizzare strutture complete che devono rispondere a requisiti precisi.

REQUISITI E PRESTAZIONI (UT)

01.03.R01 Resistenza alla corrosione

Classe di Requisiti: Durabilità tecnologica

Classe di Esigenza: Durabilità

Gli elementi di unione utilizzati non devono decadere in processi di corrosione.

Prestazioni:

Gli elementi metallici utilizzati per le unioni non devono decadere in processi di corrosione se sottoposti all'azione dell'acqua e del gelo.

Livello minimo della prestazione:

I materiali utilizzati per le unioni devono soddisfare i requisiti indicati dalla norme vigenti.

01.03.R02 Resistenza Meccanica

Classe di Requisiti: Di stabilità

Classe di Esigenza: Sicurezza

Gli elementi utilizzati per realizzare unioni diverse devono garantire resistenza meccanica alle sollecitazioni ad essi trasmessi

Prestazioni:

Le unioni devono essere realizzate con materiali idonei a resistere a fenomeni di trazione che potrebbero verificarsi durante il ciclo di vita.

Livello minimo della prestazione:

I materiali utilizzati per le unioni devono soddisfare i requisiti indicati dalla norme vigenti.

L'Unità Tecnologica è composta dai seguenti Elementi Manutenibili:

- ° 01.03.01 Bullonature per acciaio
- ° 01.03.02 Collegamenti con piastre di fondazione
- ° 01.03.03 Collegamenti di ripristino con coprigiunti (pilastro/pilastro - trave/trave)
- ° 01.03.04 Collegamenti di ripristino con flangia (pilastro/pilastro - trave/trave)
- ° 01.03.05 Collegamenti con flangia (trave/pilastro passante - pilastro/trave passante)
- ° 01.03.06 Collegamenti con flangia (travi: principale/secondaria)
- ° 01.03.07 Collegamenti con flangia (trave/altro materiale)
- ° 01.03.08 Collegamenti a squadretta (trave/pilastro passante - pilastro/trave passante)
- ° 01.03.09 Collegamenti a squadretta (travi: principale/secondaria)
- ° 01.03.10 Collegamenti diretti (travi: principale/secondaria)
- ° 01.03.11 Saldature per acciaio

Elemento Manutenibile: 01.03.01

Bullonature per acciaio

Unità Tecnologica: 01.03
Unioni

Si tratta di elementi di giunzione tra parti metalliche. Le tipologie e caratteristiche dei prodotti forniti dal mercato variano a secondo dell'impiego.

L'impiego di bulloni è indicato quando vi è la necessità di collegare elementi con spessori notevoli e/o nei casi in cui i collegamenti devono essere realizzati in cantiere. Essi possono essere stampati o torniti. Sono formati da:

- viti, con testa (definita bullone) con forma esagonale e gambo in parte o completamente filettato. generalmente il diametro dei bulloni utilizzati per le carpenterie varia tra i 12-30 mm;
- dadi, sempre di forma esagonale, che svolgono la funzione di serraggio del bullone;
- rondelle, in genere di forma circolare, che svolgono la funzione di rendere agevole il serraggio dei dadi;
- controdadi, si tratta di rosette elastiche, bulloni precaricati, e/o altri sistemi, con funzione di resistenza ad eventuali vibrazioni.

I bulloni sono in genere sottoposti a forze perpendicolari al gambo (a taglio) e/o a forze parallele al gambo (a trazione).

Le unioni bullonate si dividono in due categorie:

- a flangia, usate tipicamente nei casi in cui il bullone è sottoposto prevalentemente a trazione.
- a coprigiunto, usate tipicamente nei casi in cui il bullone è sottoposto a taglio.

REQUISITI E PRESTAZIONI (EM)

01.03.01.R01 Durabilità

Classe di Requisiti: Durabilità tecnologica

Classe di Esigenza: Durabilità

Le bullonature per acciaio devono garantire adeguata resistenza durante il loro ciclo di vita.

Prestazioni:

Le bullonature per acciaio dovranno garantire adeguata resistenza secondo i valori tabellati della norma UNI EN 20898.

Livello minimo della prestazione:

Le bullonature utilizzate in carpenteria tabellati per classi, secondo UNI EN 20898, dovranno rispettare i seguenti parametri:

- Classe 4.6: Resistenza a taglio (fk,V) = 170 MPa, Resistenza a snervamento (fy) = 240 MPa, Res.a trazione/compressione (fk,N) = 240 MPa, Resistenza ultima (ft) = 400 Mpa, Allungamento % (A%) = 22;
- Classe 5.6: Resistenza a taglio (fk,V) = 212 MPa, Resistenza a snervamento (fy) = 300 MPa, Res.a trazione/compressione (fk,N) = 300 MPa, Resistenza ultima (ft) = 500 Mpa, Allungamento % (A%) = 20;
- Classe 6.8: Resistenza a taglio (fk,V) = 255 MPa, Resistenza a snervamento (fy) = 360 MPa, Res.a trazione/compressione (fk,N) = 480 MPa, Resistenza ultima (ft) = 600 Mpa, Allungamento % (A%) = 16;
- Classe 8.8: Resistenza a taglio (fk,V) = 396 MPa, Resistenza a snervamento (fy) = 560 MPa, Res.a trazione/compressione (fk,N) = 640 MPa, Resistenza ultima (ft) = 800 Mpa, Allungamento % (A%) = 12;
- Classe 10.9: Resistenza a taglio (fk,V) = 495 MPa, Resistenza a snervamento (fy) = 700 MPa, Res.a trazione/compressione (fk,N) = 900 MPa, Resistenza ultima (ft) = 1000 Mpa, Allungamento % (A%) = 9;
- Classe 12.9: Resistenza a taglio (fk,V) = 594 MPa, Resistenza a snervamento (fy) = 840 MPa, Res.a trazione/compressione (fk,N) = 1080 MPa, Resistenza ultima (ft) = 1200 Mpa, Allungamento % (A%) = 8.

Questi valori caratteristici andranno divisi per un coefficiente di modello e uno di sicurezza del materiale per i calcoli di progetto. Le classi 8.8, 10.9 e 12.9 sono dette ad alta resistenza e per esse viene effettuata solamente la verifica ad attrito tra le superfici di contatto della lamiera e del bullone, ovvero si verifica che la forza di serraggio dei bulloni renda efficace l'unione. Per tutte le altre classi si considera il tranciamento del bullone, lo strappo e il rifollamento della lamiera.

I diametri dei bulloni in genere variano dai 12 ai 30 mm (a due a due fino a 24 mm, poi 27 e 30); nel dimensionamento, a causa della loro filettatura, si considera un'area equivalente e non quella effettiva ricavabile dal diametro.

ANOMALIE RISCOINTRABILI

01.03.01.A01 Allentamento

Allentamento delle bullonature rispetto alle tenute di serraggio.

01.03.01.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.01.A03 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.01.A04 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.01.A05 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.01.C01 Controllo generale

Cadenza: ogni 2 anni

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.

Per la corretta messa in opera delle unioni bullonate occorre fare 4 tipi di verifica:

- verifica di resistenza a taglio o a tranciamento;
- verifica della pressione del foro o a rifollamento;
- verifica a rottura per trazione della piastra o a strappamento;
- verifica a rottura per trazione dei fori o a strappamento.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Rifollamento*; 4) *Strappamento*; 5) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.01.I01 Ripristino

Cadenza: ogni 2 anni

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche.

Ditte specializzate: *Specializzati vari*.

Elemento Manutenibile: 01.03.02

Collegamenti con piastre di fondazione

Unità Tecnologica: 01.03

Unioni

I giunti di base dei pilastri hanno funzione di trasmettere le sollecitazioni delle membrature verticali agli elementi di fondazione. I componenti principali dei giunti di base sono realizzati da:

- piastre di base in acciaio, per la distribuzione delle forze di compressione dalla colonna;
- malta di livellamento in c.a., con strato impostato al di sopra della fondazione;
- tirafondi, inglobati nella fondazione in c.a.

ANOMALIE RISCONTRABILI

01.03.02.A01 Allentamento

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.02.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.02.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.02.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.02.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.02.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.02.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.02.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.02.C01 Controllo generale

Cadenza: ogni anno

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.
Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Strappamento*; 7) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO**01.03.02.I01 Ripristino**

Cadenza: quando occorre

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari*.

Elemento Manutenibile: 01.03.03**Collegamenti di ripristino con coprighiunti (pilastro/pilastro - trave/trave)**

Unità Tecnologica: 01.03

Unioni

I collegamenti di ripristino con coprighiunti pilastro/pilastro o trave/trave sono realizzati mediante piastre coprighiunto d'ala e/o d'anima bullonate all'estremità dei due pilastri o delle due travi.

ANOMALIE RISCONTRABILI***01.03.03.A01 Allentamento***

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.03.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.03.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.03.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.03.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.03.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.03.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.03.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO***01.03.03.C01 Controllo generale***

Cadenza: ogni anno

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio. Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Rottura*; 7) *Strappamento*; 8) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO**01.03.03.I01 Ripristino**

Cadenza: quando occorre

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.03.04

Collegamenti di ripristino con flangia (pilastro/pilastro - trave/trave)

Unità Tecnologica: 01.03

Unioni

I collegamenti di ripristino con flangia pilastro/pilastro o trave/trave sono realizzati mediante piastre d'acciaio presaldato in estremità ai pilastri o alle travi da collegare e poi bullonate in opera.

ANOMALIE RISCONTRABILI

01.03.04.A01 Allentamento

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.04.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.04.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.04.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.04.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.04.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.04.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.04.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.04.C01 Controllo generale

Cadenza: ogni anno

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.
Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Rottura*; 7) *Strappamento*; 8) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO**01.03.04.I01 Ripristino**

Cadenza: quando occorre

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.03.05

Collegamenti con flangia (trave/pilastro passante - pilastro/trave passante)

Unità Tecnologica: 01.03

Unioni

I collegamenti con flangia trave/pilastro passante o pilastro/trave passante sono realizzati mediante una piastra d'acciaio presaldada all'estremità della trave o del pilastro da collegare all'altro elemento strutturale e poi bullonata in opera all'ala o anima del pilastro passante o della trave.

ANOMALIE RISCONTRABILI

01.03.05.A01 Allentamento

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.05.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.05.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.05.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.05.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.05.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.05.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.05.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.05.C01 Controllo generale

Cadenza: ogni anno

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.
Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Rottura*; 7) *Strappamento*; 8) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO**01.03.05.I01 Ripristino**

Cadenza: quando occorre

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari*.

Elemento Manutenibile: 01.03.06

Collegamenti con flangia (travi: principale/secondaria)

Unità Tecnologica: 01.03

Unioni

I collegamenti con flangia trave principale/secondaria sono realizzati mediante una piastra d'acciaio presaldato all'estremità del trave secondaria e poi bullonata in opera all'anima della trave principale.

ANOMALIE RISCONTRABILI

01.03.06.A01 Allentamento

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.06.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.06.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.06.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.06.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.06.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.06.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.06.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.06.C01 Controllo generale

Cadenza: ogni anno

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.

Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Rottura*; 7) *Strappamento*; 8) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.06.I01 Ripristino

Cadenza: a guasto

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.03.07

Collegamenti con flangia (trave/altro materiale)

Unità Tecnologica: 01.03

Unioni

I collegamenti con flangia trave/altro materiale sono realizzati mediante una piastra d'acciaio presaldato all'estremità del trave e poi bullonata in opera all'elemento strutturale di altro materiale.

ANOMALIE RISCONTRABILI

01.03.07.A01 Allentamento

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.07.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.07.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.07.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.07.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.07.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.07.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.07.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.07.C01 Controllo generale

Cadenza: ogni 2 anni

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.

Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Rottura*; 7) *Strappamento*; 8) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.07.I01 Ripristino

Cadenza: a guasto

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.03.08**Collegamenti a squadretta (trave/pilastro passante - pilastro/trave passante)**

Unità Tecnologica: 01.03

Unioni

I collegamenti a squadretta trave/pilastro passante o pilastro/trave passante sono realizzati mediante profili angolari bullonati all'anima della trave o del pilastro e poi bullonati all'ala o anima del pilastro o della trave.

ANOMALIE RISCONTRABILI***01.03.08.A01 Allentamento***

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.08.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.08.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.08.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.08.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.08.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.08.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.08.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO***01.03.08.C01 Controllo generale***

Cadenza: ogni anno

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.
Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Rottura*; 7) *Strappamento*; 8) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO**01.03.08.I01 Ripristino**

Cadenza: quando occorre

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari*.

Elemento Manutenibile: 01.03.09

Collegamenti a squadretta (travi: principale/secondaria)

Unità Tecnologica: 01.03

Unioni

I collegamenti a squadretta trave principale/secondaria sono realizzati mediante profili angolari bullonati all'anima della trave secondaria e poi bullonati all'anima della trave principale.

ANOMALIE RISCONTRABILI

01.03.09.A01 Allentamento

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.09.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.09.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.09.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.09.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.09.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.09.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.09.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.09.C01 Controllo generale

Cadenza: ogni 2 anni

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.

Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Rottura*; 7) *Strappamento*; 8) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.09.I01 Ripristino

Cadenza: a guasto

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.03.10

Collegamenti diretti (travi: principale/secondaria)

Unità Tecnologica: 01.03

Unioni

I collegamenti diretti trave principale/secondaria sono realizzati mediante profili angolari bullonati all'anima della trave secondaria e poi bullonati all'ala della trave principale.

ANOMALIE RISCONTRABILI

01.03.10.A01 Allentamento

Allentamento dei giunti rispetto alle tenute di serraggio.

01.03.10.A02 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.10.A03 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.10.A04 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.10.A05 Rifollamento

Deformazione dei fori delle lamiere, predisposti per le unioni, dovute alla variazione delle azioni esterne sulla struttura e/o ad errori progettuali e/o costruttivi.

01.03.10.A06 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.10.A07 Strappamento

Rottura dell'elemento dovute a sollecitazioni assiali che superano la capacità di resistenza del materiale.

01.03.10.A08 Tranciamento

Rottura dell'elemento dovute a sollecitazioni taglienti che superano la capacità di resistenza del materiale.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.10.C01 Controllo generale

Cadenza: ogni anno

Tipologia: Revisione

Controllo degli elementi di giunzione tra parti e verifica della giusta tenuta di serraggio.

Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Allentamento*; 2) *Corrosione*; 3) *Cricca*; 4) *Interruzione*; 5) *Rifollamento*; 6) *Rottura*; 7) *Strappamento*; 8) *Tranciamento*.

Ditte specializzate: *Tecnici di livello superiore.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.10.I01 Ripristino

Cadenza: quando occorre

Ripristino delle tenute di serraggio tra elementi. Sostituzione di eventuali elementi corrosi o degradati con altri di analoghe caratteristiche. Rimozione di saldature difettose e realizzazione di nuove.

Ditte specializzate: *Specializzati vari.*

Elemento Manutenibile: 01.03.11

Saldature per acciaio

Unità Tecnologica: 01.03

Unioni

Le saldature sono collegamenti di parti solide che realizzano una continuità del materiale fra le parti che vengono unite. Le saldature, in genere, presuppongono la fusione delle parti che vengono unite. Attraverso le saldature viene garantita anche la continuità delle caratteristiche dei materiali delle parti unite. Esse si basano sul riscaldamento degli elementi da unire (definiti pezzi base) fino al raggiungimento del rammollimento e/o la fusione per ottenere il collegamento delle parti con o senza materiale d'apporto che fondendo forma un cordone di saldatura.

Tra le principali unioni saldate:

- a piena penetrazione;
- a parziale penetrazione;
- unioni realizzate con cordoni d'angolo.

Tra le principali tecniche di saldature si elencano:

- saldatura a filo continuo (mig-mag);
- saldatura per fusione (tig);
- saldatura con elettrodo rivestito;
- saldatura a fiamma ossiacetilenica;
- saldatura in arco sommerso;
- saldatura narrow-gap;
- saldatura a resistenza;
- saldatura a punti;
- saldatura a rilievi;
- saldatura a rulli;
- saldatura per scintillio;
- saldatura a plasma;
- saldatura laser;
- saldatura per attrito.

REQUISITI E PRESTAZIONI (EM)

01.03.11.R01 Certificazione delle saldature

Classe di Requisiti: Controllabilità tecnologica

Classe di Esigenza: Controllabilità

Le saldature degli acciai dovrà avvenire mediante i procedimenti codificati previsti dalla normativa vigente.

Prestazioni:

La saldatura degli acciai dovrà avvenire con uno dei procedimenti all'arco elettrico codificati secondo la norma UNI EN ISO 4063. È ammesso l'uso di procedimenti diversi purché sostenuti da adeguata documentazione teorica e sperimentale.

I saldatori nei procedimenti semiautomatici e manuali dovranno essere qualificati secondo la norma UNI EN 287-1 da parte di un Ente terzo. A deroga di quanto richiesto nella norma UNI EN 287-1, i saldatori che eseguono giunti a T con cordoni d'angolo dovranno essere specificamente qualificati e non potranno essere qualificati soltanto mediante l'esecuzione di giunti testa-testa.

Gli operatori dei procedimenti automatici o robotizzati dovranno essere certificati secondo la norma UNI EN 1418. Tutti i procedimenti di saldatura dovranno essere qualificati secondo la norma UNI EN ISO 15614-1.

Le durezza eseguite sulle macrografie non dovranno essere superiori a 350 HV30. Per la saldatura ad arco di prigionieri di materiali metallici (saldatura ad innesco mediante sollevamento e saldatura a scarica di condensatori ad innesco sulla punta) si applica la norma UNI EN ISO 14555; valgono perciò i requisiti di qualità di cui al prospetto A1 della appendice A della stessa norma.

Le prove di qualifica dei saldatori, degli operatori e dei procedimenti dovranno essere eseguite da un Ente terzo; in assenza di prescrizioni in proposito l'Ente sarà scelto dal costruttore secondo criteri di competenza e di indipendenza.

Sono richieste caratteristiche di duttilità, snervamento, resistenza e tenacità in zona fusa e in zona termica alterata non inferiori a quelle del materiale base.

Nell'esecuzione delle saldature dovranno inoltre essere rispettate le norme UNI EN 1011 parti 1 e 2 per gli acciai ferritici e della

parte 3 per gli acciai inossidabili. Per la preparazione dei lembi si applicherà, salvo casi particolari, la norma UNI EN ISO 9692-1. Le saldature saranno sottoposte a controlli non distruttivi finali per accertare la corrispondenza ai livelli di qualità stabiliti dal progettista sulla base delle norme applicate per la progettazione.

In assenza di tali dati per strutture non soggette a fatica si adatterà il livello C della norma UNI EN ISO 5817 e il livello B per strutture soggette a fatica.

L'entità ed il tipo di tali controlli, distruttivi e non distruttivi, in aggiunta a quello visivo al 100%, saranno definiti dal Collaudatore e dal Direttore dei Lavori; per i cordoni ad angolo o giunti a parziale penetrazione si useranno metodi di superficie (ad es. liquidi penetranti o polveri magnetiche), mentre per i giunti a piena penetrazione, oltre a quanto sopra previsto, si useranno metodi volumetrici e cioè raggi X o gamma o ultrasuoni per i giunti testa a testa e solo ultrasuoni per i giunti a T a piena penetrazione.

Per le modalità di esecuzione dei controlli ed i livelli di accettabilità si potrà fare utile riferimento alle prescrizioni della norma UNI EN 12062.

Tutti gli operatori che eseguiranno i controlli dovranno essere qualificati secondo la norma UNI EN 473 almeno di secondo livello.

Livello minimo della prestazione:

Per i livelli minimi si rimanda alle prescrizioni di legge e di norme vigenti in materia. In particolare: D.M. 14.1.2008 (Norme tecniche per le costruzioni) e C.M. 2.2.2009, n.617 (Istruzioni per l'applicazione delle «Nuove norme tecniche per le costruzioni» di cui al decreto ministeriale 14.1.2008).

ANOMALIE RISCONTRABILI

01.03.11.A01 Corrosione

Decadimento dei materiali metallici a causa della combinazione con sostanze presenti nell'ambiente (ossigeno, acqua, anidride carbonica, ecc.).

01.03.11.A02 Cricca

Fenditura sottile e profonda del materiale costituente alla saldatura dovuta ad errori di esecuzione.

01.03.11.A03 Interruzione

Interruzione dei cordoni di saldatura e mancanza di continuità tra le parti.

01.03.11.A04 Rottura

Rottura dei cordoni di saldatura e mancanza di continuità tra le parti.

CONTROLLI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.11.C01 Controllo generale

Cadenza: ogni anno

Tipologia: Revisione

Controllo della continuità delle parti saldate e l'assenza di anomalie evidenti.

Requisiti da verificare: 1) *Resistenza alla corrosione*; 2) *Resistenza Meccanica*.

Anomalie riscontrabili: 1) *Corrosione*; 2) *Interruzione*; 3) *Rottura*; 4) *Cricca*.

Ditte specializzate: *Specializzati vari.*_

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.03.11.I01 Ripristino

Cadenza: quando occorre

Rimozione della saldatura difettosa e realizzazione di una nuova.

Ditte specializzate: *Specializzati vari*.

01.03.11.I02 Rimozione ossidazioni

Cadenza: quando occorre

Rimozione di eventuali ossidazioni che interessano le saldature.

Ditte specializzate: *Specializzati vari*.

Unità Tecnologica: 01.04

Coperture

Insieme degli elementi tecnici orizzontali o suborizzontali del sistema edilizio aventi funzione di separare gli spazi interni del sistema edilizio stesso dallo spazio esterno sovrastante. Esse si distinguono in base alla loro geometria e al tipo di struttura.

REQUISITI E PRESTAZIONI (UT)

01.04.R01 Resistenza meccanica

Classe di Requisiti: Di stabilità

Classe di Esigenza: Sicurezza

La copertura deve garantire una resistenza meccanica rispetto alle condizioni di carico (carichi concentrati e distribuiti) di progetto in modo da garantire la stabilità e la stabilità degli strati costituenti. Inoltre vanno considerate le caratteristiche dello strato di supporto che dovranno essere adeguate alle sollecitazioni e alla resistenza degli elementi di tenuta.

Prestazioni:

Tutte le coperture devono essere idonee a contrastare efficacemente il prodursi di rotture o deformazioni gravi sotto l'azione di sollecitazioni meccaniche in modo da assicurare la durata e la funzionalità nel tempo senza pregiudicare la sicurezza degli utenti. A tal fine si considerano le seguenti azioni: carichi dovuti al peso proprio e di esercizio, carichi presenti per operazioni di manutenzione quali pedonamento di addetti, sollecitazioni sismiche, carichi dovuti a dilatazioni termiche, assestamenti e deformazioni di strutture portanti.

Livello minimo della prestazione:

Comunque, in relazione alla funzione strutturale, le caratteristiche delle coperture devono corrispondere a quelle prescritte dalle leggi e normative vigenti.

L'Unità Tecnologica è composta dai seguenti Elementi Manutenibili:

° 01.04.01 Strutture in acciaio

Elemento Manutenibile: 01.04.01

Strutture in acciaio

Unità Tecnologica: 01.04

Coperture

E' in genere costituita da elementi metallici in profilati d'acciaio (angolari; profili a C e a doppio T, ecc.) disposti a secondo della geometria e struttura della copertura. In genere gli angolari in acciaio sono usati anche come arcarecci di supporto al manto di copertura. I profili in acciaio a C e a doppio T sono utilizzati nelle sezioni opportune, come travi. I profili maggiormente utilizzati sono quelli a doppio T ad ali parallele, ottenuti direttamente per laminazione (travi IPE e travi HE), o mediante saldature di lamiera a caldo e profilati nelle sezioni composte. La struttura di copertura ha la funzione dominante di reggere o portare il manto e di resistere ai carichi esterni.

ANOMALIE RISCONTRABILI

01.04.01.A01 Corrosione

Corrosione degli elementi metallici con relativa riduzione della sezione resistente.

01.04.01.A02 Deformazione

Cambiamento della forma iniziale con imbarcamento degli elementi e relativa irregolarità della forma geometrica degli stessi.

01.04.01.A03 Deformazioni e spostamenti

Deformazioni e spostamenti dovuti a cause esterne che alterano la normale configurazione dell'elemento.

01.04.01.A04 Distacco

Distacco degli elementi dai dispositivi di fissaggio e relativo scorrimento.

01.04.01.A05 Errori di pendenza

Errore nel calcolo della pendenza (la determinazione in gradi, o in percentuale, rispetto al piano orizzontale di giacitura delle falde) rispetto alla morfologia del tetto, alla lunghezza di falda (per tetti a falda), alla scabrosità dei materiali, all'area geografica di riferimento. Insufficiente deflusso delle acque con conseguente ristagno delle stesse.

01.04.01.A06 Imbozzamento

Deformazione dell'elemento che si localizza in prossimità dell'ala e/o dell'anima.

01.04.01.A07 Snervamento

Deformazione dell'elemento che si può verificare, quando all'aumentare del carico, viene meno il comportamento perfettamente elastico dell'acciaio.

CONTROLLI ESEGUIBILI DALL'UTENTE

01.04.01.C01 Controllo struttura

Cadenza: ogni 12 mesi

Tipologia: Controllo a vista

Controllo del grado di usura delle parti in vista finalizzato alla ricerca di anomalie (corrosione, difetti di ancoraggi, perdita delle caratteristiche di resistenza, ecc.).

Requisiti da verificare: 1) *Resistenza meccanica*.

Anomalie riscontrabili: 1) *Corrosione*; 2) *Deformazione*; 3) *Distacco*; 4) *Errori di pendenza*._

MANUTENZIONI ESEGUIBILI DA PERSONALE SPECIALIZZATO

01.04.01.I01 Ripristino protezione

Cadenza: ogni 2 anni

Ripristino delle parti in vista della protezione anticorrosiva previa pulizia delle superfici, mediante rimozione della polvere e di altri depositi. Trattamento anticorrosivo sulle parti in vista con applicazione a spruzzo o a pennello di protezione anticorrosione.

Ditte specializzate: *Pittore, Specializzati vari*.

01.04.01.I02 Ripristino serraggi bulloni e connessioni metalliche

Cadenza: ogni 2 anni

Ripristino e/o sostituzione degli elementi di connessione e verifica del corretto serraggio degli stessi e sostituzioni di quelli mancanti. Riparazione della protezione antiruggine degli elementi metallici mediante rimozione della ruggine ed applicazione di vernici protettive. Riparazione di eventuali corrosioni o fessurazioni mediante saldature in loco con elementi di raccordo.

Ditte specializzate: *Tecnici di livello superiore, Specializzati vari*.

01.04.01.I03 Sostituzione strutture metalliche

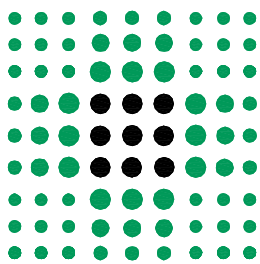
Cadenza: quando occorre

Sostituzione parziale o totale degli elementi di struttura degradati per eccessiva corrosione, deformazione e/o riduzione della sezione. Ripristino degli elementi di copertura.

Ditte specializzate: *Tecnici di livello superiore, Specializzati vari*.

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OSPEDALE DI FIDENZA-SAN SECONDO

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**REALIZZAZIONE NUOVO CORPO DI
 AMPLIAMENTO E RISTRUTTURAZIONE
 PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
 STRUTTURALE**

CORPO DI AMPLIAMENTO

**ALLEGATO 12
 STRUTTURE METALLICHE - RELAZIONE SUI MATERIALI**

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ELABORATO

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SCALA

IL DIRETTORE GENERALE
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IL COORDINATORE PER LA SICUREZZA
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REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Boni P.	Dott. ing. Boni P.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10:1

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1 DESCRIZIONE DELL'OPERA

La copertura cilindrica in acciaio è impostata sui pilastri in c.a. emergenti dal 5° solaio (destinato ad alloggiare gli impianti) di una struttura multipiano in c.a.p...

L'arco costituente la trave principale della copertura lavora come una trave continua su 4 appoggi in modo da eliminare le azioni spingenti: il primo appoggio è una cerniera mentre gli altri tre sono carrelli.

La stabilità della struttura in senso trasversale è garantita da un sistema di controventamento di falda costituito da controventi a croce di Sant'Andrea in tondo con tenditore e puntoni in tubo tondo che si vanno a scaricare su setti di controventamento in c.a..

La copertura dell'ampliamento è suddivisa in due blocchi separati da un giunto strutturale; il primo lotto ha dimensioni in asse di 16.98x20.23m ed il secondo di 16.98x36.26m.

La struttura sorge in zona sismica 3.

Il sito sorge in una zona caratterizzata da una sismicità bassa. La struttura sismo-resistente è dimensionata assumendo un comportamento sismico NON DISSIPATIVO ($q=1$).

Le strutture in esame, sono in acciaio S235JR-S275JR-S355JR, zincato a caldo (UNI EN ISO 1461).

La funzione di ospedale induce ad optare nel calcolo agli stati limite per una classe d'uso IV (par.2.4.2 DM 2008) ed una vita nominale VN pari a 50 anni (par.2.4.1 DM 2008).

Vita nominale:

$V_N = 50$ anni

Classe d'uso:

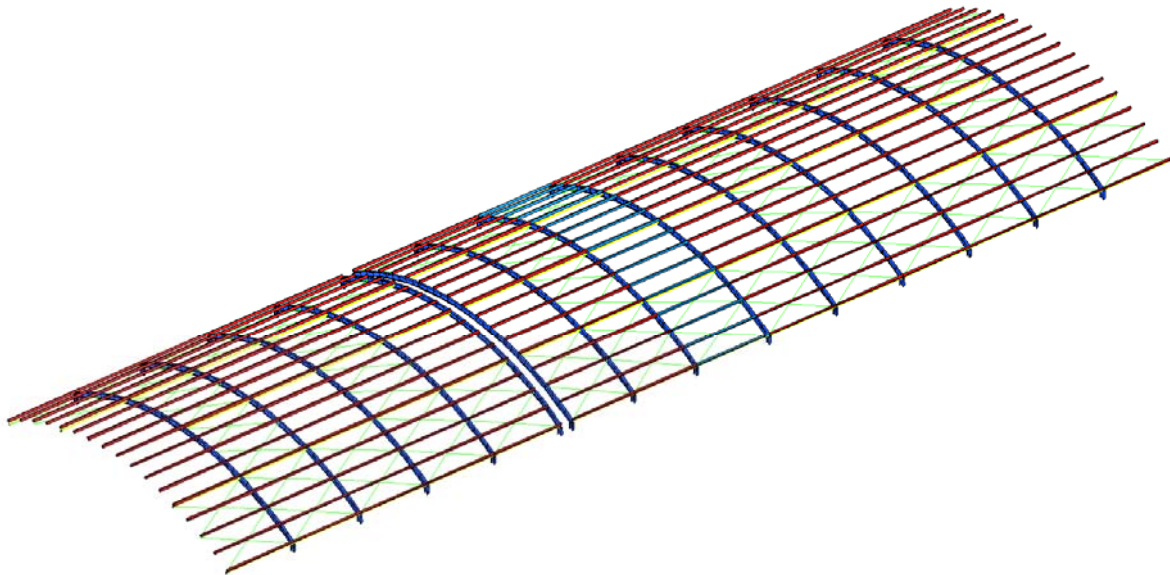
IV Funzioni pubbliche importanti

Coefficiente d'uso:

$C_U = 2.0$

Periodo di riferimento per l'azione sismica:

$V_R = 100$ anni



VITA NOMINALE, CLASSI D'USO E PERIODO DI RIFERIMENTO

1.1 VITA NOMINALE

La vita nominale di un'opera strutturale V_N è intesa come il numero di anni nel quale la struttura, purché soggetta alla manutenzione ordinaria, deve potere essere usata per lo scopo al quale è destinata. La vita nominale dei diversi tipi di opere è quella riportata nella Tab. 2.4.I e deve essere precisata nei documenti di progetto.

Tabella 2.4.I – Vita nominale V_N per diversi tipi di opere

TIPI DI COSTRUZIONE		Vita Nominale V_N (in anni)
1	Opere provvisorie – Opere provvisionali - Strutture in fase costruttiva ¹	≤ 10
2	Opere ordinarie, ponti, opere infrastrutturali e dighe di dimensioni contenute o di importanza normale	≥ 50
3	Grandi opere, ponti, opere infrastrutturali e dighe di grandi dimensioni o di importanza strategica	≥ 100

¹ Le verifiche sismiche di opere provvisorie o strutture in fase costruttiva possono omettersi quando le relative durate previste in progetto siano inferiori a 2 anni.

1.2 CLASSI D'USO

In presenza di azioni sismiche, con riferimento alle conseguenze di una interruzione di operatività o di un eventuale collasso, le costruzioni sono suddivise in classi d'uso così definite:

Classe I: Costruzioni con presenza solo occasionale di persone, edifici agricoli.

Classe II: Costruzioni il cui uso preveda normali affollamenti, senza contenuti pericolosi per l'ambiente e senza funzioni pubbliche e sociali essenziali. Industrie con attività non pericolose per l'ambiente. Ponti, opere infrastrutturali, reti viarie non ricadenti in Classe d'uso *III* o in Classe d'uso *IV*, reti ferroviarie la cui interruzione non provochi situazioni di emergenza. Dighe il cui collasso non provochi conseguenze rilevanti.

Classe III: Costruzioni il cui uso preveda affollamenti significativi. Industrie con attività pericolose per l'ambiente. Reti viarie extraurbane non ricadenti in Classe d'uso *IV*. Ponti e reti ferroviarie la cui interruzione provochi situazioni di emergenza. Dighe rilevanti per le conseguenze di un loro eventuale collasso.

Classe IV: Costruzioni con funzioni pubbliche o strategiche importanti, anche con riferimento alla gestione della protezione civile in caso di calamità. Industrie con attività particolarmente pericolose per l'ambiente. Reti viarie di tipo A o B, di cui al D.M. 5 novembre 2001, n. 6792, "Norme funzionali e geometriche per la costruzione delle strade", e di tipo C quando appartenenti ad itinerari di collegamento tra capoluoghi di provincia non altresì serviti da strade di tipo A o B. Ponti e reti ferroviarie di importanza critica per il mantenimento delle vie di comunicazione, particolarmente dopo un evento sismico. Dighe connesse al funzionamento di acquedotti e a impianti di produzione di energia elettrica.

1.3 PERIODO DI RIFERIMENTO PER L'AZIONE SISMICA

Le azioni sismiche su ciascuna costruzione vengono valutate in relazione ad un periodo di riferimento V_R che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale V_N per il coefficiente d'uso C_U : $V_R = V_N \cdot C_U$ (2.4.1)

Il valore del coefficiente d'uso C_U è definito, al variare della classe d'uso, come mostrato in Tab. 2.4.II.

Tab. 2.4.II – Valori del coefficiente d'uso C_U

CLASSE D'USO	I	II	III	IV
COEFFICIENTE C_U	0,7	1,0	1,5	2,0

Se $V_R \leq 35$ anni si pone comunque $V_R = 35$ anni.

2 MATERIALI

2.1 REQUISITI GENERALI PER L'ACCETTAZIONE DI MATERIALI IN GENERE

In generale, per l'accettazione di tutti i materiali in opera da parte della D.L., l'Appaltatore dovrà consegnare tutte le certificazioni comprovanti i requisiti minimi previsti dalle normative in vigore per ciascun elemento richiamate nel Capitolato, dalle norme UNI, CEI, UNI-VVF, UNI-CNR, UNI-EN, ASTM o equipollenti, e delle leggi vigenti.

Tutti i prodotti saranno di qualità e dovranno corrispondere allo standard qualitativo richiesto dal descrittivo delle opere anche in riferimento alle prestazioni minime identificate dalla marca specifica del prodotto eventualmente indicata e dal Capitolato Speciale di Appalto. Non verrà in nessun caso permesso l'impiego di materiali difformi e/o avariati.

Ove richiesto da parte della D.L. per approvazione ed accettazione dovranno essere forniti i disegni di fabbrica, con le caratteristiche delle varie sezioni finiture, nella scala 1:1. I disegni dovranno comprendere anche, chiaramente indicati, tutti i materiali e componenti dell'elemento completo.

Prima di accettare il materiale la D.L. potrà richiedere la campionatura necessaria di ogni elemento, richiedere le prove di laboratorio che saranno effettuate in laboratori specializzati indicati dalla D.L. ed a carico dell'Appaltatore. L'appaltatore provvederà a consegnare la campionatura al vero di dimensioni adeguate, in doppia serie identica sia dell'elemento che degli eventuali accessori. Detti campioni dovranno essere approvati dalla D.L., una serie sarà conservata dall'Appaltatore e una serie dalla D.L.

Oltre a quanto stabilito dalle normative in essere, dalle leggi e regolamenti nazionali, regionali e locali vigenti si precisa che:

- 1) nel caso di materiali e tecnologie tradizionali e/o artigianali, i componenti proverranno da quelle località che l'Appaltatore riterrà più opportuno e convenienti, purchè rispondano alle prestazioni riportate nel presente Capitolato Speciale di Appalto, negli elaborati allegati al Contratto, alle normative di riferimento ed alle leggi vigenti.
- 2) nel caso di prodotti industriali la rispondenza al presente Capitolato, agli elaborati allegati al Contratto, alle normative di riferimento ed alle leggi vigenti, dovrà risultare da un attestato di conformità rilasciato dal produttore e dall'installatore comprovato da idonea documentazione e certificazione in accordo con la D.L.
- 3) i composti organici volatili sono presenti negli ambienti allo stato di vapore in miscele complesse che non permettono una precisa individuazione dei ruoli. Per quanto riguarda i materiali da costruzione impiegati nel presente appalto, saranno richieste documentazioni e certificazioni che attestino la composizione delle sostanze presenti con le relative quantità impiegate. Nelle resine per compensati e truciolati di legno, nelle schiume isolanti e nei componenti dei collanti dovrà essere verificato e valutato, prima dell'impiego, congiuntamente alla D.L. tramite le specifiche certificazioni, il rilascio di formaldeide nella fase di installazione (elevata concentrazione) nella fase intermedia ed in quella di deterioramento.

2.2 OPERE IN ELEVAZIONE IN CARPENTERIA METALLICA

Le strutture in esame, sono in acciaio S235JR-S275JR S355JR e verranno trattate con procedimento di zincatura a caldo, previo processo di decapaggio, sgrassaggio e flussaggio. I collegamenti realizzati in officina sono realizzati con saldature di seconda classe, quelli di cantiere in fase di montaggio tramite bulloni di classe 8.8.

2.3 VALORI DI CALCOLO

Vengono riepilogati i valori di calcolo per ogni tipologia di materiale impiegato, sulla base delle caratteristiche di resistenza e dei coefficienti parziali di sicurezza previsti dalle NTC-08.

ACCIAIO DA CARPENTERIA S235JR

γ =	Peso specifico	=	7850	kg/m ³
E =	Modulo di Young (Modulo di elasticità normale)	=	206 000	MPa
G =	Modulo di elasticità tangenziale)	=	80 000	MPa
ν =	Coefficiente di Poisson	=	0.300	
α	Coefficiente di dilatazione termica	=	1.2e-005	(1/°C)
f_y =	Tensione di snervamento	=	235	MPa
f_{y1} =		=	215	MPa
f_u =	Tensione di rottura	=	360	MPa
$\gamma_{M0,c}$ =	1.05			
$\gamma_{M0,t}$ =	1.05			
γ_{M1} =	1.05			
$\gamma_{m,ecc}$ =	1			

ACCIAIO DA CARPENTERIA S275JR

γ =	Peso specifico	=	7850	kg/m ³
E =	Modulo di Young (Modulo di elasticità normale)	=	206 000	MPa
G =	Modulo di elasticità tangenziale)	=	80 000	MPa
ν =	Coefficiente di Poisson	=	0.300	
α	Coefficiente di dilatazione termica	=	1.2e-005	(1/°C)
f_y =	Tensione di snervamento	=	275	MPa
f_{y1} =		=	255	MPa
f_u =	Tensione di rottura	=	430	MPa
$\gamma_{M0,c}$ =	1.05			
$\gamma_{M0,t}$ =	1.05			
γ_{M1} =	1.05			
$\gamma_{m,ecc}$ =	1			

ACCIAIO DA CARPENTERIA S355JR

γ =	Peso specifico	=	7850	kg/m ³
E =	Modulo di Young (Modulo di elasticità normale)	=	206 000	MPa
G =	Modulo di elasticità tangenziale)	=	80 000	MPa
ν =	Coefficiente di Poisson	=	0.300	
α	Coefficiente di dilatazione termica	=	1.2e-005	(1/°C)
f_y =	Tensione di snervamento	=	355	MPa
f_{y1} =		=	335	MPa
f_u =	Tensione di rottura	=	510	MPa
$\gamma_{M0,c}$ =	1.05			
$\gamma_{M0,t}$ =	1.05			
γ_{M1} =	1.05			
$\gamma_{m,ecc}$ =	1			

BULLONERIA

Bulloni classe 8.8 zincati elettroliticamente

$f_{y,b}$ = Tensione di snervamento = 640 MPa

$f_{u,b}$ = Tensione di rottura = 800 MPa

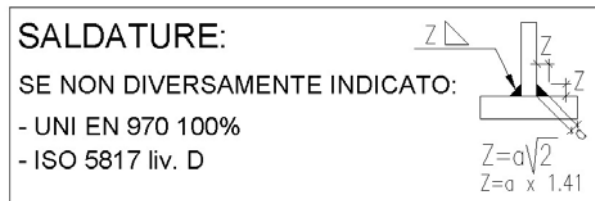
dadi classe 6S

Saldature II[^] classe

SALDATURE

Le saldature saranno a completa penetrazione di I classe, con spessore minimo almeno pari al minimo dello spessore degli elementi collegati.

Saldature a cordone d'angolo con $a = 0.8$ sp.min. (se non diversamente specificato)



Le dimensioni delle sezioni sono rappresentate all'interno della relazione di calcolo, e nelle tavole allegate di progetto.

MODELLAZIONE DEI MATERIALI ED INTERAZIONE TERRENO-STRUTTURA

Tutte le analisi sono condotte in regime di linearità materiale (proporzionalità tra tensioni e deformazioni), e di linearità geometrica (proporzionalità tra carichi e spostamenti). Nei riguardi dell'interazione terreno-struttura, il terreno viene modellato come suolo elastico alla Winkler, sia che le strutture di collegamento siano travi (travi su suolo elastico), platee di fondazione (piastre su suolo elastico) o plinti.

2.4 MATERIALI E LORO SPECIFICHE TECNICHE

Strutture in acciaio

Generalità

Ove non diversamente disposto, tutte le strutture metalliche dovranno essere fornite zincate a caldo (UNI EN ISO 1461).

Lo strato di zinco dovrà presentarsi uniforme ed esente da incrinature, scaglie, scorie ed analoghi difetti e dovrà aderire tenacemente alla superficie del metallo base.

Non saranno ammesse lavorazioni in cantiere che compromettano la zincatura.

I materiali da impiegare dovranno rispettare quanto riportato nelle :

- UNI EN 10025 (per elementi principali)
- UNI EN 10210 (Profilati cavi finiti a caldo)
- UNI EN 10219 (Profilati cavi formati a freddo)

Le strutture di acciaio dovranno essere progettate e costruite tenendo conto di quanto disposto dalla legge 5 novembre 1971, n. 1086, Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica, dalla legge 2 febbraio 1974, n. 64, Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche, dalle circolari e dai decreti ministeriali in vigore, attuativi delle leggi citate, e dal D.M. 14/01/2008.

L'impresa sarà tenuta a presentare in tempo utile, prima dell'approvvigionamento dei materiali, all'esame ed all'approvazione della Direzione dei lavori:

- a) gli elaborati progettuali esecutivi di cantiere, comprensivi dei disegni esecutivi di officina, sui quali dovranno essere riportate anche le distinte da cui risultino: numero, qualità, dimensioni, grado di finitura e peso teorici di ciascun elemento costituente la struttura, nonché la qualità degli acciai da impiegare;

- b) tutte le indicazioni necessarie alla corretta impostazione delle strutture metalliche sulle opere di fondazione.

I suddetti elaborati dovranno essere redatti a cura e spese dell'Appaltatore.

Collaudo tecnologico dei materiali

Ogni volta che i materiali destinati alla costruzione di strutture di acciaio pervengono dagli stabilimenti per la successiva lavorazione, l'Appaltatore darà comunicazione alla Direzione dei lavori specificando, per ciascuna colata, la distinta dei pezzi ed il relativo peso, la destinazione costruttiva e la documentazione di accompagnamento della ferriera costituita da:

- attestato di controllo;
- dichiarazione che il prodotto è qualificato secondo le norme vigenti.

La Direzione dei lavori si riserva la facoltà di prelevare campioni di prodotto qualificato da sottoporre a prova presso laboratori di sua scelta ogni volta che lo ritenga opportuno, per verificarne la rispondenza alle norme di accettazione ed ai requisiti di progetto. Per i prodotti non qualificati la Direzione dei lavori deve effettuare presso laboratori ufficiali tutte le prove meccaniche e chimiche in numero atto a fornire idonea conoscenza delle proprietà di ogni lotto di fornitura. Tutti gli oneri relativi alle prove sono a carico dell'impresa.

Le prove e le modalità di esecuzione sono quelle prescritte dal D.M. 9 gennaio 1996, e dal D.M. 14/01/2008, ed altri eventuali a seconda del tipo di metallo in esame.

Controlli in corso di lavorazione

L'Appaltatore dovrà essere in grado di individuare e documentare in ogni momento la provenienza dei materiali impiegati nelle lavorazioni e di risalire ai corrispondenti certificati di qualificazione, dei quali dovrà esibire la copia a richiesta della Direzione dei lavori.

Alla Direzione dei lavori è riservata comunque la facoltà di eseguire in ogni momento della lavorazione tutti i controlli che riterrà opportuni per accertare che i materiali impiegati siano quelli certificati, che le strutture siano conformi ai disegni di progetto e che le stesse siano eseguite a perfetta regola d'arte.

Ogni volta che le strutture metalliche lavorate si rendono pronte per il collaudo l'Appaltatore informerà la Direzione dei lavori, la quale darà risposta entro 8 giorni fissando la data del collaudo in contraddittorio, oppure autorizzando la spedizione delle strutture stesse in cantiere.

Montaggio

Il montaggio in opera di tutte le strutture costituenti ciascun manufatto sarà effettuato in conformità a quanto, a tale riguardo, è previsto nella relazione di calcolo.

Durante il carico, il trasporto, lo scarico, il deposito ed il montaggio, si dovrà porre la massima cura per evitare che le strutture vengano deformate o sovrasollecitate.

Le parti a contatto con funi, catene od altri organi di sollevamento saranno opportunamente protette.

Il montaggio sarà eseguito in modo che la struttura raggiunga la configurazione geometrica di progetto, nel rispetto dello stato di sollecitazione previsto nel progetto medesimo.

In particolare, per quanto riguarda le strutture a travata, si dovrà controllare che la controfrecchia ed il posizionamento sugli apparecchi di appoggio siano conformi alle indicazioni di progetto, rispettando le tolleranze previste.

La stabilità delle strutture dovrà essere assicurata durante tutte le fasi costruttive e la rimozione dei collegamenti provvisori e di altri dispositivi ausiliari dovrà essere fatta solo quando essi risulteranno staticamente superflui.

Nei collegamenti con bulloni si dovrà procedere alla alesatura di quei fori che non risultino centrati e nei quali i bulloni previsti in progetto non entrino liberamente. Se il diametro del foro alesato risulta superiore al diametro sopraccitato, si dovrà procedere alla sostituzione del bullone con uno di diametro superiore.

E' ammesso il serraggio dei bulloni con chiave pneumatica purché questo venga controllato con chiave dinamometrica, la cui taratura dovrà risultare da certificato rilasciato da laboratorio ufficiale in data non anteriore ad un mese.

Per le unioni con bulloni, l'impresa effettuerà, alla presenza della Direzione dei lavori, un controllo di serraggio su un numero adeguato di bulloni. Bulloneria cl.8.8 (UNI EN 14399-1÷6:2005)

Tabella C4.2.XX Coppie di serraggio per bulloni 8.8

Viti 8.8 – Momento di serraggio M [N m]									
VITE	k=0.10	k=0.12	k=0.14	k=0.16	k=0.18	k=0.20	k=0.22	$F_{p,C}$ [kN]	A_{rez} [mm ²]
M12	56.6	68.0	79.3	90.6	102	113	125	47.2	84.3
M14	90.2	108	126	144	162	180	198	64.4	115
M16	141	169	197	225	253	281	309	87.9	157
M18	194	232	271	310	348	387	426	108	192
M20	274	329	384	439	494	549	604	137	245
M22	373	448	523	597	672	747	821	170	303
M24	474	569	664	759	854	949	1044	198	353
M27	694	833	972	1110	1249	1388	1527	257	459
M30	942	1131	1319	1508	1696	1885	2073	314	561
M36	1647	1976	2306	2635	2965	3294	3624	457	817

Tabella C4.2.XXI Coppie di serraggio per bulloni 10.9

Viti 10.9 – Momento di serraggio M [N m]									
VITE	k=0.10	k=0.12	k=0.14	k=0.16	k=0.18	k=0.20	k=0.22	$F_{p,C}$ [kN]	A_{rez} [mm ²]
M12	70.8	85.0	99.1	113	128	142	156	59.0	84.3
M14	113	135	158	180	203	225	248	80.5	115
M16	176	211	246	281	317	352	387	110	157
M18	242	290	339	387	435	484	532	134	192
M20	343	412	480	549	617	686	755	172	245
M22	467	560	653	747	840	933	1027	212	303
M24	593	712	830	949	1067	1186	1305	247	353
M27	868	1041	1215	1388	1562	1735	1909	321	459
M30	1178	1414	1649	1885	2121	2356	2592	393	561
M36	2059	2471	2882	3294	3706	4118	4529	572	817

L'assemblaggio ed il montaggio in opera delle strutture dovrà essere effettuato senza che venga interrotto il traffico di cantiere sulla eventuale sottostante sede stradale salvo brevi interruzioni durante le operazioni di sollevamento, da concordare con la Direzione dei lavori.

Nella progettazione e nell'impiego delle attrezzature di montaggio, l'impresa è tenuta a rispettare le norme, le prescrizioni ed i vincoli che eventualmente venissero imposti da Enti, Uffici e persone responsabili riguardo alla zona interessata, ed in particolare:

- per l'ingombro degli alvei dei corsi d'acqua;
- per le sagome da lasciare libere nei sovrappassi o sottopassi di strade, autostrade, ferrovie, tranvie, ecc.;
- per le interferenze con servizi di soprasuolo e di sottosuolo.

Tolleranze di Montaggio in cantiere

I montaggi della struttura dovranno avvenire nel rispetto delle seguenti tolleranze:

- posizione della prima colonna eretta+ 0 - 5 mm
- dimensioni lineari: fino a 15 m+ 0 - 10 mm
- da 15 a 30 m.....+ 0 - 15 mm
- oltre 30 m+ 0 - 20 mm
- piombo delle colonne1 per mille
- livello piastra di base della prima colonna eretta+ 0 - 5 mm
- livello trave al collegamento con la colonna.....+ 0 - 10 mm
- differenza di livello fra i terminali di una trave+ 0 - 10 mm

Tutte le misure in pianta (interasse tra colonne, diagonali, ecc.) devono rientrare nella tolleranza di 0.2 mm ogni metro.

Tolleranza vie di corsa delle gru secondo par. 7 norme CNR 10021/85.

Prove e collaudi

Il controllo dell'efficienza dei giunti serrati dovrà essere verificata controllando la coppia torcente applicata in uno dei seguenti modi:

– misurando con chiave dinamometrica la coppia richiesta per fare ruotare ulteriormente di 10° il dado;

– allentando il dado con una rotazione di almeno 60° e poi riavvitandolo per verificare se l'applicazione della coppia prescritta riporta il dado nella posizione originale.

Qualora anche un solo bullone del giunto non risponda alle prescrizioni di serraggio, tutti i bulloni del giunto devono essere controllati.

Dovranno essere eseguiti gli opportuni controlli sugli elementi strutturali assemblati a piè d'opera e sulle strutture montate.

Dovrà essere effettuato il controllo finale del corretto montaggio comprendente:

– l'ispezione visiva delle strutture oggetto del contratto al fine di accertare che ogni parte sia stata montata conformemente alle specifiche, disegni ed istruzioni ricevute;

– il controllo piombature, allineamenti, planarità;

– il controllo che tutti i dadi dei bulloni di fondazione siano stati serrati, analogamente dicasi per i bulloni di unione di parti strutturali.

Dopo il montaggio in opera dovranno essere eseguiti i necessari ritocchi nelle zone danneggiate ripristinando le condizioni iniziali; ciò sarà eseguito rispettando la preparazione della superficie eseguita in officina.

Le saldature e i loro supporti dovranno essere controllati secondo le seguenti prescrizioni:

. ogni saldatura dovrà essere esaminata visivamente;

. le saldature a sovrapposizione a completa penetrazione con funzione strutturale dovranno essere controllate al 100% attraverso ultrasuoni o radiografie ed al 100% per magnetoscopia;

. le saldature a sovrapposizione e penetrazione parziale dovranno essere controllate per ultrasuoni o radiografie e per magnetoscopia, sul 20% del perimetro di ogni assemblaggio;

. le saldature ad angolo dovranno essere controllate al 20% per magnetoscopia.

Ogni saldatura dovrà essere identificata in modo univoco e riporta su una scheda di riconoscimento nella quale dovranno essere riportati tutti i dati ed i controlli eseguiti.

Prescrizioni tecniche per l'esecuzione di saldature.

Gli acciai per strutture saldate non devono essere effervescenti. Gli acciai S275 devono avere composizione chimica contenuta entro i limiti raccomandati dalla UNI 5132 per le varie classi di qualità degli elettrodi impiegati. Gli acciai destinati ad essere saldati con procedimenti di saldatura ad arco sommerso o sotto gas protettivo, quando trattasi di procedimenti che comportano una forte penetrazione della zona fusa del metallo base, è opportuno che abbiano composizione chimica, riferita al prodotto finito (e non alla colata) rispondente alle seguenti limitazioni:

grado B $C \leq 0.24 \% P \leq 0.055 \% S \leq 0.055 \%$

grado C $C \leq 0.22 \% P \leq 0.050 \% S \leq 0.050 \%$

grado D $C \leq 0.22 \% P \leq 0.045 \% S \leq 0.045 \%$

Si raccomanda di escludere l'impiego di acciaio effervescente, che comunque per la composizione chimica riferita a prodotto finito deve soddisfare la stessa limitazione dell'acciaio semicalmato.

Gli acciai S355 devono essere tali da verificare, su prodotto finito, che:

grado B $C \leq 0.26 \% Mn \leq 1.6 \% Si \leq 0.60 \% P \leq 0.055 \% S \leq 0.055 \%$

grado C $C \leq 0.24 \% Mn \leq 1.6 \% Si \leq 0.60 \% P \leq 0.050 \% S \leq 0.050 \%$

grado D $C \leq 0.22 \% Mn \leq 1.6 \% Si \leq 0.60 \% P \leq 0.045 \% S \leq 0.045 \%$

Qualora il tenore di C risulti minore od uguale, per i tre gradi B, C, e D, rispettivamente a 0.24 %, 0.22% e 0.20 % potranno accettarsi tenori di Mn maggiori di 1.6 %, ma comunque non maggiori di 1.7 %. Deve intendersi escluso l'impiego di acciaio effervescente.

La temperatura minima alla quale l'acciaio di una struttura saldata può essere utilizzato senza pericolo di una rottura fragile, in assenza di dati più precisi, può essere stimata sulla base della temperatura T alla quale, per detto acciaio, può essere garantita una resilienza KV, secondo UNI 4713, di 34 J cm⁻². La temperatura T deve risultare minore od uguale a quella minima di servizio per elementi importanti di strutture saldate soggetti a trazione con tensione prossima a quella ammissibile aventi spessore maggiore di 25 mm e forme tali da produrre concentrazioni locali di sforzi (saldature di testa e d'angolo non soggette a controllo), od accentuate deformazioni plastiche di formatura. A parità di altre condizioni, via via che diminuisce lo spessore, la temperatura T potrà innalzarsi fino ad una temperatura di circa 30°C maggiore di quella minima di servizio per spessori dell'ordine di 10 mm. Un aumento può avere luogo anche per spessori fino a 25 mm via via che l'importanza dell'elemento strutturale decresce o che le altre condizioni citate si attenuano.

Tra i procedimenti di saldatura che possono essere utilizzati (saldatura manuale ad arco con elettrodi rivestiti, saldatura automatica ad arco sommerso, saldatura automatica o semiautomatica sotto gas di protezione – CO₂ o sue miscele, od altri procedimenti di saldatura la cui attitudine a garantire una saldatura pienamente efficace deve essere previamente verificata) devono essere impiegati elettrodi omologati secondo la UNI 5132 per la saldatura manuale ad arco, che devono essere del tipo E44 per gli acciai Fe 360, Fe 430, di qualità 2, 3, 4, e del tipo E52 per l'acciaio Fe 510, di qualità 3, 4; per gli altri tipi di saldatura si devono impiegare i fili, i flussi (gas) e la tecnica esecutiva usati per la prova di qualifica dei procedimenti di saldatura. L'impiego di elettrodi omologati secondo UNI 5132 esime da ogni prova di qualifica del procedimento. Per l'impiego degli altri procedimenti di saldatura (arco sommerso o sotto gas di protezione) occorre eseguire prove preliminari di qualifica intese ad accertare:

l'attitudine ad eseguire i principali tipi di giunto previsti nella struttura ottenendo giunti corretti sia per aspetto esterno sia per assenza di sensibili difetti interni;

la resistenza a trazione su giunti testa a testa, mediante provette trasversali al giunto, resistenza

che deve risultare non inferiore a quella del materiale base;

la capacità di deformazione del giunto, mediante provette di piegamento trasversali che devono potersi piegare a 180° su mandrino con diametro pari a 3 volte lo spessore per l'acciaio S275 ed a 4 volte per l'acciaio S355;

La resilienza su provette intagliate a V secondo UNI 4713 ricavate trasversalmente al giunto saldato, resilienza che deve essere verificata a +20 °C, se la struttura deve essere impiegata a temperatura maggiore di 0 °C.

Le provette per le prove di trazione, di piegamento e di resilienza ed eventualmente per le altre prove meccaniche, se ritenute necessarie, devono essere ricavate da saggi testa a testa saldati. Allo scopo devono essere scelti gli spessori più significativi della struttura.

Con ogni procedimento di saldatura, la durezza Vickers HV30 nella zona termicamente alterata del metallo base non deve eccedere il valore di 3500 Mpa; quando le necessità di spessore o di temperatura ambiente lo richiedano, occorre quindi applicare un opportuno preriscaldamento.

Nei giunti testa a testa di saldatura si distinguono due classi di giunti:

1. I classe, che comprende i giunti effettuati con elettrodi di classe 3 o 4 secondo UNI 5132 o con gli altri procedimenti qualificati di saldatura, e realizzati con accurata eliminazione di ogni difetto al vertice prima di effettuare la ripresa o seconda saldatura. Tali giunti devono inoltre soddisfare ovunque l'esame radiografico con i risultati richiesti per il raggruppamento B della UNI 7278. L'aspetto della saldatura deve essere ragionevolmente regolare e non presentare bruschi disallineamenti col metallo base. Nei casi di sollecitazione a fatica possono risultare convenienti sovrassessori particolarmente lisci ed avviati per usufruire delle maggiori tensioni ammesse in questo caso;

2. II classe, che comprende i giunti effettuati con elettrodi di classe 2, 3 o 4 secondo UNI 5132 o con gli altri procedimenti qualificati di saldatura, e realizzati ugualmente con l'eliminazione di ogni difetto al vertice prima di effettuare la ripresa o seconda saldatura. Tali giunti devono inoltre soddisfare l'esame radiografico con i risultati richiesti per il raggruppamento F della UNI 7278. L'aspetto della saldatura deve essere ragionevolmente regolare e non presentare bruschi disavviamenti col metallo base.

Nei giunti a croce od a T a completa penetrazioni, si distinguono due classi di giunti:

1. I classe, che comprende i giunti effettuati con elettrodi di classe 3 o 4 secondo UNI 5132 o con gli altri procedimenti qualificati di saldatura, e realizzati con accurata eliminazione di ogni difetto al vertice prima di effettuare la ripresa o seconda saldatura. Tali giunti devono avere un grado di difettosità non maggiore di quello dei giunti testa a testa di I classe. L'aspetto della saldatura deve essere ragionevolmente regolare e non presentare bruschi disallineamenti col metallo base. Nei casi di sollecitazione a fatica possono risultare convenienti sovrassessori particolarmente lisci ed avviati per usufruire delle maggiori tensioni ammesse in questo caso;

2. II classe, che comprende i giunti effettuati con elettrodi di classe 2, 3 o 4 secondo UNI 5132 o con gli altri procedimenti qualificati di saldatura, e realizzati ugualmente con l'eliminazione di ogni difetto al vertice prima di effettuare la ripresa o seconda saldatura. Tali giunti devono avere un grado di difettosità non maggiore di quello dei giunti testa a testa di II classe. L'aspetto della saldatura deve essere ragionevolmente regolare e non presentare bruschi disavviamenti col metallo base.

Nei giunti con cordone d'angolo, essi devono essere considerati appartenenti ad un'unica classe, ed effettuati con elettrodi di classe 2, 3 o 4 secondo UNI 5132 o con gli altri procedimenti qualificati di saldatura, e caratterizzati da una ragionevole assenza di difetti interni e da assenza di incrinature interne o cricche da strappo sui lembi dei cordoni.

La posizione dei giunti deve essere tale da agevolare l'esecuzione, da evitare la concentrazione di

saldature in zone ristrette e da permettere che i giunti testa a testa siano suscettibili di controlli non distruttivi. L'impiego di saldature entro fori od intagli deve essere considerato eccezionale; qualora detti fori od intagli debbano essere usati, il loro contorno non deve presentare punti angolosi, né raggi di curvatura minori di metà della dimensione dell'intaglio.

Le preparazioni dei lembi da saldare devono essere conformi alle raccomandazioni contenute nella UNI 11001.

Devono essere previsti di I classe i giunti testa a testa di maggiore importanza appartenenti a membrature tese esposte a temperature minori di 0 °C.

Nelle strutture saldate devono essere evitate, per quanto possibile, le discontinuità locali; tale regola deve sempre essere osservata in presenza di sollecitazioni a fatica o di bassa temperatura.

La saldatura a tratti non è ammessa che per cordoni d'angolo, e deve di regola sempre essere evitata nelle membrature sollecitate a fatica.

Sia in officina che in cantiere le saldature da effettuare con elettrodi rivestiti devono essere eseguite da operai che abbiano superato le prove di qualifica indicate nella UNI 4634 per la classe relativa al tipo di elettrodo ed alle posizioni di saldatura previste. Nel caso di costruzioni tubolari si farà riferimento anche alla UNI 4633 per quanto riguarda i giunti di testa. Le saldature da effettuare con altro procedimento devono essere eseguite da operai sufficientemente addestrati all'uso delle apparecchiature relative ed al rispetto delle condizioni operative stabilite in sede di approvazione del procedimento.

La preparazione dei lembi da saldare deve essere effettuata mediante macchina utensile, smerigliatrice od ossitaglio automatico e dovrà risultare regolare e ben liscia. L'ossitaglio a mano può essere accettato solo se un'adeguata successiva ripassatura alla smerigliatrice avrà perfettamente regolarizzato l'asperità del taglio. I lembi al momento della saldatura devono essere esenti da incrostazioni, ruggine, scaglie, grassi, vernici, irregolarità locali ed umidità.

La distanza dei lembi nei giunti di testa e dei giunti a T a completa penetrazione deve essere secondo UNI 11001. Nei giunti a T con cordoni d'angolo i pezzi devono essere a contatto; è tollerato un giuoco massimo di 3 mm per spessori maggiori di 10 mm, da ridurre adeguatamente per spessori minori o per casi particolari. Il disallineamenti dei lembi non deve essere maggiore di 1/8 dello spessore con un massimo di 1.5 mm; nel caso della saldatura manuale ripresa al vertice, si potrà tollerare un disallineamento di entità doppia.

Gli elettrodi devono essere usati con il tipo di corrente (continua od alternata) e di polarità per cui sono stati omologati. Il diametro dell'anima degli elettrodi rivestiti, per saldatura manuale, usati nella saldatura di un giunto, deve essere fissato in relazione allo spessore, al tipo di giunto ed alla posizione della passata nel giunto; in generale sarà non maggiore di 6 mm per saldature in piano e di 5 mm per saldature in verticale. Devono essere osservate le sequenze di saldatura indicate in progetto e le prescrizioni che verranno indicate per il preriscaldamento locale in relazione agli spessori, ai tipi di acciaio ed alla temperatura ambiente durante la costruzione.

La superficie di ogni passata deve essere liberata dalla scoria prima che vengano effettuate le passate successive; ugualmente la scoria deve essere localmente asportata in corrispondenza delle riprese della medesima passata. Nella saldatura manuale si deve evitare l'accensione degli elettrodi sulle lamiere accanto al giunto, specialmente per l'acciaio S355.

Le estremità dei cordoni di saldatura dei giunti di testa, nella saldatura automatica e semiautomatica, devono sempre essere fatte su prolunghe; nel caso di saldatura manuale ciò sarà fatto almeno per i giunti di I classe.

Devono essere adottate le sequenze di saldatura e le condizioni di vincolo più opportune al fine di ridurre per quanto possibile le tensioni residue nella saldatura e facilitare l'esecuzione dei giunti saldati.

Nei giunti di testa ed in quelli a T a completa penetrazione effettuati con saldatura manuale, il vertice della saldatura deve sempre essere asportato, per la profondità richiesta per raggiungere il metallo perfettamente sano, a mezzo di scalpellatura, smerigliatura od altro adeguato sistema, prima di effettuare la seconda saldatura o la ripresa. Qualora ciò non sia assolutamente possibile, si deve

fare ricorso alla saldatura a V con piatto di sostegno che è, peraltro, sconsigliata nel caso di strutture sollecitate a fatica, od alla saldatura effettuata da saldatori specializzati secondo UNI 4634 o di classe TT secondo UNI 4633.

La superficie delle saldature deve risultare sufficientemente liscia e regolare e ben raccordata con il materiale base.

Quando la temperatura ambiente scende al di sotto di + 5 °C, si devono preriscaldare le zone da saldare di almeno 50 °C.

Per tutto quanto non descritto nella presente relazione, si rimanda alla normativa vigente (prescrizioni delle N.T.C. 2008 D.M. 14/01/2008 e circolare esplicativa N° 617/2009).

ELENCO NORME UNI CITATE NEL DM. 14/01/2008

UNI 552:1986 Prove meccaniche dei materiali metallici. Simboli, denominazioni e definizioni. IT

UNI 5592:1968 Dadi esagonali normali. Filettatura metrica ISO a passo grosso e a passo fine. Categoria C. IT

UNI 7356:1974 Prodotti finiti di acciaio laminati a caldo. Vergella e tondi per bulloneria e chiodi da ribadire, stampati a freddo o a caldo. IT

UNI EN 10002-1:2004 Materiali metallici - Prova di trazione - Parte 1: Metodo di prova a temperatura ambiente IT

UNI EN 10025-1:2005 Prodotti laminati a caldo di acciai per impieghi strutturali - Parte 1: Condizioni tecniche generali di fornitura EI

UNI EN 10045-1:1992 Materiali metallici. Prova di resilienza su provetta Charpy. Metodo di prova. IT

UNI EN 10083-2:2006 Acciai da bonifica - Parte 2: Condizioni tecniche di fornitura per acciai non legati EN

UNI EN 1011-1:2005 Saldatura - Raccomandazioni per la saldatura dei materiali metallici - Parte 1: Guida generale per la saldatura ad arco IT

UNI EN 1011-2:2005 Saldatura - Raccomandazioni per la saldatura dei materiali metallici - Parte 2: Saldatura ad arco di acciai ferritici IT

UNI EN 1011-3:2005 Saldatura - Raccomandazioni per la saldatura dei materiali metallici - Parte 3: Saldatura ad arco degli acciai inossidabili IT

UNI EN 10210-1:2006 Profilati cavi finiti a caldo di acciai non legati e a grano fine per impieghi strutturali - Parte 1: Condizioni tecniche di fornitura EI

UNI EN 10219-1:2006 Profilati cavi formati a freddo di acciai non legati e a grano fine per strutture saldate - Parte 1: Condizioni tecniche di fornitura EI

UNI EN 10293:2006 Getti di acciaio per impieghi tecnici generali EN

UNI EN 1337-3:2005 Appoggi strutturali - Parte 3: Appoggi elastomerici IT

UNI EN 1337-4:2004 Appoggi strutturali - Parte 4: Appoggi a rullo EN

UNI EN 1337-5:2005 Appoggi strutturali - Parte 5: Appoggi a disco elastomerico IT

UNI EN 1337-6:2004 Appoggi strutturali - Parte 6: Appoggi a contatto lineare EN

UNI EN 1337-7:2004 Appoggi strutturali - Parte 7: Appoggi sferici e cilindrici di PTFE EI

UNI EN 14399-1:2005 Bulloneria strutturale ad alta resistenza a serraggio controllato - Parte 1: Requisiti generali EI

UNI EN 14399-3:2005 Bulloneria strutturale ad alta resistenza a serraggio controllato Parte 3: Sistema HR - Assieme vite e dado esagonali EI

UNI EN 14399-4:2005 Bulloneria strutturale ad alta resistenza a serraggio controllato - Parte 4: Sistema HV - Assieme vite e dado esagonali EI

UNI EN 14399-5:2005 Bulloneria strutturale ad alta resistenza a serraggio controllato – Parte 5: Rondelle piane IT

UNI EN 14399-6:2005 Bulloneria strutturale ad alta resistenza a serraggio controllato - Parte 6: Rondelle piane smussate IT

UNI EN 20898-2:1994 Caratteristiche meccaniche degli elementi di collegamento. Dadi con carichi di prova determinati. Filettatura a passo grosso. IT

UNI EN ISO 14555:2001 Saldatura - Saldatura ad arco di prigionieri di materiali metallici IT

UNI EN ISO 377:1999 Acciaio e prodotti di acciaio - Prelievo e preparazione dei saggi e delle provette per prove meccaniche IT

UNI EN ISO 4016:2002 Viti a testa esagonale con gambo parzialmente filettato - Categoria C IT

UNI EN ISO 5817:2004 Saldatura - Giunti saldati per fusione di acciaio, nichel, titanio e loro leghe (esclusa la saldatura a fascio di energia) - Livelli di qualità delle imperfezioni EN

UNI EN ISO 898-1:2001 Caratteristiche meccaniche degli elementi di collegamento di acciaio - Viti e viti prigioniere. IT

UNI EN ISO 9692-1:2005 Saldatura e procedimenti connessi - Raccomandazioni per la preparazione dei giunti - Parte 1: Saldatura manuale ad arco con elettrodi rivestiti, saldatura ad arco con elettrodo fusibile sotto protezione di gas, saldatura a gas, saldatura TIG e saldatura mediante fascio degli acciai EN

PER GLI ASPETTI DI PREVENZIONE INCENDI E DI RESISTENZA AL FUOCO DELLE STRUTTURE

D.M. del 16 febbraio 1982: “Modificazioni del Decreto Ministeriale 27 settembre 1965 concernente la determinazione della attività soggette alle visite di prevenzione incendi”

D.P.R. n.577 del 29 luglio 1982: “Approvazione del regolamento concernente l’espletamento dei servizi di prevenzione e vigilanza antincendi”

Legge 7 dicembre 1984 n. 818: Nullaosta provvisorio per le attività soggette ai controlli di prevenzione incendi, modifica degli Artt. 2 e 3 della legge 4 marzo 1982, n.66 e norme integrative dell’ordinamento del Corpo Nazionale dei Vigili del Fuoco

D.M. 16 maggio 1984, n.246: “Norme di sicurezza antincendio per gli edifici di civile abitazione”

D.P.R. n.37 del 4 maggio 1998: “Regolamento recante disciplina dei procedimenti relativi alla prevenzione incendi, a norma dell’articolo20, comma 8 della legge 15 marzo 1997, n.59”

D.M. del 4 maggio 1998: “Disposizioni relative alle modalità di presentazione ed al contenuto delle domande per l’avvio dei procedimenti di prevenzione incendi, nonché all’uniformità dei connessi servizi resi dai Comandi Provinciali dei Vigili del Fuoco”

D.M. del 10 marzo 1998: “Criteri generali di sicurezza antincendio e per la gestione dell’emergenza nei luoghi di lavoro”

D.Lgs.n.626/94: “Norme per la salute e sicurezza dei lavoratori sui luoghi di lavoro” e successive modifiche e integrazioni

D.Lgs.n.493 del 14/8/96: “Attuazione direttiva CEE per la segnaletica di sicurezza”

D.M. del 09 marzo 2007: “Prestazioni di resistenza al fuoco delle costruzioni nelle attività soggette al controllo del Corpo nazionale dei vigili del fuoco”.

Direttiva 89/106/CEE del 21/12/1988, relativa al ravvicinamento delle disposizioni legislative e regolamentari degli Stati membri concernenti i prodotti da costruzione (DPR n. 246/93 - regolamento di attuazione)

D.M. 16/02/2007, recante classificazione di resistenza al fuoco di prodotti ed elementi costruttivi di opere da costruzione

EN 1991-1-2 - Eurocodice 1- Azioni sulle strutture - Parte 1-2 Azioni sulle strutture esposte all'incendio

D.M. 9/05/2007 recante direttive per l'attuazione dell'approccio ingegneristico alla sicurezza antincendio

Disposizioni del locale Comando dei VV.F. in merito alla prevenzione incendi

ALTRE NORME TECNICHE

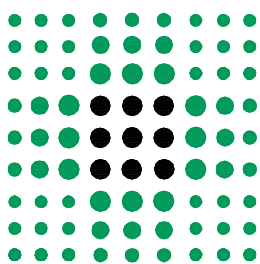
ISTRUZIONI CNR UNI

Norme CNR UNI 10012/85: Istruzioni per la valutazione delle azioni sulle costruzioni.

Norme CNR UNI 10016/85: Travi composte di acciaio e calcestruzzo. Istruzioni per l'impiego nelle costruzioni.

Norme CNR UNI 10011/85: Costruzioni in acciaio - Istruzioni per il calcolo, l'esecuzione, il collaudo e la manutenzione.

Norme CNR-UNI 10018/98: Apparecchi appoggio in gomma e PTFE nelle costruzioni. Istruzioni per il calcolo e l'impiego.



GRUPPO DI LAVORO:

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geom. Roberto Mellini
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ing. Renato Maria Saviano
geom. Pier Paolo Taddei
geom. Michele Tagliavini
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OSPEDALE DI FIDENZA-SAN SECONDO

Via Don Enrico Tincati n°5 - Loc. Vaio - Fidenza (PR)

**REALIZZAZIONE NUOVO CORPO DI
AMPLIAMENTO E RISTRUTTURAZIONE
PRONTO SOCCORSO**

**PROGETTO DEFINITIVO
STRUTTURALE**

CORPO DI AMPLIAMENTO

**VERIFICHE AL FUOCO
TRAVI E PILASTRI PREFABBRICATI**

PROGETTO STRUTTURE
Dott. ing. MAURO FERRARI
Via Aristotele n. 5
Tel. 3356030441 - 0522 865441
42122 - Reggio Emilia

ELABORATO

RS. 14

SCALA

IL DIRETTORE GENERALE
dr. MASSIMO FABI

IL DIRETTORE DELL'OSPEDALE
dr.ssa MARIA ROSA SALATI

IL DIRETTORE DEL S.A.T.
ing. RENATO MARIA SAVIANO

IL RESP. UNICO DEL PROCEDIMENTO
geom. ROBERTA TAGLIAVINI

IL PROGETTISTA
ing. RENATO MARIA SAVIANO

IL COORDINATORE PER LA SICUREZZA
ing. RENATO MARIA SAVIANO

REV.	DESCRIZIONE	DATA	REDATTO	VERIFICATO	APPROVATO
0	EMISSIONE	06.09.2013	Dott. ing. Benassi A.	Dott. ing. Benassi A.	Dott. ing. Ferrari M.
1					
2					
3					
FILE:	Ospedale di Vaio\Progetto definitivo				PLOT 10-1

PREMESSA

Si relazionano di seguito le verifiche analitiche al fuoco delle travi e dei pilastri prefabbricati costituenti la struttura portante dell'ampliamento dell'ospedale "Vaio" sito in via Don Tincati 5, Fidenza (PR)..

NORMATIVA DI RIFERIMENTO

- Eurocodice UNI EN 1991-1-2 rev. Ottobre 2004 : "Azioni in generale – Azioni sulle strutture esposte al fuoco."
- Eurocodice UNI EN 1992-1-2 rev. Settembre 2008 : "Regole generali – Progettazione strutturale contro l'incendio."
- Decreto Ministero dell'Interno 16 febbraio 2007 : "Classificazione di resistenza al fuoco di prodotti ed elementi costruttivi di opere da costruzione."
- Decreto Ministero dell'Interno 9 marzo 2007 : "Prestazioni di resistenza al fuoco delle costruzioni nelle attività soggette al controllo del Corpo nazionale dei vigili del fuoco."

CODICE DI CALCOLO

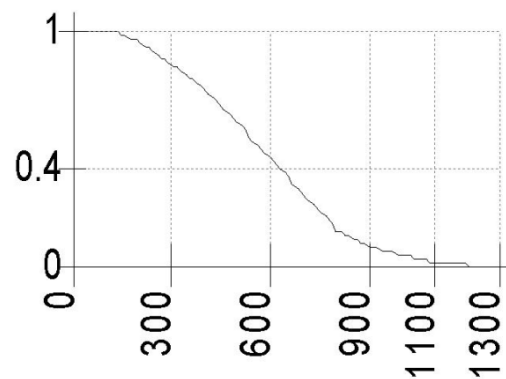
Le verifiche vengono eseguite con l'utilizzo del software "**WinStrand Structural Analysis & Design**" della ditta **ENEXSYS S.r.L.**– Via Tizzano 46/2, Casalecchio di Reno (Bologna)- basato sulla norma Eurocodice UNI EN 1992-1-2 rev. Settembre 2008 e integrato con Decreto Ministero dell'Interno 9 marzo 2007.

CARATTERISTICHE DEI MATERIALI

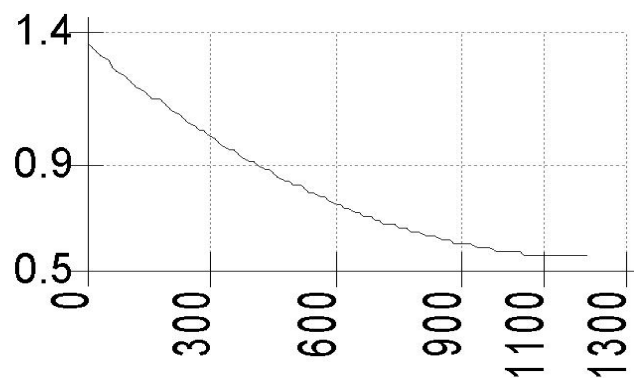
Calcestruzzo getti prefabbricati:	C35/45
Calcestruzzo getti integrativi in opera:	C28/35
Acciaio:	B450C controllato

- **Proprietà del calcestruzzo:**

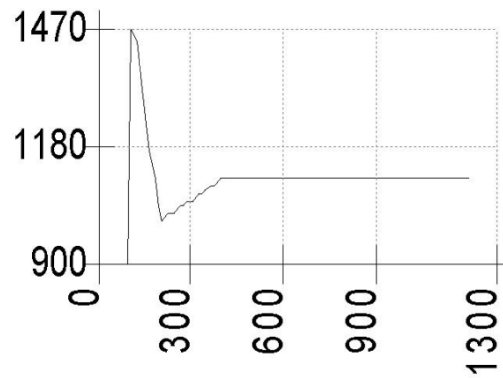
- $k_c(\theta)$:



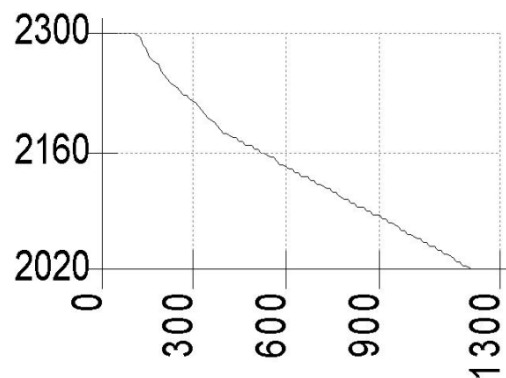
- *Conduktività termica:*



- *Capacità termica:*



- *Densità:*

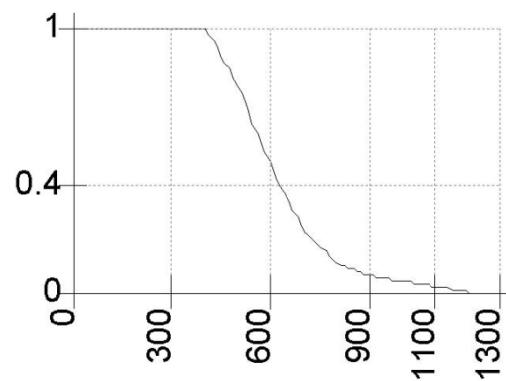


- *Coefficiente di sicurezza:*

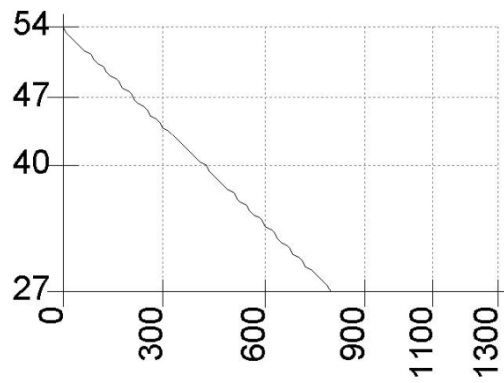
$$\gamma_{c,fi} = 1,0$$

- *Proprietà dell'acciaio:*

- $k_s(\theta)$:



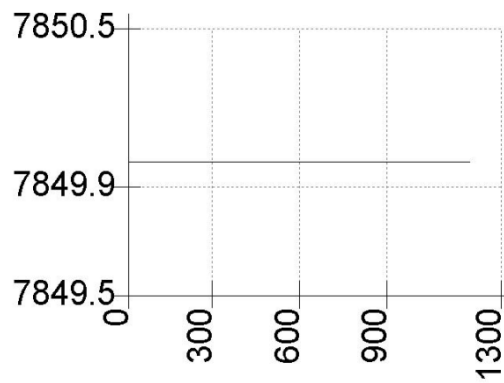
- *Conduttività termica:*



- *Capacità termica:*



- *Densità:*



- *Coefficiente di sicurezza:*

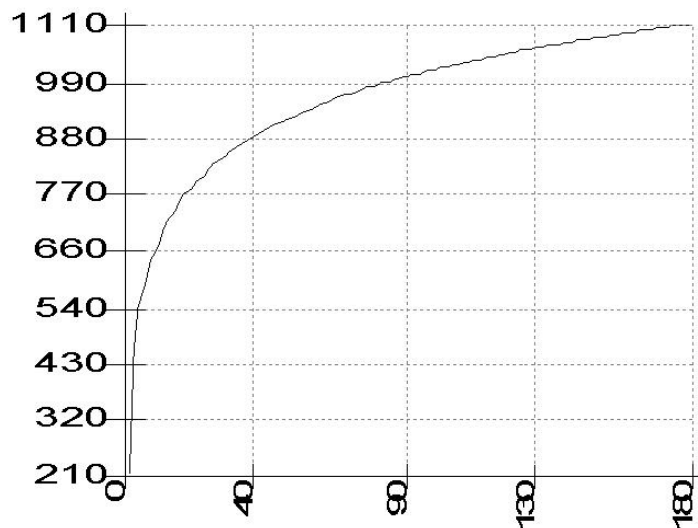
$$\gamma_{s,fi} = 1,0$$

CRITERI DI VERIFICA E CALCOLO

In relazione alle norme "Eurocodice UNI EN 1992-1-2 rev. Settembre 2008" e "Eurocodice UNI EN 1991-1-2 rev. Ottobre 2004" si fa riferimento ai seguenti parametri:

- **Curva temperature/tempo nominale normalizzata:**

$$\theta_g = 20 + 345 \cdot \log_{10}(8t + 1)$$



- **Propagazione del calore nell'elemento:**

$$\text{div}(\lambda_c \cdot \text{grad}\theta) + W = C_c \cdot \rho_c \cdot \frac{\delta\theta}{\delta t}$$

- **Scambio di calore dell'elemento con l'ambiente:**

$$\dot{h}_{net} = \alpha_c \cdot (\theta_g - \theta_m) + \Phi \cdot \varepsilon_m \cdot \varepsilon_f \cdot \sigma \cdot [(\theta_r + 273)^4 - (\theta_m + 273)^4]$$

- **Procedura di progettazione**

- Regole prescrittive (azioni termiche date dall'incendio normalizzato)
- Analisi delle membrature
- Calcolo delle azioni meccaniche al contorno
- Modelli di calcolo semplificato

Per ulteriori chiarimenti si rimanda alla norma stessa.

DETERMINAZIONE DELLE AZIONI

La membratura è considerata come isolata.

Non si considerano le azioni indirette dell'incendio, eccetto quelle risultanti dai gradienti termici.

Il metodo di calcolo semplificato può essere utilizzato per determinare la capacità portante allo stato limite ultimo di una sezione a caldo e per confrontare la capacità con la relativa combinazione di azioni.

Per l'analisi delle membrature, l'effetto delle azioni è determinato per il tempo $t = 0$ utilizzando i fattori di combinazione $\psi_{1,1}$. Questo effetto delle azioni può essere considerato costante per tutta la durata dell'esposizione al fuoco. Allo stesso modo le condizioni al contorno dei vincoli e alle estremità della membratura, applicabili al tempo $t = 0$, si assumono costanti durante tutta la durata dell'esposizione al fuoco.

Come semplificazione, gli effetti delle azioni sono ottenuti da un'analisi strutturale eseguita a temperatura ambiente come:

$$E_{d,fi} = \eta_{fi} \cdot E_d$$

dove:

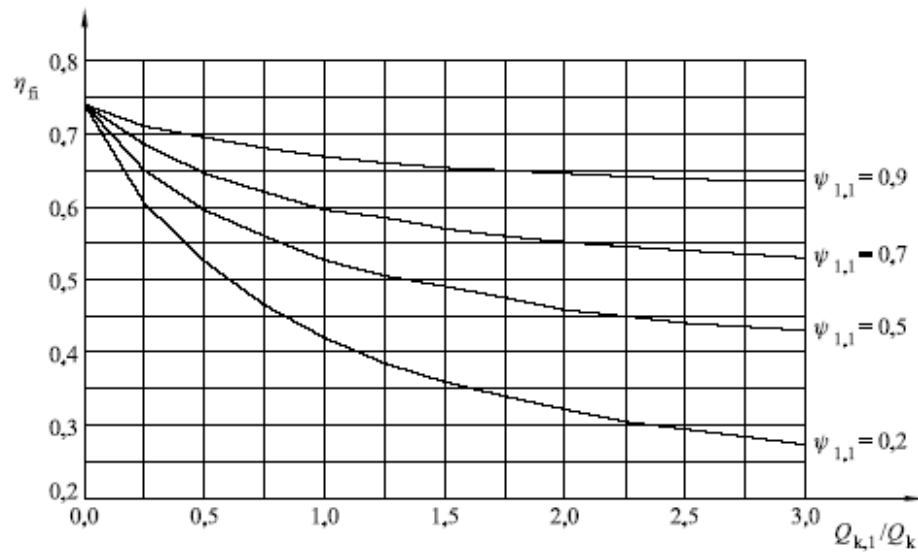
$$E_d = \sum_{j \geq 1} \gamma_{G,j} \cdot G_{k,j} + \gamma_{Q,1} \cdot Q_{k,1} + \sum_{i \geq 1} \gamma_{Q,i} \cdot \psi_{0,i} \cdot Q_{k,i}$$

ovvero è il valore di progetto corrispondente per il calcolo a temperatura ambiente per la combinazione fondamentale SLU, e:

$$\eta_{fi} = \frac{G_k + \psi_{fi} \cdot Q_{k,1}}{\gamma_G \cdot G_k + \gamma_{Q,1} \cdot \psi_{0,1} \cdot Q_{k,1}}$$

Il valore di questo fattore di riduzione η_{fi} può essere estrapolato dalla figura 2.1 della norma UNI EN 1992-1-2 riportata qui sotto:

Variazione del fattore di riduzione η_{fi} con il rapporto di carico $Q_{k,1}/G_k$



Nel caso in esame, dato che la destinazione d'uso della struttura è ospedaliera (cat. C1), si ha:

$$\psi_{1,1} = 0,7$$

Inoltre, dato che i carichi permanenti (strutturali e non) sono complessivamente pari a 675 kg/m^2 mentre i variabili sono pari a 300 kg/m^2 , si ha:

$$\frac{Q_{k,1}}{G_k} = \frac{300}{675} = 0,44$$

Con questi valori si ottiene un valore di $\eta_{fi} \cong 0,66$. A favore di sicurezza si adotta un valore di $\eta_{fi} = 0,7$.

In definitiva, la combinazione di carico per la verifica al fuoco è ottenuta con i seguenti coefficienti moltiplicativi delle azioni caratteristiche:

P e s o p r o p r i o	S o l a i o g e t t a t o	P e r m p o r t · 1 / 2	P e r m p o r t · 2 / 2	T a m p o n a m e n t i	V a r · c	N e v e

FUOCO	0.910	0.910	0.910	1.050	1.050	1.050	0.525
-------	-------	-------	-------	-------	-------	-------	-------

DESCRIZIONE DELLE STRUTTURE

L'edificio principale, progettato secondo le Norme Tecniche delle Costruzioni D.M. 14/01/2008, è composto da un piano interrato, 4 piani di elevazione più una copertura, realizzata con una struttura metallica: lo sviluppo in pianta è approssimativamente inscritto in un rettangolo di 66 x 19 metri. Il tunnel di collegamento con i preesistenti edifici risulta invece composto di un piano interrato più 5 piani di elevazione, e il suo sviluppo in pianta è inscritto in un rettangolo di 17 x 4,5 metri.

La struttura resistente dell'edificio principale è mista telaio-pareti, costituita da un telaio spaziale formato da travi e pilastri in c.a. con maglia strutturale di 4,05 x 6,9 metri e due nuclei di controventamento in c.a. posizionati alle due estremità della struttura (che fungono da vani scala e ascensori).

La struttura resistente del tunnel è invece costituita da un telaio spaziale formato da travi e pilastri in c.a. con maglia strutturale di 3,95 x 5,15 metri, ed è giuntato sia rispetto all'edificio principale di nuova costruzione sia rispetto a quelli esistenti.

L'interpiano medio è pari a circa 4,05 metri, e i solai sono realizzati con lastre tralicciate tipo predalle di spessore 24 cm.

Le travi sono previste essere semi-prefabbricate e puntellate al montaggio, con altezza pari a 34 cm e larghezza variabile: di conseguenza, sono tutte ribassate 10 cm rispetto alle lastre predalles. Il fondello prefabbricato delle travi è realizzato con calcestruzzo avente classe di resistenza C35/45 (ex $R_{ck} \geq 450 \text{ kg/cm}^2$) e un traliccio metallico sporgente di acciaio tipo B450C. L'unione con i solai e i pilastri avviene attraverso la messa in opera di armature integrative e dei getti di completamento eseguiti con calcestruzzo di classe C28/35 (ex $R_{ck} \geq 350 \text{ kg/cm}^2$), lungo tutta la trave e nei nodi travi-pilastro, realizzando così una continuità strutturale fra le campate adiacenti.

I pilastri sono prefabbricati con nodo a secco, da gettarsi in opera dopo il posizionamento di armature integrative per solidarizzare l'unione trave-pilastro e garantire necessariamente l'iperstaticità della costruzione. Tutti i pilastri prefabbricati sono realizzati con calcestruzzo avente classe di resistenza C35/45 (ex $R_{ck} \geq 450 \text{ kg/cm}^2$) e acciaio del tipo B450C.

I setti dei vani scala sono realizzati con calcestruzzo avente classe di resistenza C28/35 (ex $R_{ck} \geq 350 \text{ kg/cm}^2$).

Vista la lunghezza della costruzione, superiore ai 60 metri, si è reso necessario posizionare un giunto strutturale trasversale in corrispondenza della mezzeria dell'edificio lungo l'asse più corto, presente a tutti i solai. Il tunnel è stato a sua volta giuntato rispetto all'edificio principale al fine di conseguire una maggiore regolarità in pianta della struttura. Al piano interrato è presente un muro perimetrale controterra, che è stato giuntato sismicamente rispetto al corpo principale dell'edificio al fine di renderne indipendenti i comportamenti sismici, e verrà quindi analizzato separatamente.

VERIFICHE ANALITICHE

Si riportano nelle pagine seguenti le verifiche analitiche della resistenza al fuoco delle travi.

Il tempo di esposizione al fuoco considerato è di 120 minuti (**R 120**).

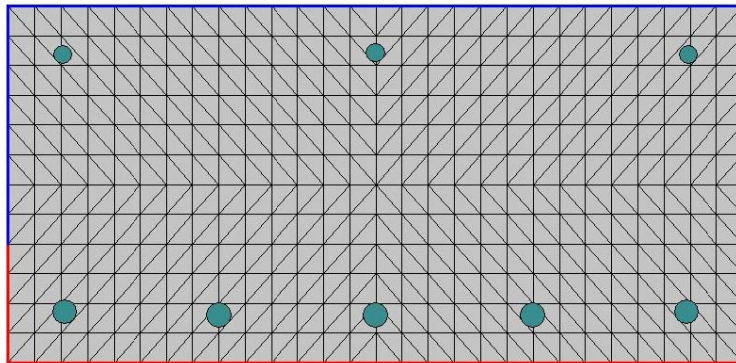
Le travi e i pilastri presi in esame sono i più sollecitati e più significativi, in modo che la verifica positiva degli stessi possa essere a garanzia della verifica dell'intera struttura.

La descrizione geometrica e la siglatura degli elementi nonché i relativi esecutivi delle armature fanno riferimento alla documentazione depositata presso gli uffici competenti.

Si rimanda alla stessa documentazione per quanto riguarda schemi strutturali, tipo di analisi e normativa di riferimento adottate nel calcolo dei manufatti.

1° SOLAIO- TRAVE n. 2/1

- **Dimensioni:** rettangolare 70x34 cm, ribassata 10 cm
- **Armatura:** 3Ø18 correnti superiori
5Ø24 correnti inferiori
copriferro superiore netto 2,5 cm
copriferro inferiore e laterale netto 2,5 cm
- **Staffe :**
 - 1° tratto 45 cm: Ø 10/7,5" (staffe verticali)
 - 2° tratto 100 cm: Ø 12/25" (staffe a traliccio)
 - tratto centrale: Ø 10/25" (staffe a traliccio)N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**



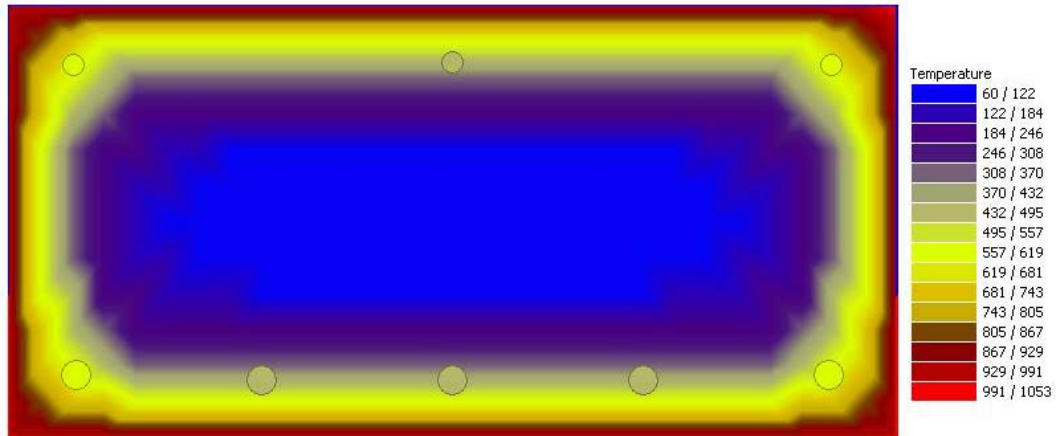
COMMITTENTE: AZIENDA UNITA' SANITARIA LOCALE DI PARMA
 LOCALITA': VIA DON TINCATI 5, FIDENZA (PR)
 LAVORO: AMPLIAMENTO OSPEDALE "VAIO"

• - Barre

x [cm]	y [cm]	∅ [mm]	Materiale	T [°C]
5.14	29.36	18	B450C DM2008 EC2 1992-1-2 Classe N a caldo	638
64.86	29.36	18	B450C DM2008 EC2 1992-1-2 Classe N a caldo	638
35.00	29.51	18	B450C DM2008 EC2 1992-1-2 Classe N a caldo	434
64.65	4.85	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	620
5.35	4.85	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	620
50.00	4.49	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	445
35.00	4.49	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	438
20.00	4.49	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	445

• - Mappa delle temperature

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]

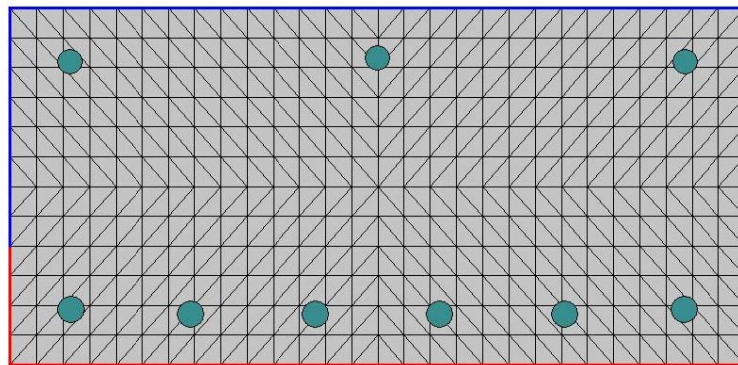


• - Verifiche a pressoflessione

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	0.0	-14349.1	0.0	0.79

1° SOLAIO- TRAVE n. 3/1

- **Dimensioni:** rettangolare 70x34 cm, ribassata 10 cm
- **Armatura:** 3Ø24 correnti superiori
6Ø26 correnti inferiori
copriferro superiore netto 2,5 cm
copriferro inferiore e laterale netto 2,5 cm
- **Staffe :**
 - 1° tratto 37,5 cm: Ø 12/7,5" (staffe verticali)
 - 2° tratto 75 cm: Ø 14/25" (staffe a traliccio)
 - tratto centrale: Ø 12/25" (staffe a traliccio)N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

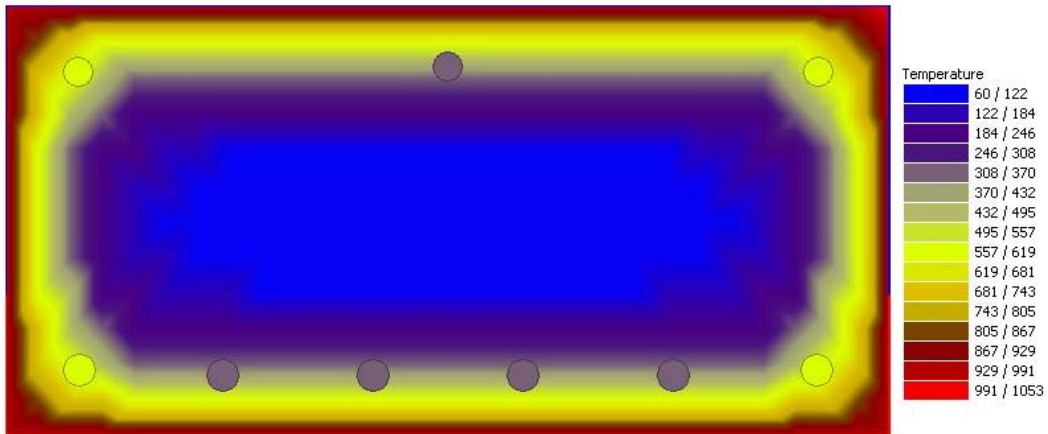


• **- Barre**

x [cm]	y [cm]	∅ [mm]	Materiale	T [°C]
5.65	28.85	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	586
64.35	28.85	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	586
35.00	29.21	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	407
64.28	5.22	26	B450C DM2008 EC2 1992-1-2 Classe N a caldo	583
5.72	5.22	26	B450C DM2008 EC2 1992-1-2 Classe N a caldo	583
52.82	4.79	26	B450C DM2008 EC2 1992-1-2 Classe N a caldo	424
40.94	4.79	26	B450C DM2008 EC2 1992-1-2 Classe N a caldo	414
29.06	4.79	26	B450C DM2008 EC2 1992-1-2 Classe N a caldo	414
17.18	4.79	26	B450C DM2008 EC2 1992-1-2 Classe N a caldo	424

• **- Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]

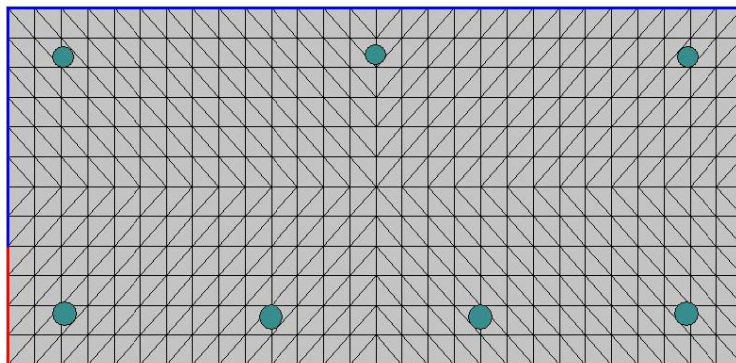


• **- Verifiche a pressoflessione**

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	0.0	-13042.8	0.0	0.46

2° SOLAIO- TRAVE n. 11/2

- **Dimensioni:** rettangolare 70x34 cm, ribassata 10 cm
- **Armatura:** 3Ø20 correnti superiori
4Ø24 correnti inferiori
copriferro superiore netto 2,5 cm
copriferro inferiore e laterale netto 2,5 cm
- **Staffe :**
 - 1° tratto 37,5 cm: Ø 8/7,5" (staffe verticali)
 - tratto centrale: Ø 10/25" (staffe a traliccio)N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

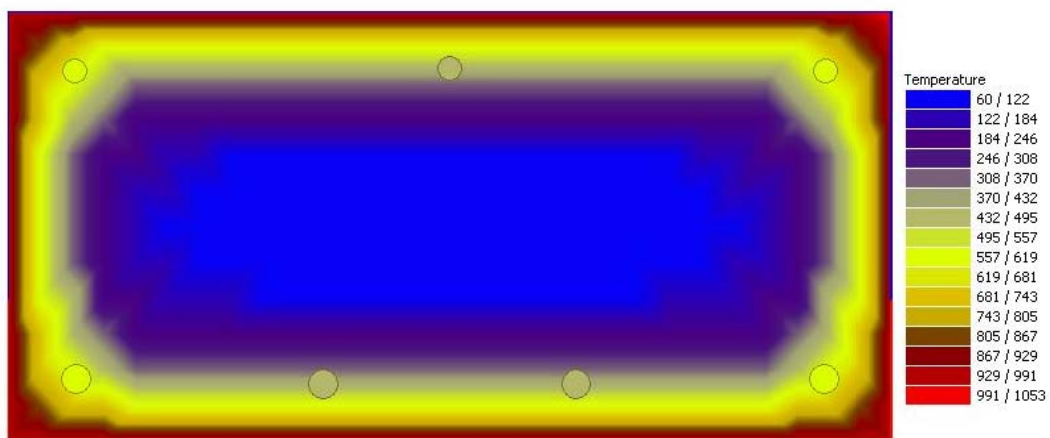


• **- Barre**

x [cm]	y [cm]	∅ [mm]	Materiale	T [°C]
5.21	29.29	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	631
64.79	29.29	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	631
35.00	29.51	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	434
64.65	4.85	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	620
5.35	4.85	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	620
45.00	4.49	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	442
25.00	4.49	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	442

• **- Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]

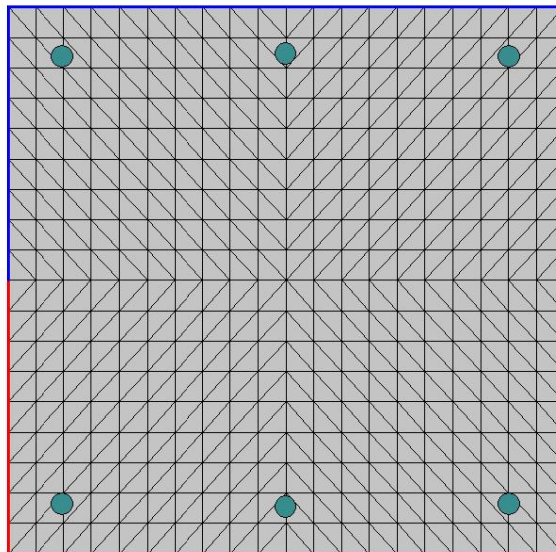


• **- Verifiche a pressoflessione**

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	0.0	-11497.2	0.0	0.83

3° SOLAIO- TRAVE n. 16/3

- **Dimensioni:** rettangolare 50x49 cm, ribassata 25 cm
- **Armatura:** 3Ø20 correnti superiori
3Ø20 correnti inferiori
copriferro superiore netto 2,5 cm
copriferro inferiore e laterale netto 2,5 cm
- **Staffe :**
 - 1° tratto 50 cm: Ø 8/10" (staffe verticali)
 - tratto centrale: Ø 8/25" (staffe a traliccio)N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

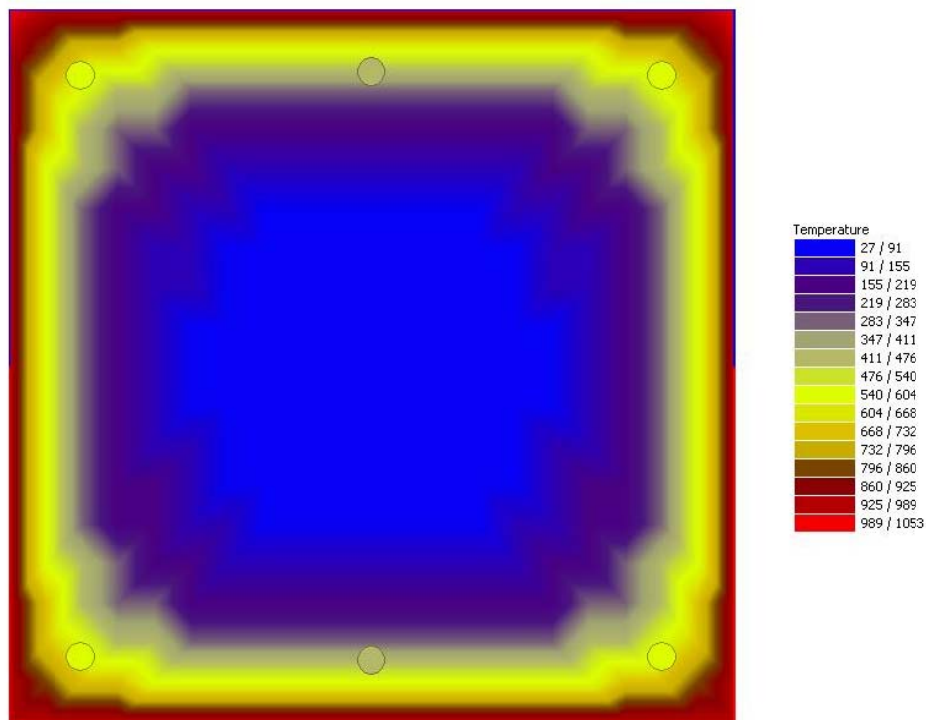


• **- Barre**

x [cm]	y [cm]	∅ [mm]	Materiale	T [°C]
4.91	44.59	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	660
45.09	44.59	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	660
25.00	44.81	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	460
45.09	4.41	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	665
4.91	4.41	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	665
25.00	4.19	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	464

• **- Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]

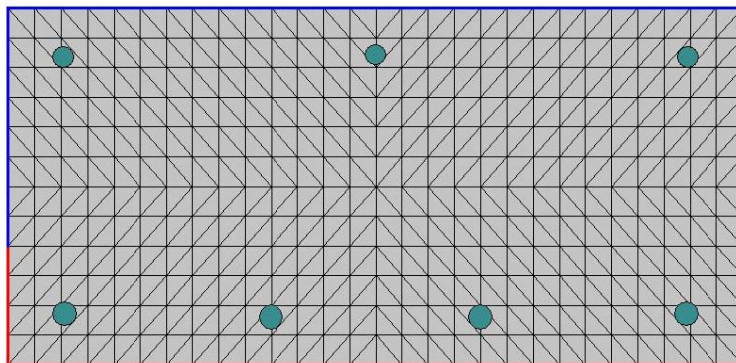


• **- Verifiche a pressoflessione**

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	0.0	-5881.6	0.0	0.68

4° SOLAIO- TRAVE n. 3/2

- **Dimensioni:** rettangolare 70x34 cm, ribassata 10 cm
- **Armatura:** 3Ø18 correnti superiori
2Ø24+2Ø26 correnti inferiori
copriferro superiore netto 2,5 cm
copriferro inferiore e laterale netto 2,5 cm
- **Staffe :**
 - 1° tratto 37,5 cm: Ø 8/7,5" (staffe verticali)
 - tratto centrale: Ø 10/25" (staffe a traliccio)N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

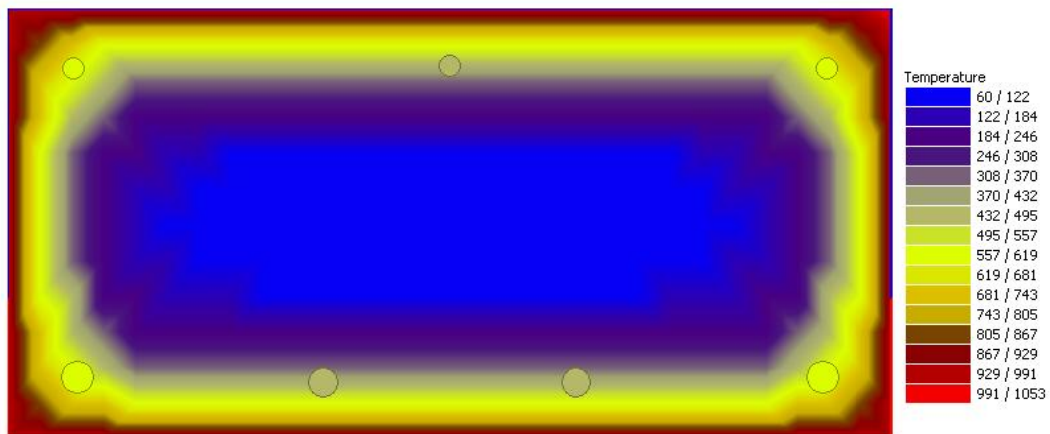


• - Barre

x [cm]	y [cm]	∅ [mm]	Materiale	T [°C]
5.14	29.36	18	B450C DM2008 EC2 1992-1-2 Classe N a caldo	638
64.86	29.36	18	B450C DM2008 EC2 1992-1-2 Classe N a caldo	638
35.00	29.51	18	B450C DM2008 EC2 1992-1-2 Classe N a caldo	434
64.58	4.92	26	B450C DM2008 EC2 1992-1-2 Classe N a caldo	613
5.42	4.92	26	B450C DM2008 EC2 1992-1-2 Classe N a caldo	613
45.00	4.49	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	442
25.00	4.49	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	442

• - Mappa delle temperature

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



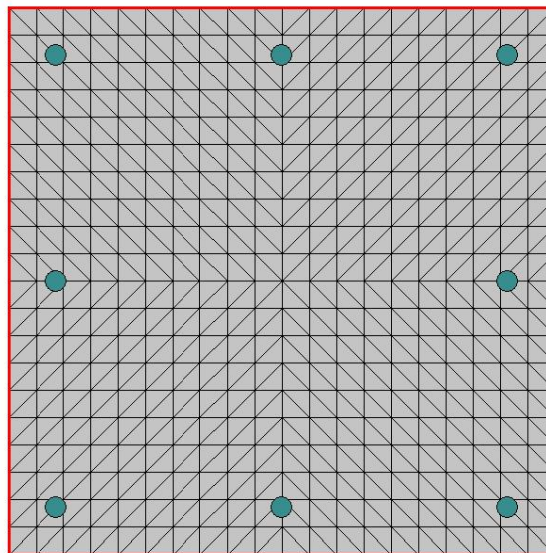
• - Verifiche a pressoflessione

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	0.0	-12316.5	0.0	0.84

PILASTRO n. 10 - 1° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 8Ø20
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 50 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

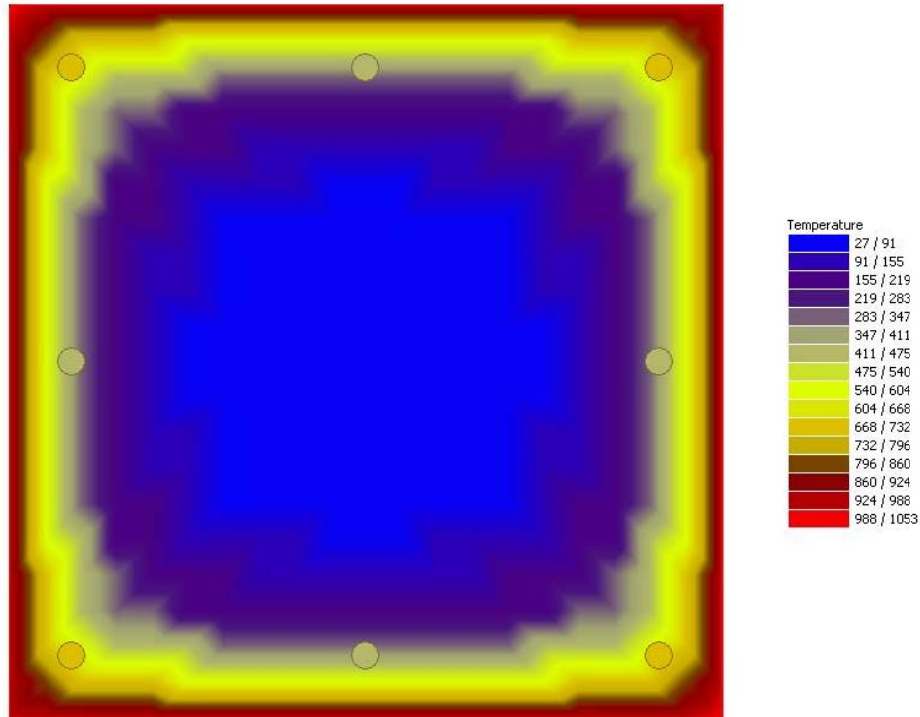


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.30	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
25.00	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
25.00	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
4.30	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
45.70	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449

• - Mappa delle temperature

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



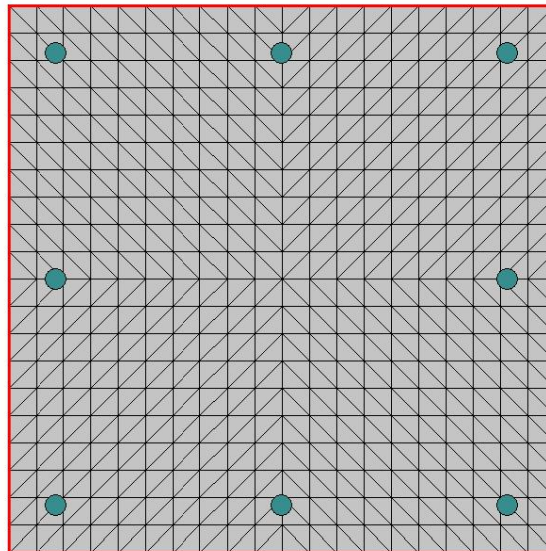
• - Verifiche a pressoflessione

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-87491.1	1849.9	-902.0	0.14
1	-85642.6	-3323.0	1894.7	0.15

PILASTRO n. 10 - 2° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 8Ø20
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

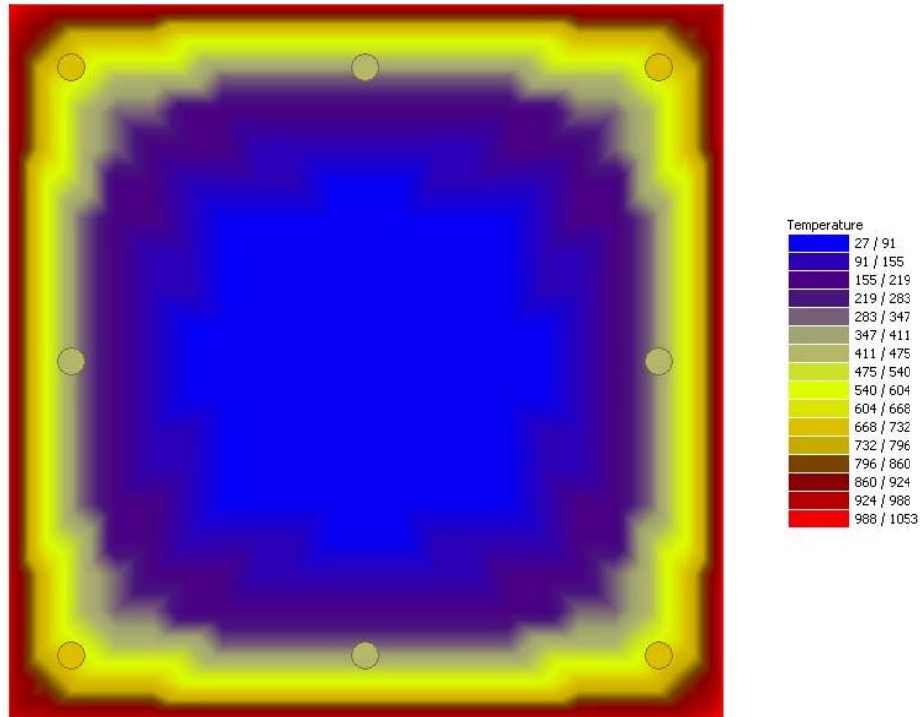


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.30	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
25.00	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
25.00	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
4.30	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
45.70	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449

• - Mappa delle temperature

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



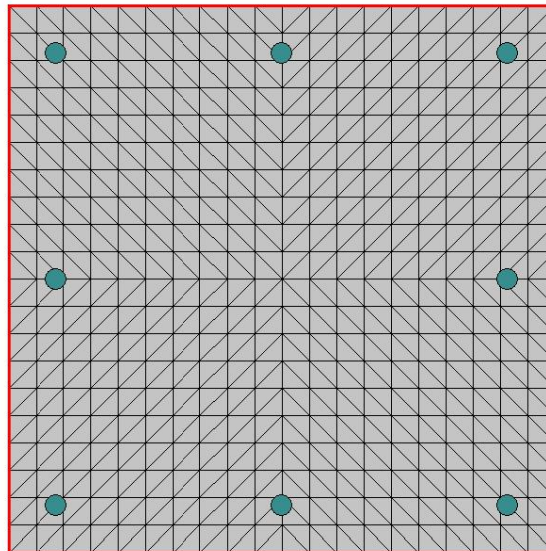
• - Verifiche a pressoflessione

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-70117.3	3167.3	-1530.1	0.13
1	-67802.5	-1821.7	478.1	0.11

PILASTRO n. 10 - 3° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 8Ø24
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

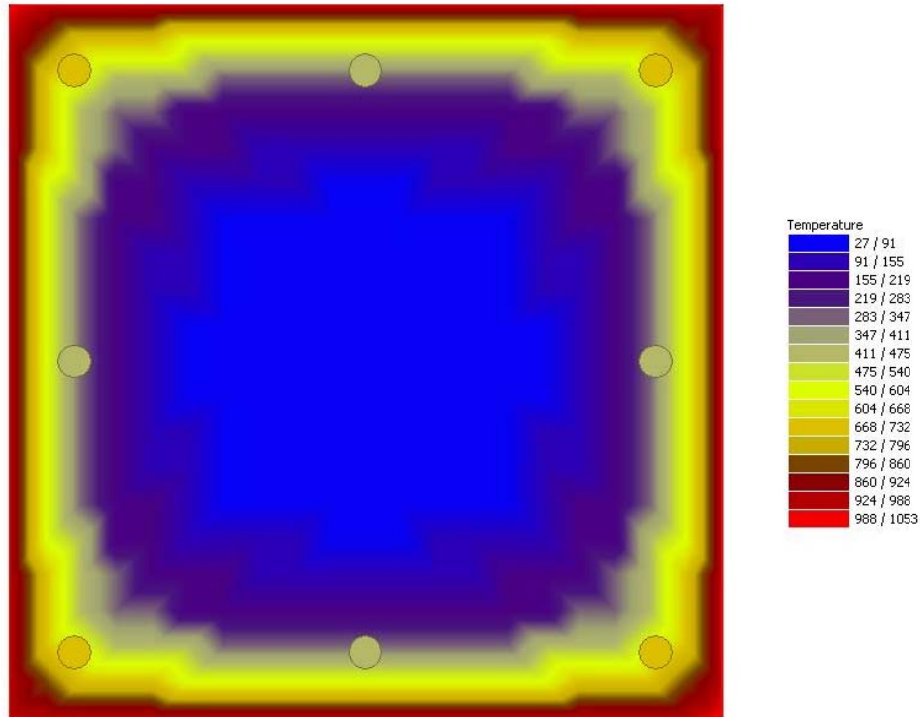


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.50	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
4.50	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
45.50	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
45.50	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
25.00	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
25.00	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
4.50	25.00	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
45.50	25.00	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430

• - Mappa delle temperature

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



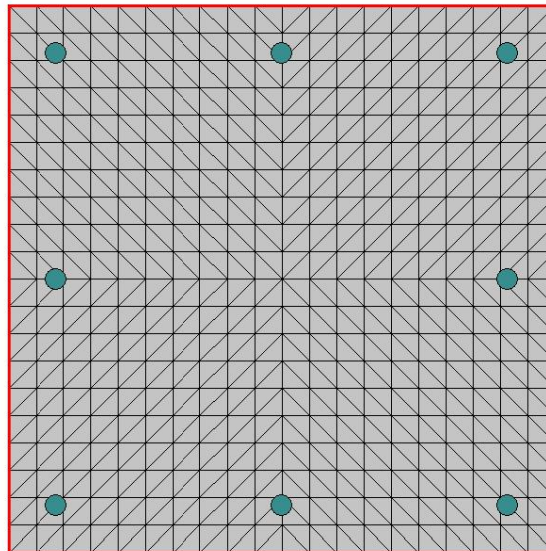
• - Verifiche a pressoflessione

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-53364.1	1084.7	-32.5	0.08
1	-51060.7	-1312.8	143.4	0.08

PILASTRO n. 10 - 4° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 8Ø24
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

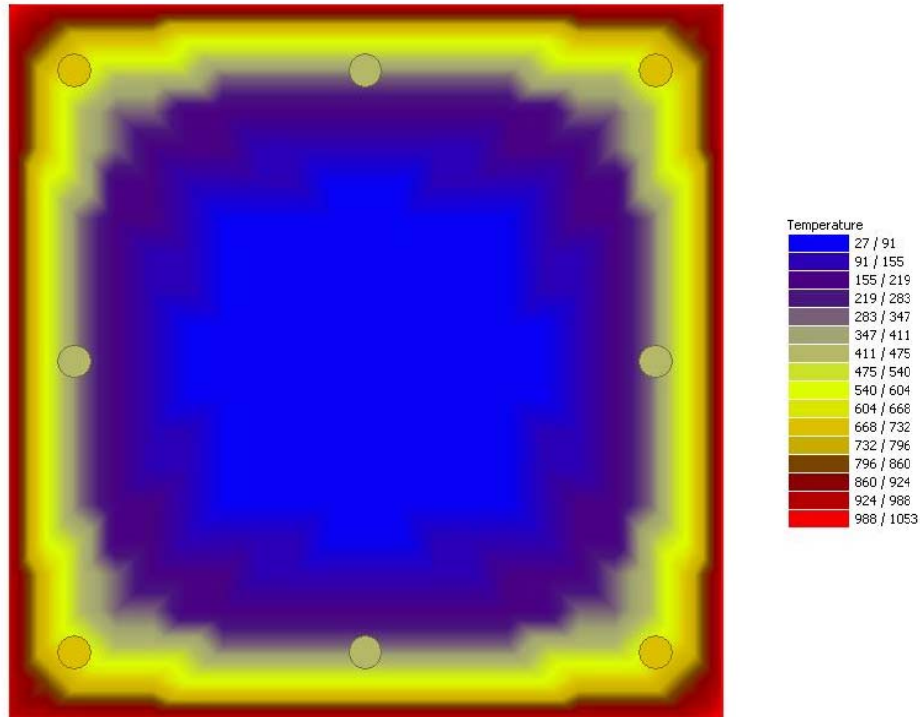


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.50	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
4.50	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
45.50	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
45.50	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
25.00	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
25.00	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
4.50	25.00	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
45.50	25.00	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430

• **- Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



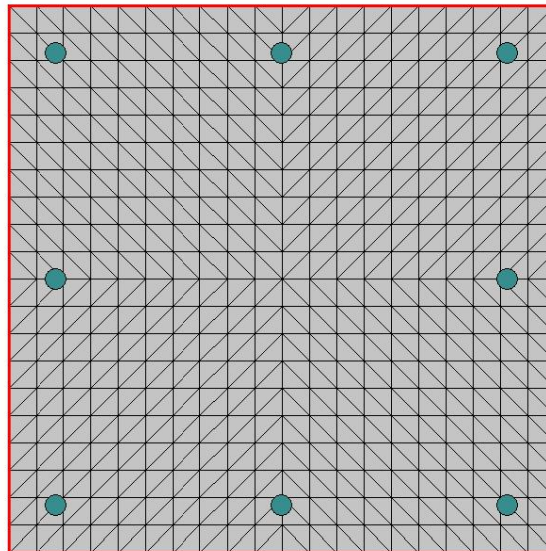
• **- Verifiche a pressoflessione**

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-36677.4	1546.9	-399.6	0.06
1	-34373.9	-1387.2	178.8	0.06

PILASTRO n. 10 - 5° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 8Ø24
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.
- **Mesh:**

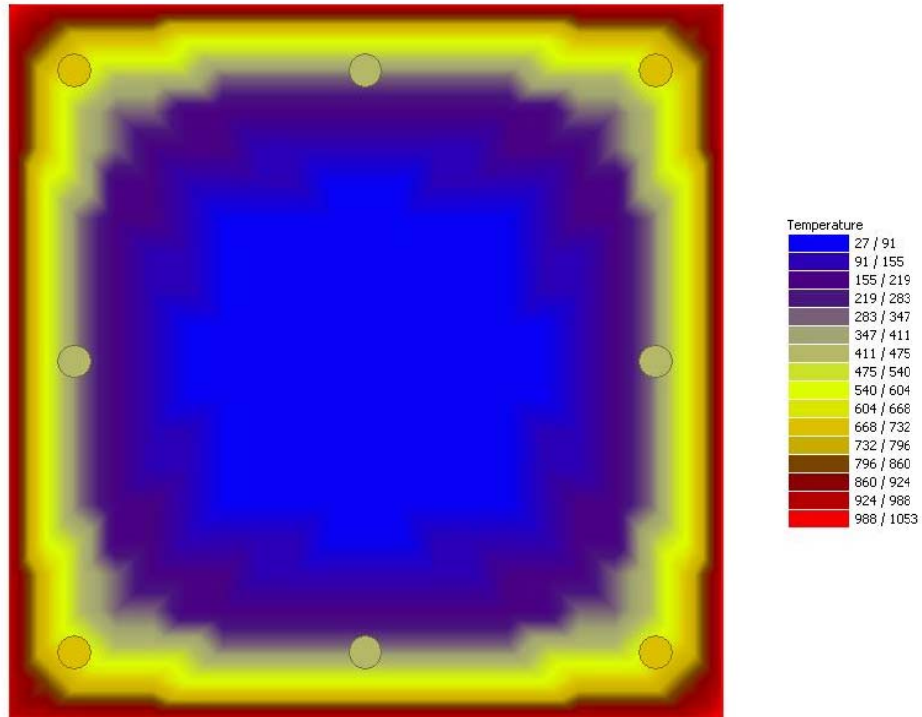


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.50	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
4.50	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
45.50	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
45.50	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	671
25.00	4.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
25.00	45.50	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
4.50	25.00	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430
45.50	25.00	24	B450C DM2008 EC2 1992-1-2 Classe N a caldo	430

• - **Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



• - **Verifiche a pressoflessione**

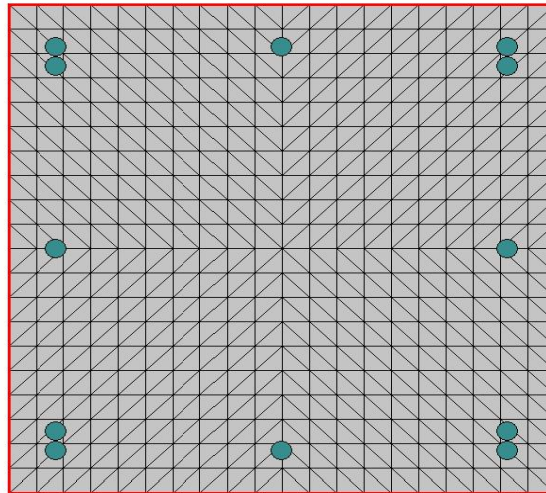
Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-19960.0	1643.0	-435.4	0.04
1	-17656.6	-2025.5	635.3	0.05

PILASTRO n. 59 - 1° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 12Ø20
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 50 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.

- **Mesh:**

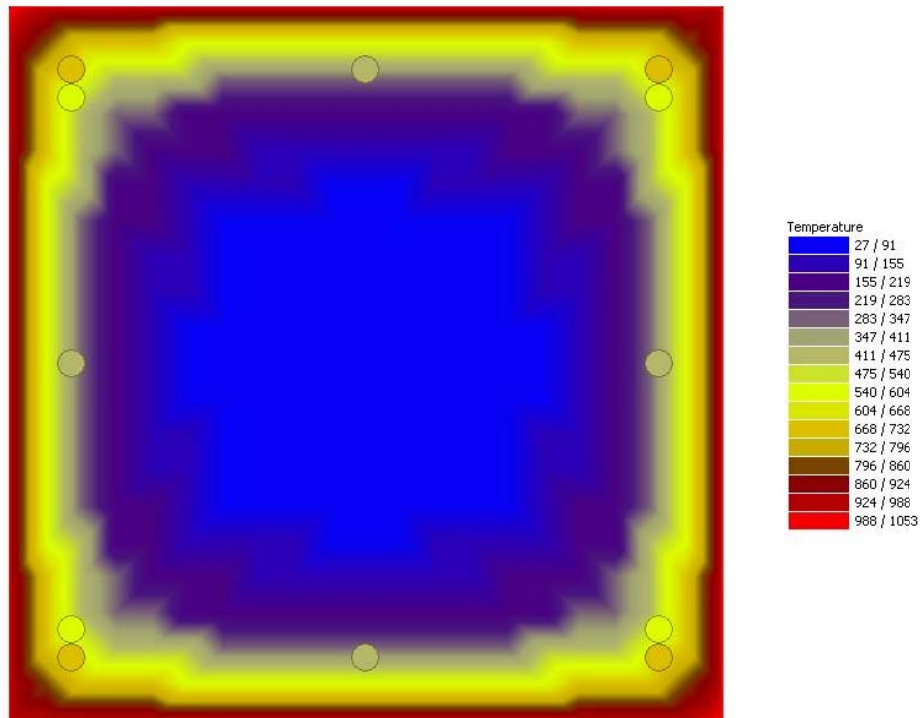


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.30	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
4.30	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
25.00	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
25.00	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
4.30	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
45.70	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449

- **- Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



- **- Verifiche a pressoflessione**

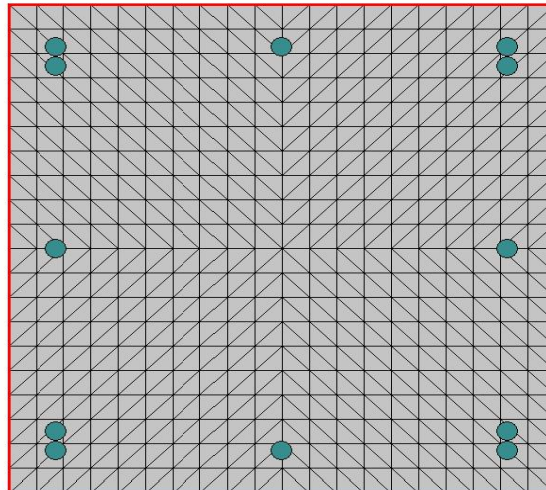
Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-92095.3	1290.4	149.5	0.13
1	-90246.9	-2333.8	-313.8	0.14

PILASTRO n. 59 - 2° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 12Ø20
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.

- **Mesh:**

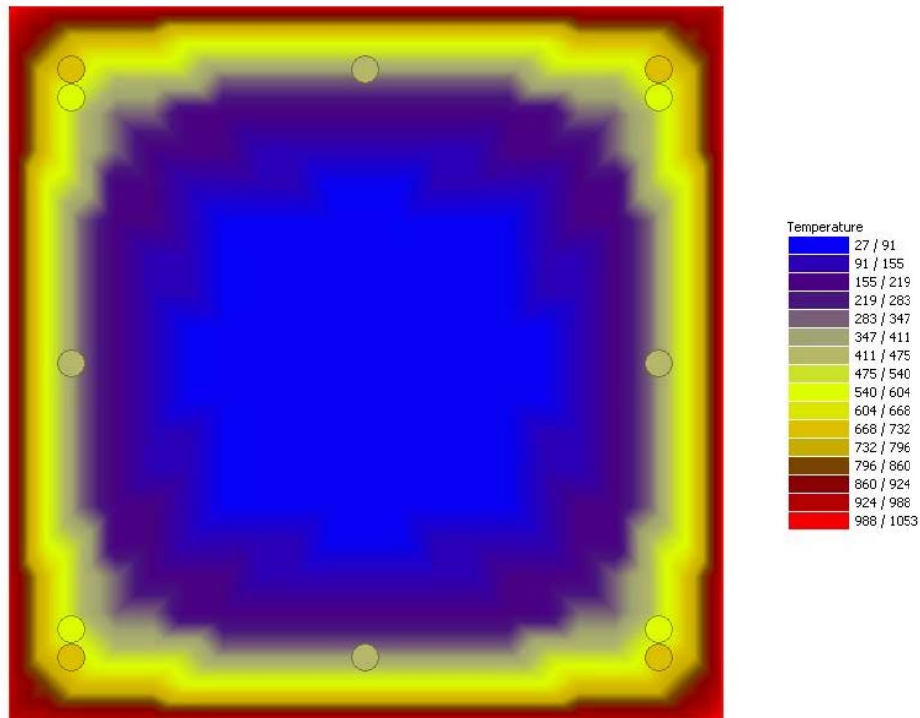


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.30	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
4.30	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
25.00	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
25.00	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
4.30	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
45.70	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449

• - Mappa delle temperature

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



• - Verifiche a pressoflessione

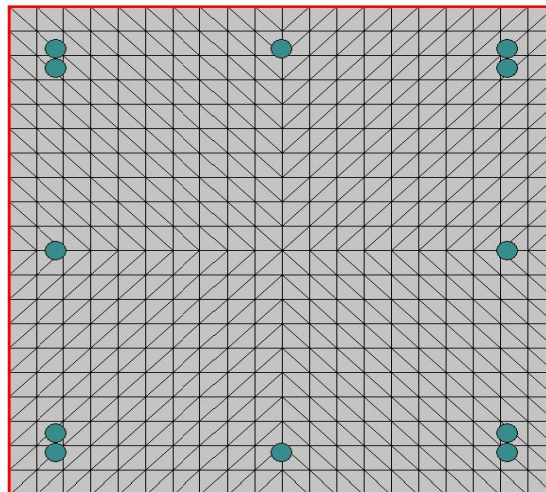
Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-76457.0	2965.6	365.1	0.13
1	-74142.2	-2866.8	-351.1	0.12

PILASTRO n. 59 - 3° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 12Ø20
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.

- **Mesh:**

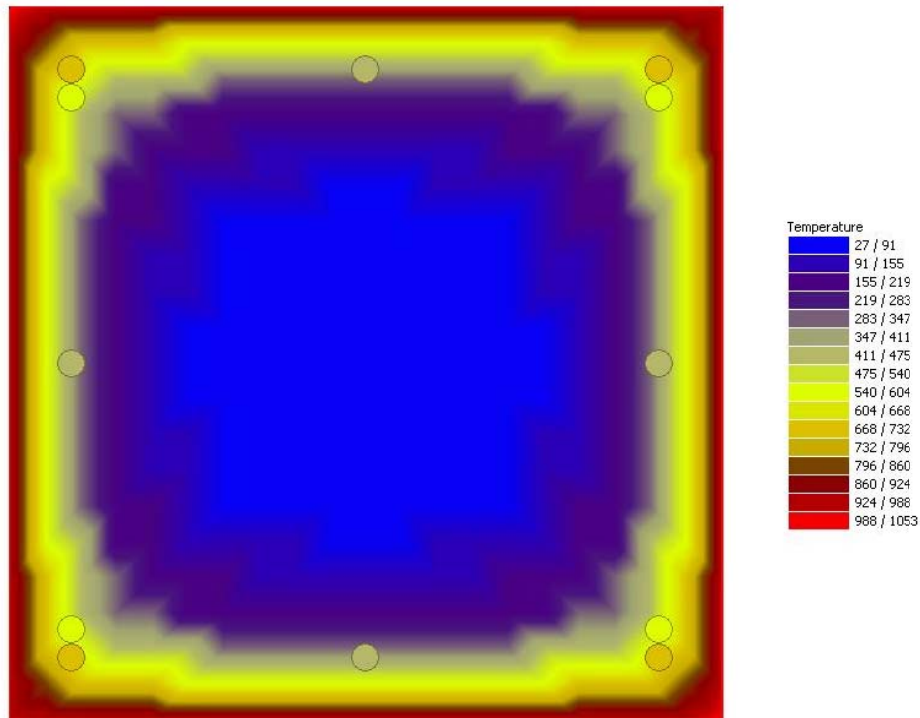


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.30	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
4.30	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
25.00	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
25.00	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
4.30	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
45.70	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449

- **- Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



- **- Verifiche a pressoflessione**

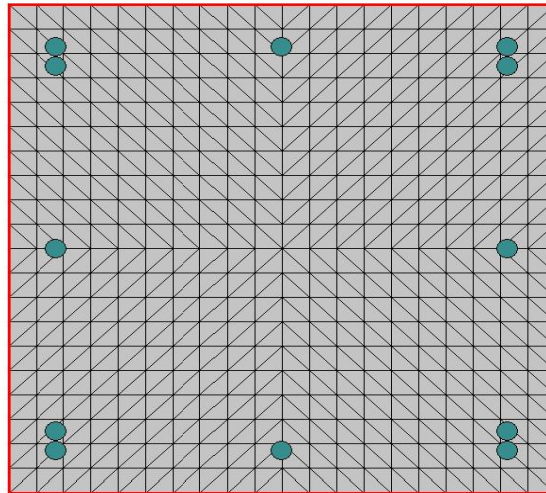
Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-60177.4	2968.8	340.7	0.11
1	-57873.9	-2993.0	-341.9	0.10

PILASTRO n. 59 - 4° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 12Ø20
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.

- **Mesh:**

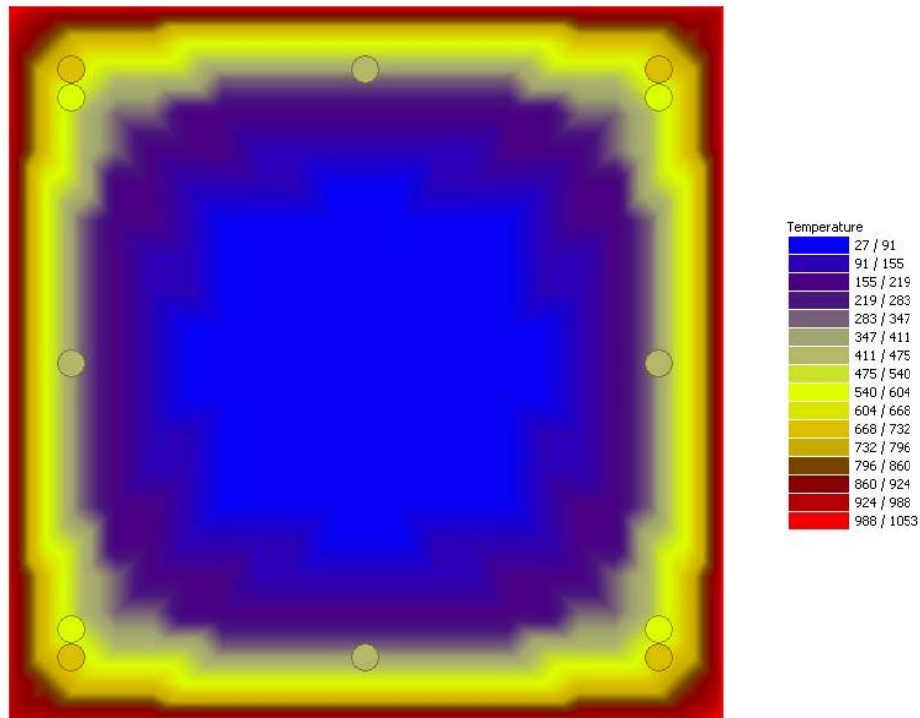


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.30	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
4.30	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
25.00	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
25.00	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
4.30	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
45.70	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449

- **- Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



- **- Verifiche a pressoflessione**

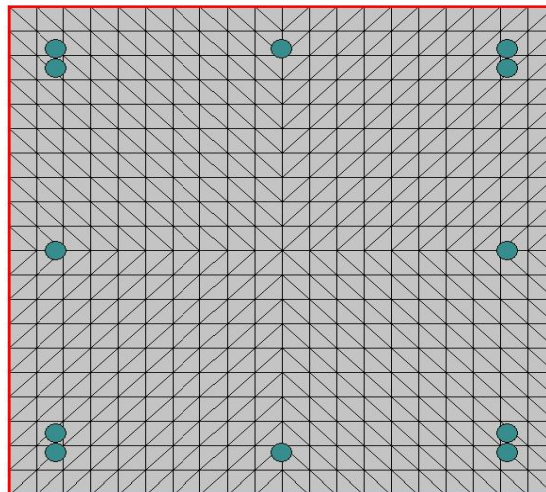
Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-43797.8	3123.5	348.7	0.09
1	-41494.4	-3134.1	-354.7	0.09

PILASTRO n. 59 - 5° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 12Ø20
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.

- **Mesh:**

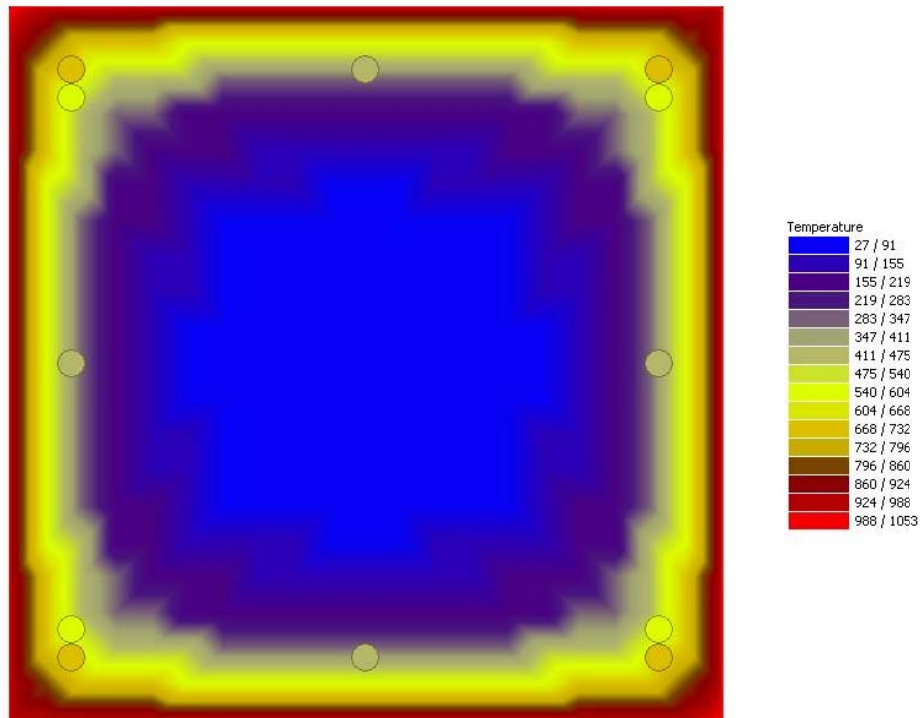


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.30	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
4.30	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	43.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
45.70	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	6.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	612
25.00	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
25.00	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
4.30	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
45.70	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449

- **- Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



- **- Verifiche a pressoflessione**

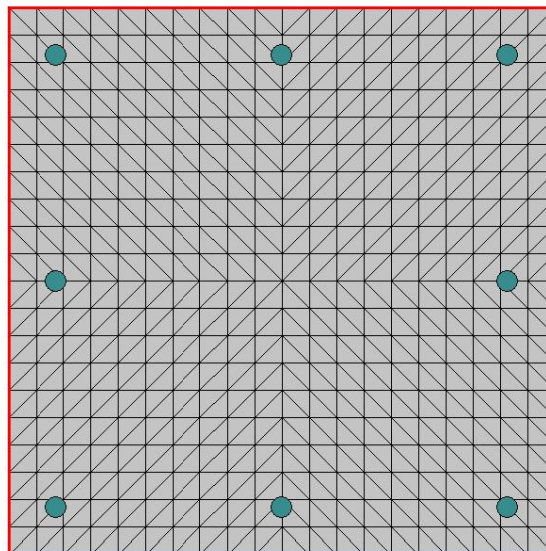
Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-27340.3	3185.1	330.5	0.07
1	-25036.9	-3171.1	-298.8	0.07

PILASTRO n. 59 - 6° tronco:

- **Dimensioni:** rettangolare 50x50 cm
- **Armatura:** 8Ø20
copriferro netto 2,5 cm
- **Staffe :**
 - 1° tratto 60 cm: Ø 12/10"
 - tratto centrale: Ø 12/20"

N.B. : le staffe sono disposte simmetricamente.

- **Mesh:**

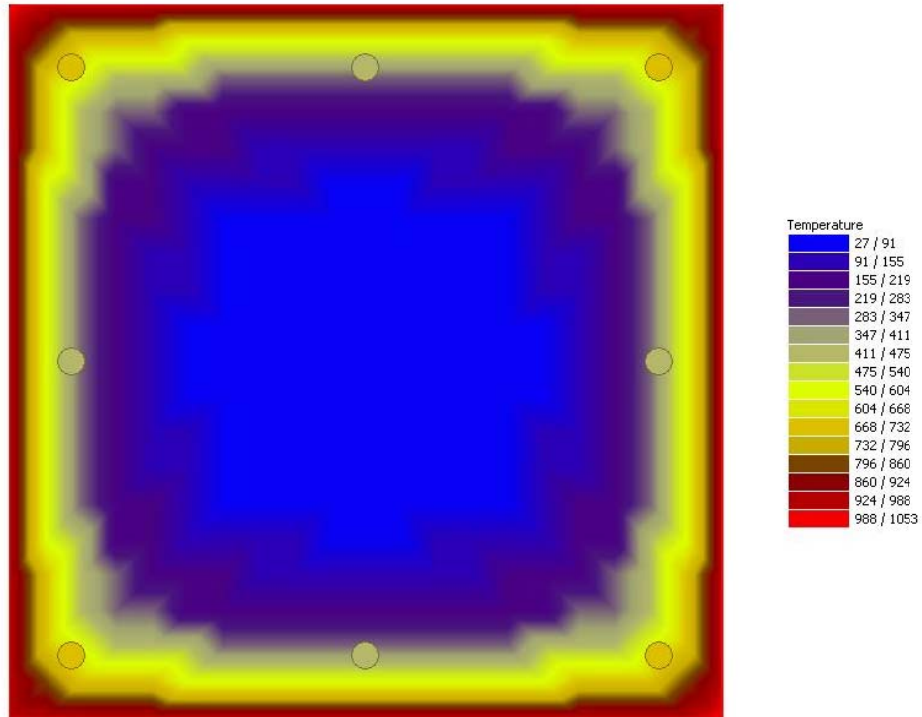


- **- Barre**

x [cm]	y [cm]	Ø [mm]	Materiale	T [°C]
4.30	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
4.30	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
45.70	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	692
25.00	4.30	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
25.00	45.70	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
4.30	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449
45.70	25.00	20	B450C DM2008 EC2 1992-1-2 Classe N a caldo	449

• - **Mappa delle temperature**

- Durata di applicazione del fuoco 7200.00 [sec] (120.0 min)
- Numero di step di calcolo 360
- Passo Temporale 10.00 [sec]



• - **Verifiche a pressoflessione**

Info	N [kg]	Mx [kgm]	My [kgm]	S _D /S _R
1	-10821.9	3309.0	415.5	0.12
1	-8518.5	-3510.1	-571.2	0.15

CONCLUSIONI

A conclusione delle verifiche analitiche effettuate, sulla base dei criteri di sicurezza e del metodo di calcolo facenti riferimento alle norme tecniche indicate, si ritiene che le strutture prefabbricate siano in grado di sviluppare una resistenza al fuoco R120.

Progettista strutturale
Dott. Ing. Mauro Ferrari