

REGIONE EMILIA-ROMAGNA

Comune di Cesenatico - Provincia di Forlì-Cesena

Sviluppo del territorio - Servizio Sismica

Via M. Moretti 5 - 47042 Cesenatico (FC)

*Programma di riqualificazione urbana per la
costruzione di un edificio di ERP comprendente
n. 18 alloggi nell'area Ex colonea Prealpi in Via
Galilei, loc. Valverde, Comune di Cesenatico*

*Relazione strutturale
ai sensi del DGR 1373/2011*

*Nuova Costruzione ai sensi delle NTC18 e della
LR19/2008*

*Autorizzazione Sismica
CORPO A*

Committente:

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1. Illustrazione sintetica degli elementi essenziali del progetto strutturale

1.1 Descrizione del contesto edilizio e delle caratteristiche geologiche, morfologiche e idrogeologiche del sito oggetto di intervento e con l'indicazione, per entrambe le tematiche, di eventuali problematiche riscontrate e delle soluzioni ipotizzate, tenuto conto anche delle indicazioni degli strumenti di pianificazione territoriale e urbanistica;

Il contesto edilizio oggetto di progetto presenta le seguenti caratteristiche che vengono brevemente descritte:

Superficie in pianta: 330 mq

Destinazione d'uso:

N° Piani Interrati: 0

N° Piani fuori terra: 4

Volume: 2800 mc circa

Luce max solai: 4.5 m

Luce max sbalzi-aggetti: 1.8 m

Min quota piano fondale: - 1.25 m

Max. altezza piano copertura: 13.30 m

Foglio: 39

Particella: 226

Sub: /



In riferimento alle caratteristiche geologiche, morfologiche e idrogeologiche si riporta quanto segue:

Localizzazione geografica:

L'area in esame è situata in località Valverde del Comune di Cesenatico e, in particolare, nella zona interposta tra viale Galilei, Viale Pitagora e Viale Archimede. Il fabbricato oggetto di nuova costruzione è situato nella zona EST della città di Cesenatico in una porzione di territorio altamente urbanizzato della frazione di Valverde.

Considerazione geomorfologiche:

L'area pianeggiante in esame è situata nella pianura costiera di Cesenatico a circa 300 m dalla linea di costa ed alla quota di circa 1.5 metri sul livello marino.

Aspetti geologici:

L'area in esame è interessata da un deposito di sabbie litoranee di pertinenza dell'Unità di Modena (AES8a) dell'Olocene. L'insieme di questa Unità è contraddistinto da sabbie, argille e limi di ambiente alluvionale, deltizio e litorale, organizzati in corpi sedimentari lenticolari, nastriformi, tabulari e cuneiformi di spessore plurimetrico.

Sondaggi eseguiti:

- n. 1 sondaggio a carotaggio continuo, n.3 prove CPTU, N.1 indagine geofisica, prove di laboratorio su n. 3 campioni, installazione di n. 3 piezometri

Di seguito si riportano le eventuali problematiche riscontrate in fase di progettazione, tenuto conto anche delle indicazioni degli strumenti di pianificazione territoriale e urbanistica:

Problematiche riscontrate:

Dalle indagini eseguite è emerso che il terreno di fondazione è soggetto alla liquefazione delle sabbie pertanto, prima di eseguire il fabbricato e la sua nuova fondazione, si è pensato di procedere con un consolidamento del terreno attraverso pali di ghiaia della lunghezza di 7 metri del diametro di 60 cm con un interasse massimo di 360 cm gli uni dagli altri.

Vincoli presenti sul fabbricato: ☐ SI ☒ NO

Tipologia di vincolo:

Nessun vincolo identificato.

1.2 Descrizione generale della struttura, sia in elevazione che in fondazione, e della tipologia di intervento, con indicazione delle destinazioni d'uso previste per la costruzione, dettagliate per ogni livello entro e fuori terra, e dei vincoli imposti dal progetto architettonico;

Di seguito si descrive l'edificio oggetto di progetto:

Unità strutturale:

Sistema costruttivo:

Tipo di fondazioni:

Fondazioni collegate:

☒ SI ☐ NO

Tipo di struttura:

Bene di interesse culturale (42/2004): ☐ SI ☒ NO

Vincoli architettonici da attuare: Nessun vincolo

Descrizione degli interventi da eseguirsi:

Si prevede la nuova costruzione di un edificio in c.a.

Tipo di intervento (NTC18):

Di seguito si riportano le destinazioni d'uso previste per la costruzione dettagliate per ogni livello:

Piano Terra	Abitativo
Piano Primo	Abitativo
Piano Secondo	Abitativo
Piano Terzo	Abitativo
Piano Quarto	Abitativo / Zona non praticabile / Impianti

1.3 Normativa tecnica e riferimenti tecnici utilizzati, tra cui le eventuali prescrizioni sismiche contenute negli strumenti di pianificazione territoriale e urbanistica:

- Legge 5 novembre 1971, n. 1086, recante norme per la disciplina delle opere in conglomerato cementizio armato, normale e precompresso e da struttura metallica;
- Decreto del Presidente della Repubblica 6 giugno 2001, n. 380, testo unico delle disposizioni legislative e regolamentari in materia edilizia;
- OPCM 3 maggio 2005 Ulteriori modifiche ed integrazioni all'ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003, recante "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica"
- Decreto del Ministro delle infrastrutture e dei trasporti 14 settembre 2005, con il quale sono state approvate le "Norme tecniche per le costruzioni"
- NTC08 – D.M. 14/01/2008 "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;
- NTC18 – D.M. 17/01/2018 "Aggiornamento delle Norme tecniche per le costruzioni";
- Circolare applicativa 21/01/2019, n. 7 del Ministero delle Infrastrutture e Trasporti.

1.4 Definizione dei parametri di progetto che concorrono alla definizione dell'azione sismica di base del sito (vita nominale - VN, classe d'uso, periodo di riferimento - VR, categoria del sottosuolo, categoria topografica, amplificazione topografica, zona sismica del sito, coordinate geografiche del sito), delle azioni considerate sulla costruzione e degli eventuali scenari di azioni eccezionali:

Di seguito si riportano i parametri di progetto utilizzati per definire l'azione sismica di base del sito ove sorge la costruzione:

Tipo di opera:

Vita Nominale

Classe d'uso

Periodo di riferimento $V_R = V_N \times C_U$ 50

2.4.3 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 :

$$V_R = V_N \cdot C_U \quad (2.4.1)$$

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.

Categoria del terreno

Categoria topografica

Coordinate geografiche del sito:

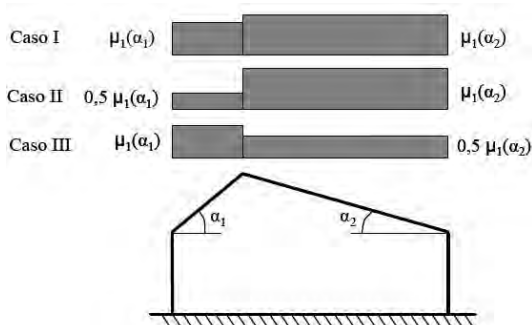
Latitudine: 44.17629 °

Longitudine: 12.428993 °

Di seguito si riportano le azioni (Pesi Propri, Permanenti non strutturali e variabili) considerate sulla costruzione:

	Q Permanente (kg/mq)	Q Portato (kg/mq)	Q Variabile (kg/mq)	Categoria
Solaio PT	/	100	200	A
Solaio ABITAZIONI	365	330	200	A
Solaio BALCONI E PARTI COMUNI	365	155	400	B
Solaio Copertura	365	155	50+120	H/NEVE

Allo stesso tempo è stata considerata l'azione della neve sulla copertura del fabbricato, riassunta di seguito:



Regione: Emilia Romagna

Provincia: Forlì-Cesena
 Ubicazione: Zona I - Mediterranea
 Quota sito s.l.m.m. as: 0 m
 Topografia: Normale
 Coefficiente di esposizione CE: 1.0
 Coefficiente termico Ct: 1.00
 Valore caratteristico di carico neve al suolo (TR=50anni) qsk: 1.50 kN/m²
 Angolo α1 della falda 1 sull'orizzontale: 20°
 Angolo α2 della falda 2 sull'orizzontale: 20°
 Coefficiente di forma μ1(α1): 0.80
 Coefficiente di forma μ1(α2): 0.80
 Caso (i) - Carico neve in assenza di vento
 Carico neve su falda 1 q1: 1.20 kN/m²
 Carico neve su falda 2 q2: 1.20 kN/m²
 Caso (ii) - Carico neve in presenza di vento
 Carico neve su falda 1 q1: 0.60 kN/m²
 Carico neve su falda 2 q2: 1.20 kN/m²
 Caso (iii) - Carico neve in presenza di vento
 Carico neve su falda 1 q1: 1.20 kN/m²
 Carico neve su falda 2 q2: 0.60 kN/m²

Si possono verificare altri scenari di azioni accidentali: ☐ SI ☒ NO

1.5 Descrizione dei materiali e dei prodotti per uso strutturale, dei requisiti di resistenza meccanica e di durabilità considerati:

Saranno utilizzati materiali compatibili con le normative vigenti sia in termini di durabilità che di resistenza meccanica, come descritto negli elaborati di progetto architettonici.

Gli interventi di manutenzione ordinaria e straordinaria saranno quelli indicati nel piano di manutenzione del fabbricato, che sarà allegato alla pratica di autorizzazione sismica.

Di seguito si riportano le prescrizioni per i materiali e i prodotti per uso strutturale utilizzati:

Calcestruzzo in opera - FONDAZIONE

Classe Resistenza Caratteristica:	C 25/30
Classe esposizione ambientale:	XC2
Classe di consistenza:	S4
Diametro massimo aggregato:	35 mm

Calcestruzzo in opera - ELEVAZIONE

Classe Resistenza Caratteristica:	C 25/30
Classe esposizione ambientale:	XC1
Classe di consistenza:	S4
Diametro massimo aggregato:	35 mm

Acciaio per c.a. in opera

Tensione caratteristica di snervamento	450 N/mm ²
Tensione rottura	540 N/mm ²

Strutture METALLICHE in acciaio e/o altri materiali

☐ S235 ☒ S275 ☐ S355

1.6 Illustrazione dei criteri di progettazione e di modellazione: classe di duttilità - CD, regolarità in pianta ed in alzato, tipologia strutturale, fattore di struttura - q e relativa giustificazione, stati limite indagati, giunti di separazione fra strutture contigue, criteri per la valutazione degli elementi non strutturali e degli impianti, requisiti delle fondazioni e collegamenti tra fondazioni, vincolamenti interni e/o esterni, schemi statici adottati;

Di seguito si illustrano i criteri di progettazione e di modellazione adottati, che in taluni casi sono a favore di sicurezza:

Classe di duttilità:

Regolarità in pianta ☐ SI ☒ NO

Regolarità in elevazione ☐ SI ☒ NO

Tipologia strutturale ai fini sismici: C.A.

Presenza e giustificazione di elementi strutturali secondari:

Sono presenti tamponamenti in laterizio che svolgono funzione secondaria e sono stati opportunamente progettati e vincolati alla struttura principale ove necessario.

Applicazione della gerarchia delle resistenze: ☒ SI ☐ NO

Tipologia dei vincoli utilizzati per i principali elementi strutturali:

Fondazione: ☐ Incastro ☐ Cerniera ☒ Winkler

Pilastrini/Maschi Murari: ☒ Incastro-Incastro ☐ Incastro-Cerniera ☐ Cerniera-Cerniera

Travi/Fascia di piano: ☒ Incastro-Incastro ☐ Incastro-Cerniera ☐ Cerniera-Cerniera

Rigidezza impalcati di copertura: Infinitamente rigidi ☒ SI ☐ NO

Tipologia di Copertura: Copertura in laterocemento

Copertura spingente: ☐ SI ☒ NO

Fattore di struttura adottato: 2.76

Riferimento normativo p.to: 7.4.3.2 NTC18

α_u / α_1 : (1.3+1)/2

K_w : 1

K_r : 0.8

Elementi strutturali in falso: ☐ SI ☒ NO

Azione sismica verticale: ☐ SI ☒ NO

Specificare l'accelerazione al suolo adottata per gli stati limite indagati:

$a_{g,SLD}$: 0.065 g

$a_{g,SLV}$: 0.182 g

Stati Limite	T.R (anni)	a_g (g)	F.o	T.C* (sec)	S,S	C,C	S	T.B (sec)	T.C (sec)	T.D (sec)	F.v
SLE: SLO	30	0.050	2.442	0.270	1.000	1.000	1.000	0.090	0.270	1.800	0.737
SLE: SLD	50	0.065	2.471	0.280	1.000	1.000	1.000	0.093	0.280	1.860	0.850
SLU: SLV	475	0.182	2.509	0.291	1.000	1.000	1.000	0.097	0.291	2.328	1.445
SLU: SLC	975	0.236	2.523	0.310	1.000	1.000	1.000	0.103	0.310	2.544	1.655

È stata effettuata la verifica della distanza tra costruzioni contigue (giunti e martellamenti)

☒ SI ☐ NO ☐ NON NECESSARIA

È stata effettuata la verifica dei collegamenti tra le fondazioni:

☒ SI ☐ NO ☐ NON NECESSARIA

È stato effettuato il controllo ai fini del danneggiamento di elementi non strutturali e impianti:

☒ SI ☐ NO ☐ NON NECESSARIA

È stata effettuata la verifica degli elementi costruttivi senza funzione strutturale (tamponamenti, tramezzi, ecc):

☒ SI ☐ NO ☐ NON NECESSARIA

☒ Edificio con tamponamento collegato rigidamente alla struttura e che interferiscono con la deformabilità della stessa ($d_r < 0.005 h$)

Si osserva che all'interno degli ambienti possono essere presenti elementi non strutturali significativi che possono condurre a situazioni di pericolo, pertanto è necessario che il Committente prenda gli opportuni provvedimenti per garantire la sicurezza prima di installarli.

1.7 Indicazione delle principali combinazioni delle azioni in relazione agli SLU e SLE indagati: coefficienti parziali per le azioni, coefficienti di combinazione;

Ai fini delle verifiche degli stati limite si dichiara che sono state considerate le seguenti combinazioni delle azioni:

- Combinazione fondamentale (SLU) ☒ SI ☐ NO
- Combinazione caratteristica rara (SLE IRREV) ☒ SI ☐ NO
- Combinazione frequente (SLE REV) ☒ SI ☐ NO
- Combinazione quasi permanente (SLE LT) ☒ SI ☐ NO
- Combinazione sismica ☒ SI ☐ NO
- SLU terreno A1 - Approccio 1/Approccio 2 ☒ SI ☐ NO
- SLU terreno A2 - Approccio 1 ☐ SI ☒ NO

Risposta alle diverse componenti dell'azione sismica è stata combinata con la formula:

$$1.00 \cdot E_x + 0.30 \cdot E_y + 0.30 \cdot E_z$$

Con rotazione dei coefficienti moltiplicativi e conseguente individuazione degli effetti più gravosi.

- Combinazione eccezionale

☐ SI

☒ NO

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

		Coefficiente γ_F	EQU	A1 STR	A2 GEO
Carichi permanenti	favorevoli	γ_{G1}	0,9	1,0	1,0
	sfavorevoli	γ_{G1}	1,1	1,3	1,0
Carichi permanenti non strutturali ⁽¹⁾	favorevoli	γ_{G2}	0,0	0,0	0,0
	sfavorevoli	γ_{G2}	1,5	1,5	1,3
Carichi variabili	favorevoli	γ_{Qi}	0,0	0,0	0,0
	sfavorevoli	γ_{Qi}	1,5	1,5	1,3

⁽¹⁾Nel caso in cui i carichi permanenti non strutturali (ad es. carichi permanenti portati) siano compiutamente definiti si potranno adottare per essi gli stessi coefficienti validi per le azioni permanenti.

1.8 Indicazione motivata del metodo di analisi seguito per l'esecuzione della stessa: analisi lineare o non lineare (precisazione del fattore $\Theta = P \cdot d/V$).

Durante le analisi sono state trascurate le non linearità geometriche perchè il valore del fattore teta è inferiore alla prescrizione di normativa (<0.1) e pertanto non è necessario incrementare l'azione sismica o eseguire ulteriori verifiche:

Valore fattore Θ : 0.08

Trascurato effetti P-Delta: ☒ SI

☐ NO

1.9 Analisi statica o dinamica (periodo $T1 < 2.5T_C$ o T_D , regolarità in altezza). Nel dettaglio deve essere esplicitato se trattasi di:- analisi lineare statica, - analisi lineare dinamica (numero di modi considerati e relative masse partecipanti), - analisi non lineare statica (distribuzioni di carico adottate e rapporti di sovrarresistenza), - analisi non lineare dinamica (accelerogrammi adottati), - altro, riportando la sintesi dei principali risultati;

Si dichiara che è stata condotta la seguente tipologia di analisi sismica:

☒ Analisi lineare Dinamica

Percentuale di masse coinvolte: Massa X tot%: 98

Massa Y tot%: 98

Sono stati considerati i seguenti modi di vibrare: N. 12

Le masse attivate sono superiori all'85%: ☒ SI ☐ NO

Di cui nel dettaglio si riportano i primi due periodi principali:

T _{1x} :	0.50 s	Massa %:	4.01
T _{2x} :	0.43 s	Massa %:	79.34
T _{1y} :	0.50 s	Massa %:	76.75
T _{2y} :	0.43 s	Massa %:	4.29

Di seguito si riporta una tabella riassuntiva delle verifiche agli SLU:

Tipo di elemento	% Non Verificate	FS Minimo
Travi Fondazione	0 su 197	>1.0
Travi Elevazione	0 su 413	>1.0
Pilastrì	0 su 108	>1.0

Per quanto riguarda le verifiche svolte a livello di fondazione:

Tipo di elemento	% Non Verificate	FS Minimo
Portanza Terreno	0	3.33
Verifica Scorrimento	0	>>1

Gli spostamenti massimi SLD sono i seguenti:

DIR_x: 22.7 mm DIR_y: 24.4 mm

Gli spostamenti massimi SLV sono i seguenti:

DIR_x: 6.2 cm DIR_y: 7 cm

Per quanto riguarda le verifiche svolte a livello di fondazione:

Tipo di elemento	% Non Verificate	Valore Massimo
Cedimento max	0	5.6 cm

1.10 Criteri di verifica agli stati limite indagati, in presenza di azione sismica: - stati limite ultimi, in termini di resistenza, di duttilità e di capacità di deformazione, - stati limite di esercizio, in termini di resistenza e di contenimento del danno agli elementi non strutturali:

COSTRUZIONI IN CEMENTO ARMATO

☒ Per le costruzioni in cemento armato criteri di verifica adottati sono quelli riportati al § 7.4.4 delle NTC18 nel quale vengono riportate le indicazioni da applicare agli elementi principali delle strutture in elevazione per i quali si effettuano le verifiche di resistenza nei modi indicati nei § 7.3.6.1 e verifiche di duttilità in accordo con il § 7.3.6.2

☒ La possibile espulsione sotto l'azione della Fa delle tamponature si può ritenere conseguita con

☒ con l'inserimento di elementi di armatura orizzontale nei letti di malta, a distanza non superiore a 500 mm.

☒ con verifiche specifiche delle partizioni secondarie

Per le verifiche degli elementi strutturali in termini di resistenza, di cui al § 7.3.6.1 delle NTC, nello spettro allo SLD va considerato un valore $h=2/3$ per tenere in conto la sovraresistenza degli elementi strutturali. Per la valutazione degli spostamenti finalizzati alle verifiche degli elementi strutturali in termini di contenimento del danno agli elementi non strutturali, di cui al § 7.3.6.1 delle NTC, si pone sempre $h=1$ in quanto, anche nel caso in cui si verificasse un limitato danneggiamento di alcuni elementi strutturali, si assume comunque che gli spostamenti complessivi della costruzione siano pari a quelli calcolati nell'ipotesi di struttura elastica.

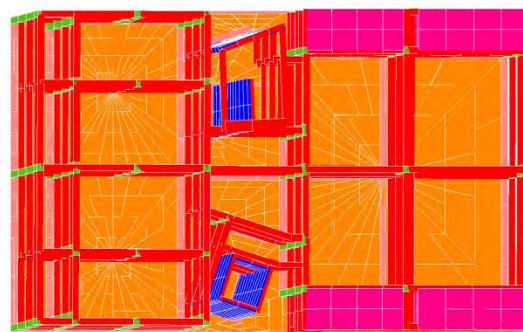
1.11 Rappresentazione delle configurazioni deformate e delle caratteristiche di sollecitazione delle strutture più significative, così come emergenti dai risultati dell'analisi, sintesi delle verifiche di sicurezza, e giudizio motivato di accettabilità dei risultati;

Di seguito si riportano i modi di vibrare che caratterizzano il comportamento dinamico della struttura:

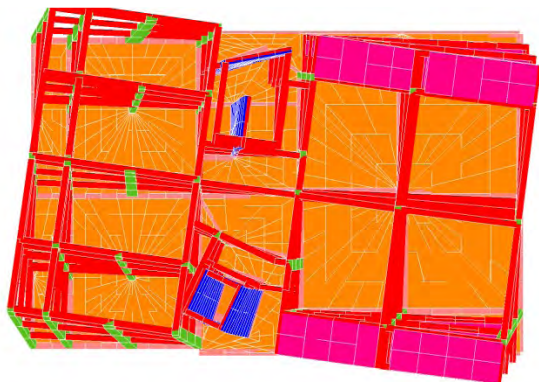
Modo n.1



Modo n.2



Modo n.3

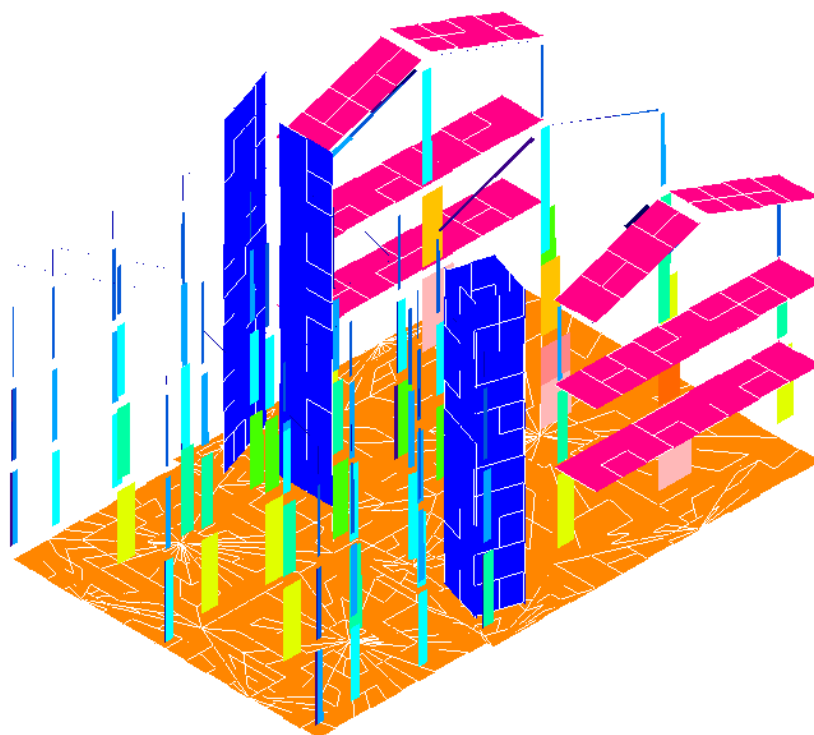


Modo n.4



Di seguito si riportano gli involuپی delle sollecitazioni principali:

Sforzo Normale - Involuppo



SPORZO NORMALE(ϵ)
(valore assoluto)

-144

-132

-119

-107

-94

-82

-69

-57

-44

-32

-19

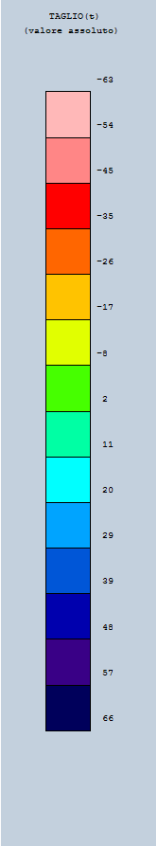
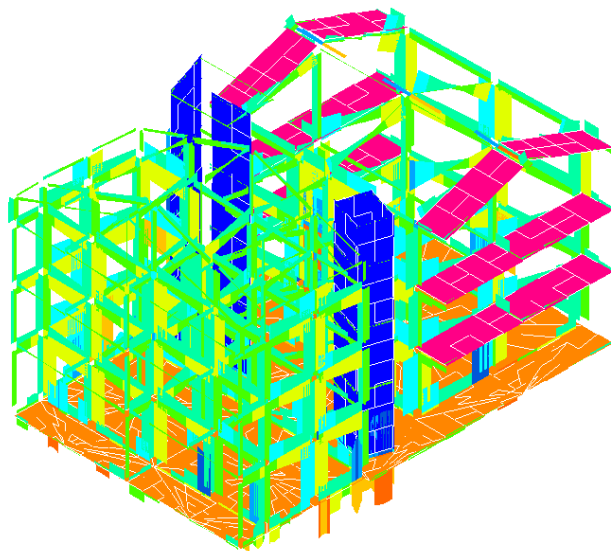
-7

6

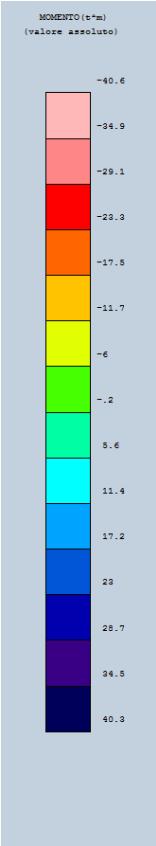
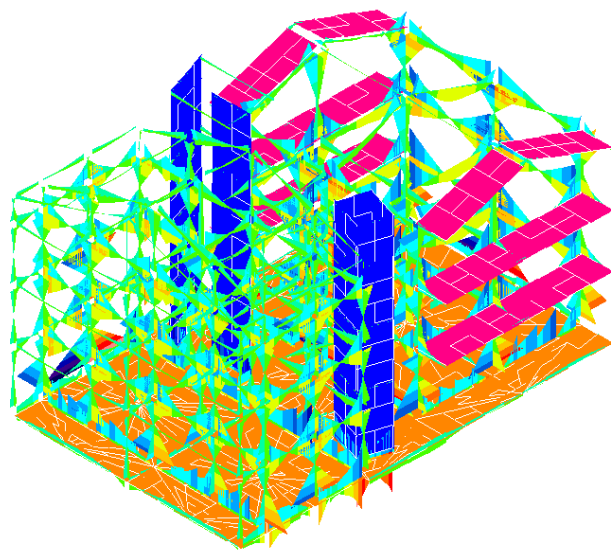
18

31

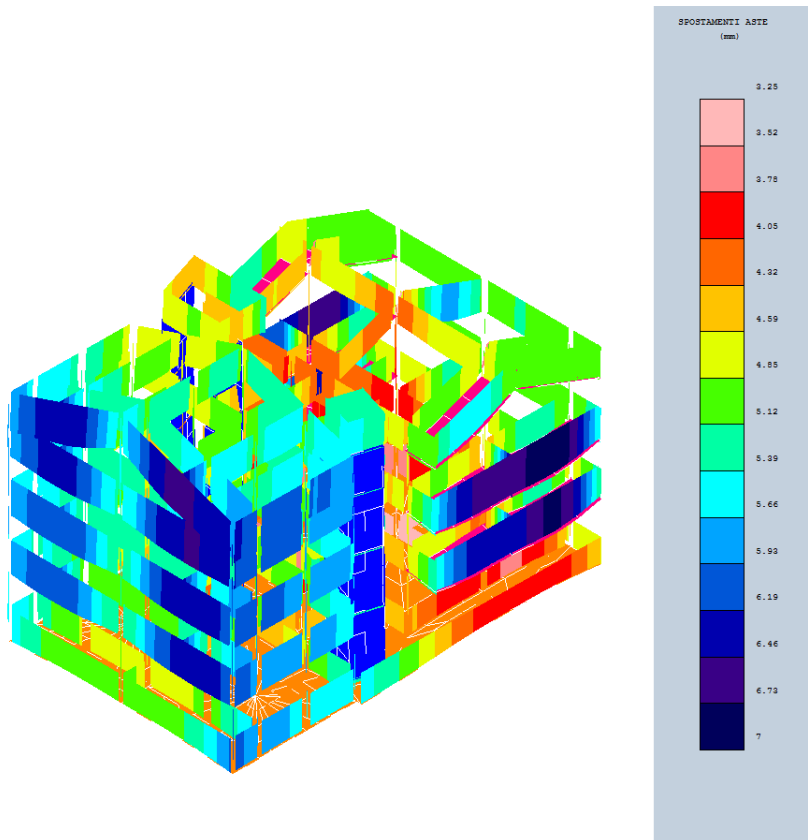
Taglio X/Y - Involuppo



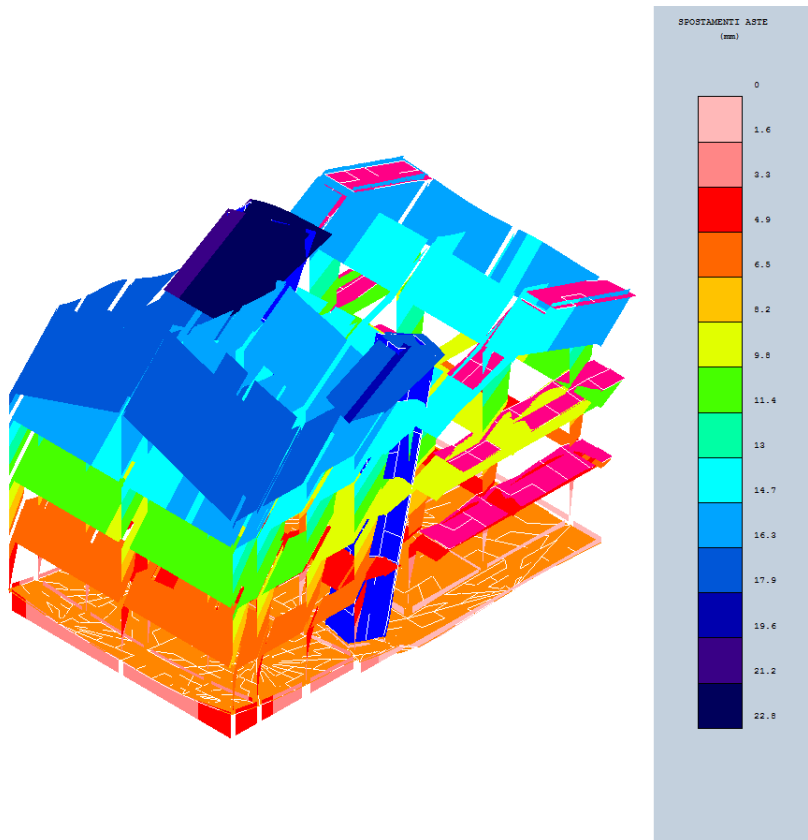
Momento Flettente 1/2 - Involuppo



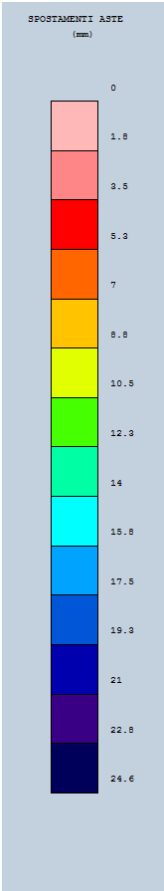
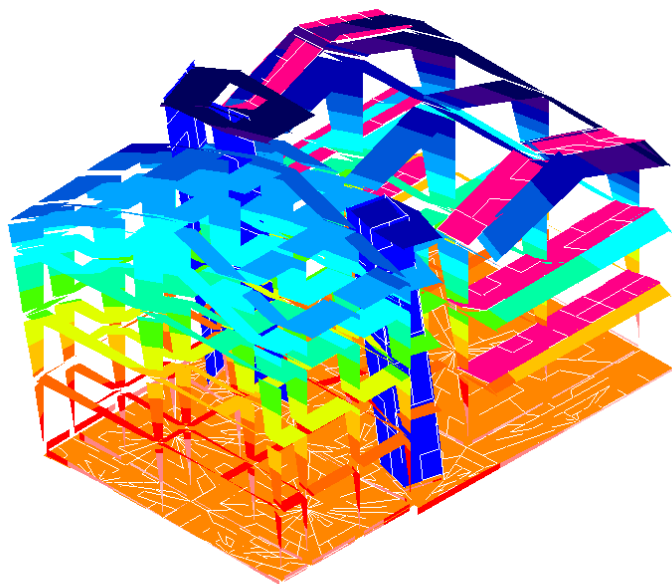
Deformata - Condizione Statica



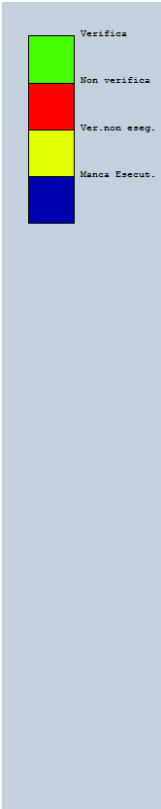
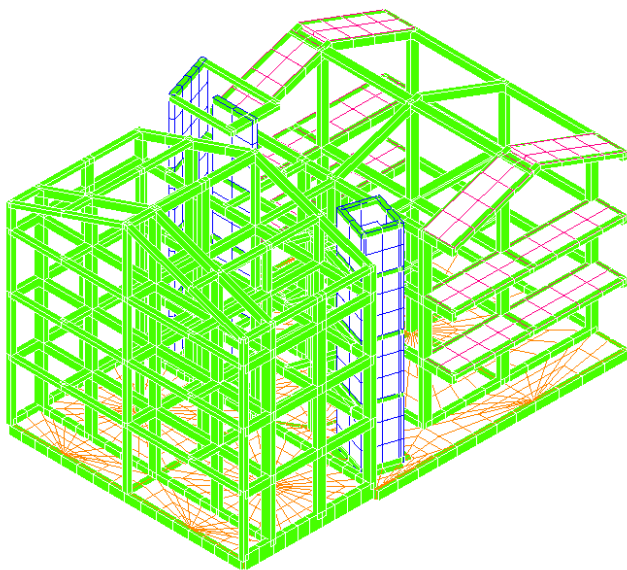
Deformata - Condizione Sismica Dir1



Deformata - Condizione Sismica Dir2



Si evince infine che le verifiche condotte sono soddisfatte:

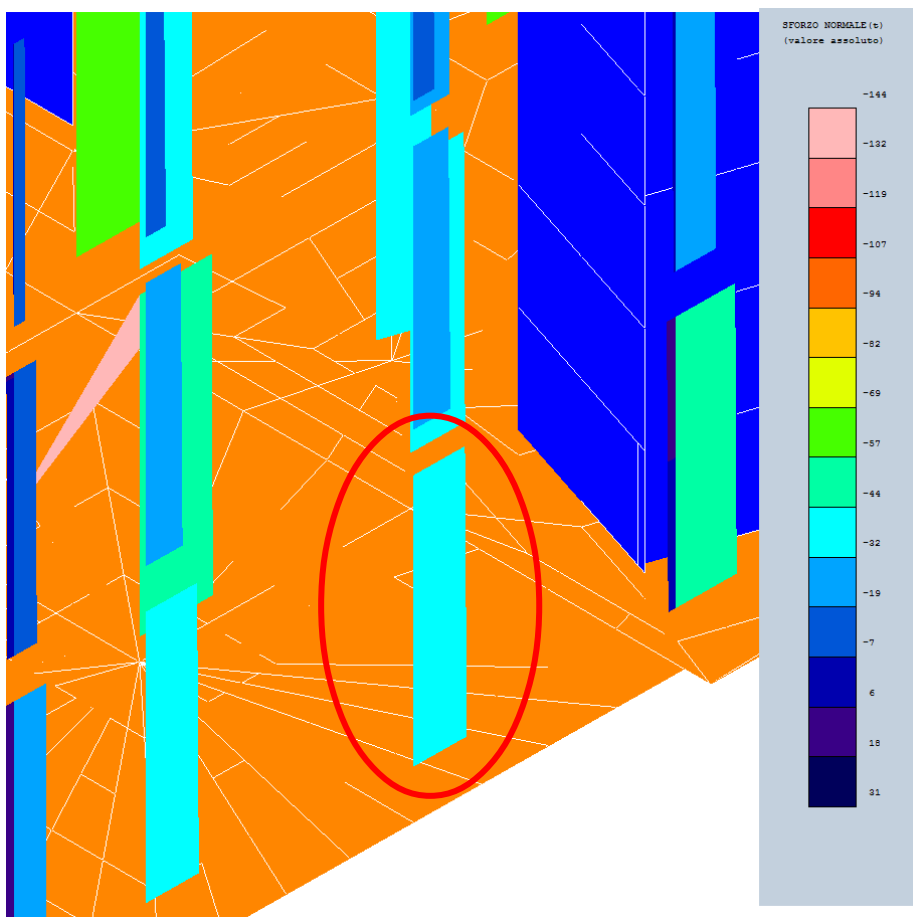


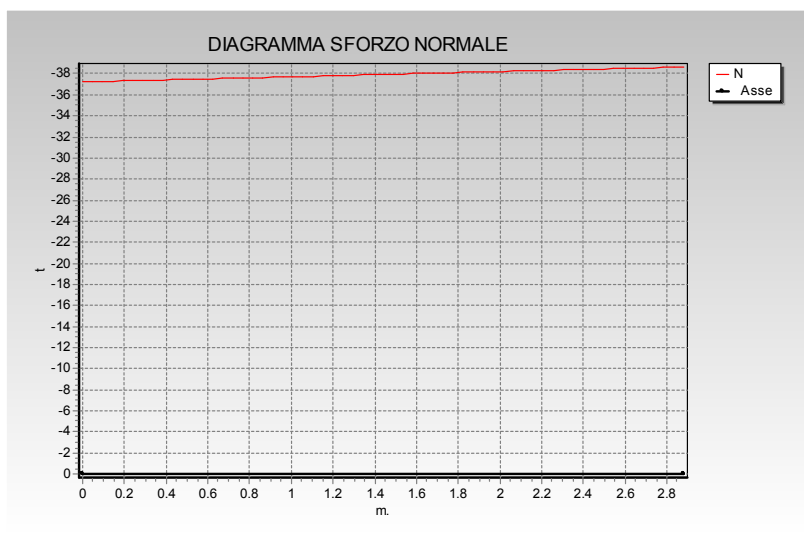
Il software utilizzato ha permesso di modellare analiticamente il comportamento fisico della struttura utilizzando la libreria disponibile di elementi finiti. Le funzioni di visualizzazione ed interrogazione sul modello hanno consentito di controllare sia la coerenza geometrica che la adeguatezza delle azioni applicate rispetto alla realtà fisica. Inoltre la visualizzazione ed interrogazione dei risultati ottenuti dall'analisi quali: sollecitazioni, tensioni, deformazioni, spostamenti e reazioni vincolari, hanno permesso un immediato controllo di tali valori con i risultati ottenuti mediante schemi semplificati della struttura stessa. Si è inoltre riscontrato che le reazioni vincolari sono in equilibrio con i carichi applicati, e che i valori dei taglianti di base delle azioni sismiche sono confrontabili con gli omologhi valori ottenuti da modelli SDOF semplificati. Sono state inoltre individuate un numero di travi ritenute significative e, per tali elementi, e' stata effettuata una apposita verifica a flessione e taglio. Le sollecitazioni fornite dal solutore per tali travi sono state validate effettuando gli equilibri alla rotazione e traslazione delle dette travi, secondo quanto meglio descritto nel calcolo semplificato, allegato alla presente relazione. Si sono infine eseguite le verifiche di tali travi con metodologie semplificate e, confrontandole con le analoghe verifiche prodotte in automatico dal programma, si e' potuto riscontrare la congruenza di tali risultati con i valori riportati dal software.

Si è inoltre verificato che tutte le funzioni di controllo ed autodiagnostica del software abbiano dato tutte esito positivo.

Da quanto sopra esposto si può quindi affermare che il calcolo e' andato a buon fine e che il modello di calcolo utilizzato e' risultato essere rappresentativo della realtà fisica, anche in funzione delle modalità e sequenze costruttive.

Si allega dimostrazione dei controlli eseguiti:





È stato eseguito il controllo dei risultati verificando che nella combinazione SLU-Carichi statici i valori coincidessero con quelli ottenuti attraverso semplici calcoli.

L'incidenza dei solai è stata considerata nel seguente modo:

$$P_{\text{Solaio}} = (365+330) \times 1.3 + 200 \times 1.5 = 1210 \text{ kg/mq}$$

$$P_{\text{Copertura}} = (365+155) \times 1.3 + 120 \times 1.5 = 860 \text{ kg/mq}$$

L'area d'incidenza per il pilastro centrale in questione è pari a: $2.80 \times 1.45 = 4.1 \text{ mq}$

Quindi:

$$P_{\text{tot}} = 14900+3600 \text{ kg} = 18500 \text{ kg}$$

Allo stesso modo è stato valutato il carico derivante dal pilastro e dalle travi in c.a.:

$$P_{\text{Pilastro}} = 0.5 \times 0.3 \times 12 \times 2500 = 4500 \text{ kg} \times 1.3 = 5850 \text{ kg}$$

$$P_{\text{Travi}} = 4 \times (0.45 \times 0.3 \times 3.1 \times 2500) = 4400 \text{ kg} \times 1.3 = 5720 \text{ kg}$$

Inoltre è stata considerata l'incidenza dei tamponamenti presenti pari a: $2.8 \times 12 \times 0.3 \times 800 = 8064 \text{ kg}$

Quindi riassumendo lo sforzo normale ottenuto dal controllo eseguito corrisponde a:

$$N_{\text{tot}} = 38100 \text{ kg}$$

Il valore è paragonabile a quanto riportato nel programma di calcolo $N = 38600 \text{ kg}$ perchè compreso nella percentuale di errore ammissibile, viste le approssimazioni considerate.

1.12 Caratteristiche e affidabilità del codice di calcolo:

Origine e caratteristiche dei codici di calcolo:

Produttore	S.T.S. srl
Titolo	CDSWin
Versione	Rel. 2018
N.ro Licenza	30336

Ragione sociale completa del produttore del software:
S.T.S. s.r.l. Software Tecnico Scientifico S.r.l.

**Via Tre Torri n°11 – Complesso Tre Torri
95030 Sant'Agata li Battiati (CT).**

L'affidabilità del codice utilizzato e la sua idoneità al caso in esame, è stata attentamente verificata sia effettuando il raffronto tra casi prova di cui si conoscono i risultati esatti sia esaminando le indicazioni, la documentazione ed i test forniti dal produttore stesso.

La S.T.S. s.r.l., a riprova dell'affidabilità dei risultati ottenuti, fornisce direttamente on-line i test sui casi prova liberamente consultabili all' indirizzo:

<http://www.stsweb.it/STSWeb/ITA/homepage.htm>

1.13 Con riferimento alle strutture geotecniche o di fondazione: fasi di realizzazione dell'opera (se pertinenti), sintesi delle massime pressioni attese, cedimenti e spostamenti assoluti/differenziali, distorsioni angolari, verifiche di stabilità terreno-fondazione eseguite, ed altri aspetti e risultati significativi della progettazione di opere particolari:

In base alle elaborazioni delle indagini effettuate, è stato possibile suddividere la stratigrafia dell'area nelle seguenti unità:

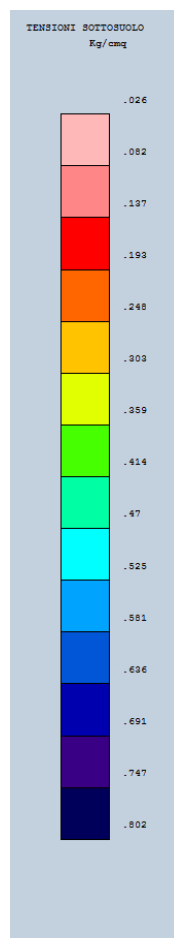
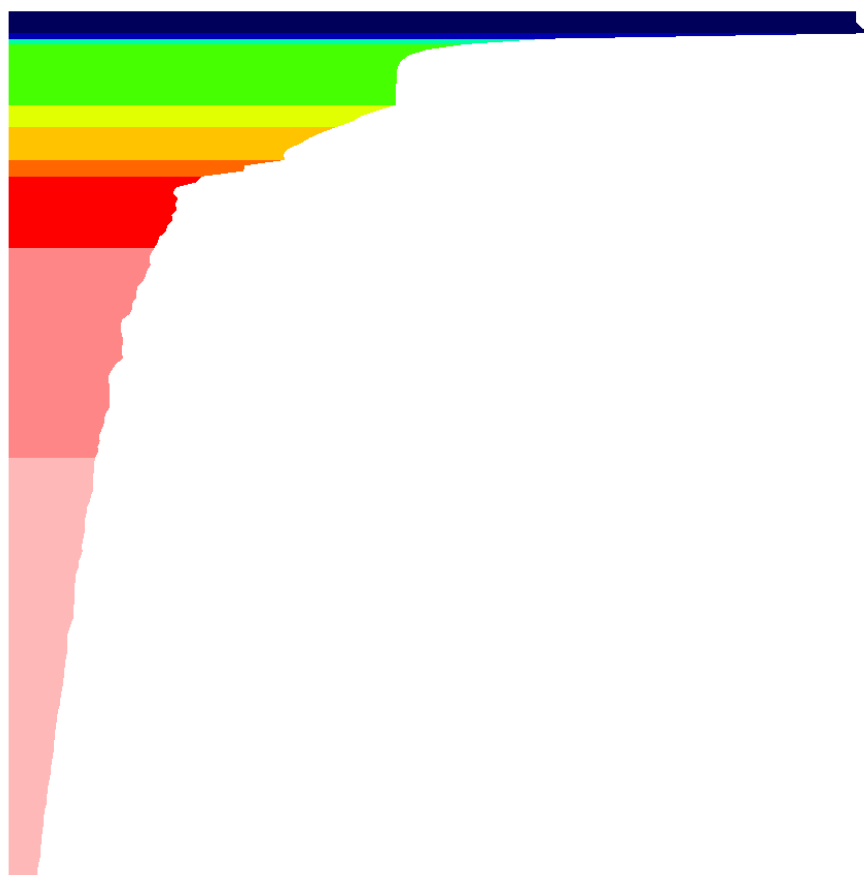
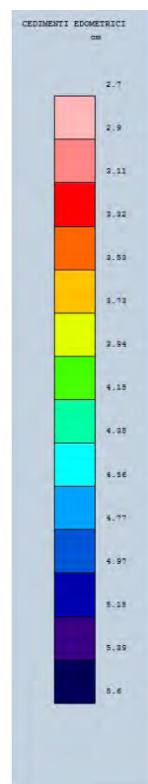
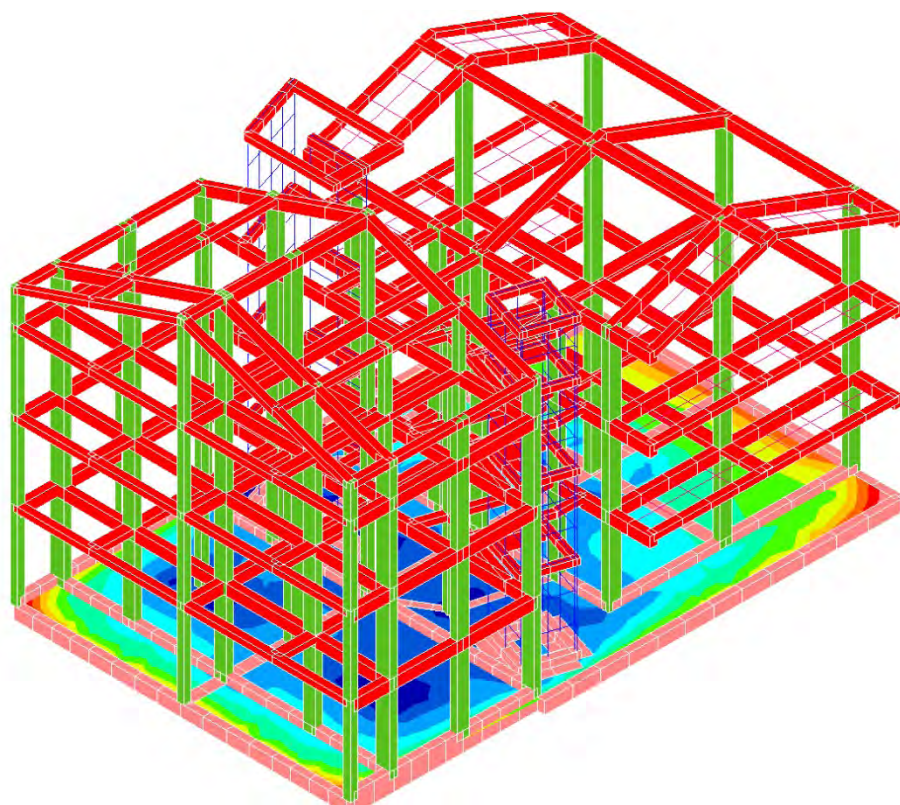
Strato	Tipologia Terreno
0 - 5.00 m	Sabbia fine e/o medio fine limosa mediamente addensata
5.00 - 8.2 m	Sabbia fine e/o medio fine limosa mediamente addensata con intercalazioni lentiformi di limo sabbioso e limo argilloso
8.2 - 12.7 m	Limo argilloso e/o argilla limosa da molle a mediamente consistente
12.7 - 16 m	Limo argilloso e/o argilla limosa mediamente consistente

Falda: ☒ SI ☐ NO

Profondità: -1.5 m dal piano campagna

Sulla base delle caratteristiche dei terreni, descritte nella Relazione geologica a firma del Dott. Geol. Aldo Antoniazzi sono state effettuate le dovute considerazioni per il progetto delle strutture di fondazione, di seguito si riporta un breve riassunto.

Stato tensionale terreno di fondazione



Elaborato 2

RELAZIONE DI CALCOLO STRUTTURALE

2. RELAZIONE DI CALCOLO STRUTTURALE

2.1 Modello/i numerico/i

Di seguito i dati del modello numerico utilizzato:

COORDINATE E TIPOLOGIA FILI FISSI							
Filo	Ascissa	Ordinata		Filo	Ascissa	Ordinata	
N.ro	m	m		N.ro	m	m	
1	0.00	5.43		2	0.00	0.00	
3	0.00	-1.88		4	-5.43	-1.88	
5	-5.43	0.00		6	-5.43	5.43	
7	-5.43	10.85		8	-5.43	12.74	
9	0.00	10.85		10	0.00	12.74	
11	-10.12	12.74		12	-11.52	11.80	
13	-12.93	11.35		14	-11.65	10.43	
15	-11.31	10.43		16	-10.12	10.43	
17	-10.12	10.85		18	-10.11	9.45	
19	-10.10	6.87		20	-11.20	7.22	
21	-11.31	7.21		22	-11.65	7.22	
23	-13.20	9.45		24	-13.20	8.26	
25	-13.20	7.07		26	-14.77	7.07	
27	-14.77	9.27		28	-14.77	9.45	
29	-14.77	10.71		30	-14.43	10.82	
31	-14.77	12.43		32	-14.77	12.74	
33	-17.84	12.43		34	-20.73	12.43	
35	-22.36	12.43		36	-22.36	9.27	
37	-20.73	9.27		38	-17.84	9.27	
39	-17.84	5.43		40	-20.73	5.43	
41	-22.36	5.43		42	-22.36	1.58	
43	-20.73	1.58		44	-17.84	1.58	
45	-14.77	1.58		46	-14.77	-0.52	
47	-14.31	-0.65		48	-14.77	-1.58	

COORDINATE E TIPOLOGIA FILI FISSI							
Filo	Ascissa	Ordinata		Filo	Ascissa	Ordinata	
N.ro	m	m		N.ro	m	m	
49	-14.77	-1.88		50	-17.84	-1.58	
51	-20.73	-1.58		52	-22.36	-1.58	
53	-10.11	-1.88		54	-10.11	0.00	
55	-12.52	4.94		56	-13.43	3.16	
57	-14.38	3.46		58	-13.98	1.92	
59	-13.53	1.78		60	-13.63	1.50	
61	-12.61	-1.19		62	-14.77	5.43	
63	-11.93	0.96		64	-11.84	1.24	
65	-11.31	1.07		66	-10.13	1.07	
67	-10.78	2.32		68	-11.43	2.53	
69	-10.12	2.32		70	-10.12	5.43	
71	-10.11	4.17		72	-10.82	4.40	
73	-10.12	7.22		74	-14.77	3.59	
75	-14.43	7.07		76	-5.03	0.00	
77	-5.03	5.43		78	-5.03	10.85	
79	-5.03	12.74		80	-5.03	-1.88	

QUOTE PIANI SISMICI ED INTERPIANI										
Quota	Altezza	Tipologia	IrregTamp			Quota	Altezza	Tipologia	IrregTamp	
N.ro	m		XY	Alt.		N.ro	m		XY	Alt.
0	0.00	Piano Terra				1	3.63	Piano sismico	NO	NO
2	6.88	Piano sismico	NO	NO		3	10.13	Piano sismico	NO	NO
4	13.88	Piano sismico	NO	NO						

PILASTRI IN C.A. QUOTA 3.63 m												
Filo	Sez.	Tipologia				Magrone	Ang.	Cod.	dx	dy	Crit.	Tipo Elemento
N.ro	N.ro				(cm)	(cm)	(Grd)		(cm)	(cm)	N.ro	ai fini sismici
1	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
2	28	Rett.	50.00	x	30.00	0.0	0.00	0	-10.00	0.00	5	SismoResist.
5	28	Rett.	50.00	x	30.00	0.0	0.00	0	0.00	0.00	5	SismoResist.
6	28	Rett.	50.00	x	30.00	0.0	0.00	0	0.00	0.00	5	SismoResist.
7	28	Rett.	50.00	x	30.00	0.0	0.00	0	0.00	0.00	5	SismoResist.
9	28	Rett.	50.00	x	30.00	0.0	0.00	0	-10.00	0.00	5	SismoResist.
17	28	Rett.	50.00	x	30.00	0.0	0.00	0	10.00	0.00	5	SismoResist.
27	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
31	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	-10.00	3	SismoResist.

PILASTRI IN C.A. QUOTA 10.13 m												
Filo N.ro	Sez. N.ro	Tipologia (cm)				Magrone (cm)	Ang. (Grd)	Cod.	dx (cm)	dy (cm)	Crit. N.ro	Tipo Elemento ai fini sismici
45	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
48	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	10.00	3	SismoResist.
50	28	Rett.	50.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
51	4	Rett.	30.00	x	60.00	0.0	0.00	0	0.00	15.00	3	SismoResist.
52	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
54	28	Rett.	50.00	x	30.00	0.0	0.00	0	10.00	0.00	3	SismoResist.
56	1	Rett.	30.00	x	30.00	0.0	-17.65	0	-14.00	4.00	3	SismoResist.
62	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
69	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	-10.00	3	SismoResist.
70	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
73	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	0.00	3	SismoResist.

PILASTRI IN C.A. QUOTA 13.88 m												
Filo N.ro	Sez. N.ro	Tipologia (cm)				Magrone (cm)	Ang. (Grd)	Cod.	dx (cm)	dy (cm)	Crit. N.ro	Tipo Elemento ai fini sismici
27	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
31	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	-10.00	3	SismoResist.
33	28	Rett.	50.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
34	4	Rett.	30.00	x	60.00	0.0	0.00	0	0.00	-15.00	3	SismoResist.
35	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
37	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
38	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
39	28	Rett.	50.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
40	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
41	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
43	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	10.00	3	SismoResist.
44	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
45	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
48	29	Rett.	30.00	x	50.00	0.0	0.00	0	0.00	10.00	3	SismoResist.
50	28	Rett.	50.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
51	4	Rett.	30.00	x	60.00	0.0	0.00	0	0.00	15.00	3	SismoResist.
52	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.
62	1	Rett.	30.00	x	30.00	0.0	0.00	0	0.00	0.00	3	SismoResist.

TRAVI IN C.A. ALLA QUOTA 0 m																										
		DATI GENERALI				QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit		
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo		
1	30	Tel.SismoRes	0	34	37	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
2	30	Tel.SismoRes	0	37	40	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
3	30	Tel.SismoRes	0	40	43	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
4	30	Tel.SismoRes	0	43	51	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
5	30	Tel.SismoRes	0	51	50	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
6	30	Tel.SismoRes	0	34	33	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
7	30	Tel.SismoRes	0	50	48	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
8	30	Tel.SismoRes	0	33	31	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
9	30	Tel.SismoRes	0	48	45	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
10	30	Tel.SismoRes	0	62	26	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
11	30	Tel.SismoRes	0	27	29	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		
12	30	Tel.SismoRes	0	35	34	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2		

TRAVI IN C.A. ALLA QUOTA 0 m																												
		DATI GENERALI					QUOTE		SCOSTAMENTI							CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit				
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo				
13	30	Tel.SismoRes	0	45	62	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
14	30	Tel.SismoRes	0	52	51	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
15	32	Tel.SismoRes	0	35	36	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
16	30	Tel.SismoRes	0	17	7	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
17	32	Tel.SismoRes	0	41	42	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
18	30	Tel.SismoRes	0	9	1	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
19	30	Tel.SismoRes	0	54	5	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
20	30	Tel.SismoRes	0	54	69	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
21	30	Tel.SismoRes	0	7	9	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
22	30	Tel.SismoRes	0	1	2	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
23	30	Tel.SismoRes	0	5	2	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
24	30	Tel.SismoRes	0	73	18	0.00	0.00	0	0	30	-1	0	30	0	0	0	0	0	0	0	0	0	2	2				
25	31	Tel.SismoRes	0	70	6	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
26	30	Tel.SismoRes	0	70	73	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
27	31	Tel.SismoRes	0	5	6	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
28	30	Tel.SismoRes	0	69	70	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2				
29	31	Tel.SismoRes	0	6	1	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
30	31	Tel.SismoRes	0	6	7	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
31	32	Tel.SismoRes	0	9	10	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
32	32	Tel.SismoRes	0	10	8	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
33	32	Tel.SismoRes	0	2	3	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
34	32	Tel.SismoRes	0	49	53	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
35	32	Tel.SismoRes	0	8	11	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
36	32	Tel.SismoRes	0	11	32	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
37	32	Tel.SismoRes	0	4	3	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				
38	32	Tel.SismoRes	0	53	4	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2				

TRAVI IN C.A. ALLA QUOTA 0 m																											
		DATI GENERALI					QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit			
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo			
39	31	Tel.SismoRes	0	41	40	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
40	31	Tel.SismoRes	0	62	70	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
41	31	Tel.SismoRes	0	39	62	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
42	31	Tel.SismoRes	0	40	39	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
43	44	Tel.SismoRes	0	30	12	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
44	32	Tel.SismoRes	0	12	17	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
45	30	Tel.SismoRes	0	29	31	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
46	44	Tel.SismoRes	0	30	29	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
47	32	Tel.SismoRes	0	62	56	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
48	32	Tel.SismoRes	0	56	45	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
49	32	Tel.SismoRes	0	56	69	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
50	44	Tel.SismoRes	0	25	23	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
51	32	Tel.SismoRes	0	23	18	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
53	32	Tel.SismoRes	0	27	23	0.00	0.00	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
54	30	Tel.SismoRes	0	26	25	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
55	30	Tel.SismoRes	0	26	27	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
56	30	Tel.SismoRes	0	18	17	0.00	0.00	-1	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
57	47	Tel.SismoRes	0	60	47	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
58	47	Tel.SismoRes	0	60	63	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
59	47	Tel.SismoRes	0	63	61	0.00	0.00	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	2	2			
60	47	Tel.SismoRes	0	61	47	0.00	0.00	16	8	30	-8	16	30	0	0	0	0	0	0	0	0	0	2	2			
61	32	Tel.SismoRes	0	36	41	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
62	32	Tel.SismoRes	0	42	52	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			

TRAVI IN C.A. ALLA QUOTA 3.63 m																									
		DATI GENERALI				QUOTE		SCOSTAMENTI						CARICHI											
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit	
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo	
6	26	Tel.SismoRes	0	35	36	3.63	3.63	0	0	0	0	0	0	765	0	0	0	765	0	0	0	30	1		

TRAVI IN C.A. ALLA QUOTA 3.63 m																											
		DATI GENERALI					QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit			
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo			
7	26	Tel.SismoRes	0	41	42	3.63	3.63	0	0	0	0	0	0	774	0	0	0	774	0	0	0	30	1				
8	25	Tel.SismoRes	0	35	34	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
9	25	Tel.SismoRes	0	52	51	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
10	25	Tel.SismoRes	0	33	31	3.63	3.63	0	0	0	0	0	0	1437	728	0	0	2165	0	0	0	30	1				
11	25	Tel.SismoRes	0	34	33	3.63	3.63	0	0	0	0	0	0	1437	728	0	0	2165	0	0	0	30	1				
12	25	Tel.SismoRes	0	50	48	3.63	3.63	0	0	0	0	0	0	1437	728	0	0	2165	0	0	0	30	1				
13	25	Tel.SismoRes	0	51	50	3.63	3.63	0	0	0	0	0	0	1438	728	0	0	2166	0	0	0	30	1				
14	25	Tel.SismoRes	0	31	29	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
15	25	Tel.SismoRes	0	29	27	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
16	25	Tel.SismoRes	0	27	26	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
17	25	Tel.SismoRes	0	62	74	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
18	25	Tel.SismoRes	0	45	46	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
19	25	Tel.SismoRes	0	46	48	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
20	25	Tel.SismoRes	0	62	39	3.63	3.63	0	0	0	0	0	0	3336	728	0	0	4064	0	0	0	30	1				
21	25	Tel.SismoRes	0	39	40	3.63	3.63	0	0	0	0	0	0	3335	728	0	0	4063	0	0	0	30	1				
22	25	Tel.SismoRes	0	40	41	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
23	25	Tel.SismoRes	0	34	37	3.63	3.63	0	0	0	0	0	0	719	728	0	0	1447	0	0	0	30	1				
24	25	Tel.SismoRes	0	37	40	3.63	3.63	0	0	0	0	0	0	700	728	0	0	1428	0	0	0	30	1				
25	25	Tel.SismoRes	0	40	43	3.63	3.63	0	0	0	0	0	0	709	728	0	0	1437	0	0	0	30	1				
26	25	Tel.SismoRes	0	43	51	3.63	3.63	0	0	0	0	0	0	706	728	0	0	1434	0	0	0	30	1				
27	39	Tel.SismoRes	0	27	38	3.63	3.63	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
28	39	Tel.SismoRes	0	45	44	3.63	3.63	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
29	39	Tel.SismoRes	0	37	36	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
30	39	Tel.SismoRes	0	38	37	3.63	3.63	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
31	39	Tel.SismoRes	0	43	42	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
32	39	Tel.SismoRes	0	44	43	3.63	3.63	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				

TRAVI IN C.A. ALLA QUOTA 3.63 m																												
		DATI GENERALI					QUOTE		SCOSTAMENTI							CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit				
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo				
33	26	Tel.SismoRes	0	36	41	3.63	3.63	0	0	0	0	0	0	783	0	0	0	783	0	0	0	30	1					
34	26	Tel.SismoRes	0	42	52	3.63	3.63	0	0	0	0	0	0	776	0	0	0	776	0	0	0	30	1					
35	25	Tel.SismoRes	0	17	7	3.63	3.63	0	0	0	0	0	0	2895	728	0	0	3623	0	0	0	30	1					
36	25	Tel.SismoRes	0	54	5	3.63	3.63	0	0	0	0	0	0	2893	728	0	0	3621	0	0	0	30	1					
37	25	Tel.SismoRes	0	2	1	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
38	25	Tel.SismoRes	0	9	10	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
39	25	Tel.SismoRes	0	2	3	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
40	25	Tel.SismoRes	0	7	9	3.63	3.63	0	0	0	0	0	0	2890	728	0	0	3618	0	0	0	30	1					
41	25	Tel.SismoRes	0	5	2	3.63	3.63	0	0	0	0	0	0	2887	728	0	0	3615	0	0	0	30	1					
42	25	Tel.SismoRes	0	1	9	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
43	25	Tel.SismoRes	0	53	54	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
44	25	Tel.SismoRes	0	54	66	3.63	3.63	0	0	0	1	0	0	0	728	0	0	728	0	0	0	0	1					
45	25	Tel.SismoRes	0	69	70	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
46	25	Tel.SismoRes	0	70	73	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
47	25	Tel.SismoRes	0	73	16	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
48	25	Tel.SismoRes	0	17	11	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
49	26	Tel.SismoRes	0	11	8	3.63	3.63	0	-13	0	0	-13	0	568	0	0	0	568	0	0	0	30	1					
50	26	Tel.SismoRes	0	53	4	3.63	3.63	0	13	0	0	13	0	565	0	0	0	565	0	0	0	30	1					
51	26	Tel.SismoRes	0	8	10	3.63	3.63	0	-13	0	0	-13	0	569	0	0	0	569	0	0	0	30	1					
52	26	Tel.SismoRes	0	4	3	3.63	3.63	0	13	0	0	13	0	566	0	0	0	566	0	0	0	30	1					
53	33	Tel.SismoRes	0	7	8	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
54	33	Tel.SismoRes	0	5	4	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
55	38	Tel.SismoRes	0	5	6	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
56	38	Tel.SismoRes	0	6	7	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
57	48	Tel.SismoRes	0	70	6	3.63	3.63	0	0	0	0	0	0	4620	728	0	0	5348	0	0	0	30	1					
58	48	Tel.SismoRes	0	6	1	3.63	3.63	0	0	0	0	0	0	4628	728	0	0	5356	0	0	0	30	1					

TRAVI IN C.A. ALLA QUOTA 3.63 m																												
		DATI GENERALI					QUOTE		SCOSTAMENTI							CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit				
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo				
59	26	Tel.SismoRes	0	62	70	3.63	3.63	0	0	0	0	0	0	1892	0	0	0	1892	0	0	0	30	1					
60	26	Tel.SismoRes	0	26	25	3.63	3.63	0	15	0	0	15	0	852	0	0	1700	2552	0	0	0	30	1					
61	26	Tel.SismoRes	0	21	73	3.63	3.63	0	1	0	0	0	0	2193	0	0	0	2193	0	0	0	30	1					
62	26	Tel.SismoRes	0	25	21	3.63	3.63	0	15	0	0	1	0	852	0	0	1700	2552	0	0	0	30	1					
63	26	Tel.SismoRes	0	74	56	3.63	3.63	0	0	0	0	0	0	1678	728	0	0	2406	0	0	0	30	1					
64	25	Tel.SismoRes	0	26	62	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
65	26	Tel.SismoRes	0	16	15	3.63	3.63	0	0	0	0	0	0	1507	0	0	0	1507	0	0	0	30	1					
66	26	Tel.SismoRes	0	14	12	3.63	3.63	0	0	0	-13	0	0	0	0	0	0	0	0	0	0	0	1					
67	27	Tel.SismoRes	0	15	21	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
68	26	Tel.SismoRes	0	56	58	3.63	3.63	-14	4	0	0	0	0	92	728	0	0	820	0	0	0	30	1					
69	26	Tel.SismoRes	0	58	46	3.63	3.63	0	0	0	0	0	0	421	728	0	0	1149	0	0	0	30	1					
70	27	Tel.SismoRes	0	66	65	3.63	3.63	0	0	0	0	0	0	615	0	0	0	615	0	0	0	30	1					
71	27	Tel.SismoRes	0	65	64	3.63	3.63	0	0	0	0	0	0	645	0	0	0	645	0	0	0	30	1					
72	27	Tel.SismoRes	0	63	64	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
73	27	Tel.SismoRes	0	60	59	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
74	27	Tel.SismoRes	0	59	58	3.63	3.63	0	0	0	0	0	0	316	0	0	0	316	0	0	0	30	1					
75	27	Tel.SismoRes	0	64	59	3.63	3.63	0	0	0	0	0	0	645	0	0	0	645	0	0	0	30	1					
76	26	Tel.SismoRes	0	56	67	3.63	3.63	0	0	0	0	0	0	1666	0	0	0	1666	0	0	0	30	1					
77	26	Tel.SismoRes	0	67	69	3.63	3.63	0	0	0	0	0	0	1888	0	0	0	1888	0	0	0	30	1					
78	34	Tel.SismoRes	0	60	63	3.63	3.63	-4	-12	0	-4	-12	0	0	0	0	0	0	0	0	0	0	1					
79	42	Tel.SismoRes	0	30	29	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
80	26	Tel.SismoRes	0	15	14	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
81	25	Tel.SismoRes	0	74	45	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
82	25	Tel.SismoRes	0	66	69	3.63	3.63	1	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
83	25	Tel.SismoRes	0	16	17	3.63	3.63	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					

SETTI ALLA QUOTA 3.63 m																												
		GEOMETRIA				QUOTE		SCOSTAMENTI						CARICHI VERTICALI										PRESSIONI		RINFORZI MUR		
Sett	Sez	Sp.	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann	Tamp	Ball	Espl	Tot.	Torc	Orizz	Assia	Ali	Psup.	Pinf.	Mat	Ini	Fin.		
N.ro	N.r	cm	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm							kg / m	kg	kg / m	%	kg/mq	Nro	cm	cm		
1	603	28	30	12	3.63	3.63	0	0	0	0	0	0	0	0	0	1700	1700	0	0	0	0	0	0					
2	603	28	25	23	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
3	602	25	60	47	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
4	602	25	63	61	3.63	3.63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
5	602	25	47	61	3.63	3.63	-8	16	0	16	8	0	0	0	0	0	0	0	0	0	0	0	0					

TRAVI IN C.A. ALLA QUOTA 6.88 m																											
		DATI GENERALI					QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit			
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo			
6	26	Tel.SismoRes	0	35	36	6.88	6.88	0	0	0	0	0	0	765	0	0	0	765	0	0	0	30	1				
7	26	Tel.SismoRes	0	41	42	6.88	6.88	0	0	0	0	0	0	774	0	0	0	774	0	0	0	30	1				
8	25	Tel.SismoRes	0	35	34	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
9	25	Tel.SismoRes	0	52	51	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
10	25	Tel.SismoRes	0	33	31	6.88	6.88	0	0	0	0	0	0	1437	728	0	0	2165	0	0	0	30	1				
11	25	Tel.SismoRes	0	34	33	6.88	6.88	0	0	0	0	0	0	1437	728	0	0	2165	0	0	0	30	1				
12	25	Tel.SismoRes	0	50	48	6.88	6.88	0	0	0	0	0	0	1437	728	0	0	2165	0	0	0	30	1				
13	25	Tel.SismoRes	0	51	50	6.88	6.88	0	0	0	0	0	0	1438	728	0	0	2166	0	0	0	30	1				
14	25	Tel.SismoRes	0	31	29	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
15	25	Tel.SismoRes	0	29	27	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
16	25	Tel.SismoRes	0	27	26	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
17	25	Tel.SismoRes	0	62	74	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
18	25	Tel.SismoRes	0	45	46	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
19	25	Tel.SismoRes	0	46	48	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
20	25	Tel.SismoRes	0	62	39	6.88	6.88	0	0	0	0	0	0	3336	728	0	0	4064	0	0	0	30	1				
21	25	Tel.SismoRes	0	39	40	6.88	6.88	0	0	0	0	0	0	3335	728	0	0	4063	0	0	0	30	1				
22	25	Tel.SismoRes	0	40	41	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				

TRAVI IN C.A. ALLA QUOTA 6.88 m																											
		DATI GENERALI					QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit			
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo			
23	25	Tel.SismoRes	0	34	37	6.88	6.88	0	0	0	0	0	0	719	728	0	0	1447	0	0	0	30	1				
24	25	Tel.SismoRes	0	37	40	6.88	6.88	0	0	0	0	0	0	700	728	0	0	1428	0	0	0	30	1				
25	25	Tel.SismoRes	0	40	43	6.88	6.88	0	0	0	0	0	0	709	728	0	0	1437	0	0	0	30	1				
26	25	Tel.SismoRes	0	43	51	6.88	6.88	0	0	0	0	0	0	706	728	0	0	1434	0	0	0	30	1				
27	39	Tel.SismoRes	0	27	38	6.88	6.88	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
28	39	Tel.SismoRes	0	45	44	6.88	6.88	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
29	39	Tel.SismoRes	0	37	36	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
30	39	Tel.SismoRes	0	38	37	6.88	6.88	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
31	39	Tel.SismoRes	0	43	42	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
32	39	Tel.SismoRes	0	44	43	6.88	6.88	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
33	26	Tel.SismoRes	0	36	41	6.88	6.88	0	0	0	0	0	0	783	0	0	0	783	0	0	0	30	1				
34	26	Tel.SismoRes	0	42	52	6.88	6.88	0	0	0	0	0	0	776	0	0	0	776	0	0	0	30	1				
35	25	Tel.SismoRes	0	17	7	6.88	6.88	0	0	0	0	0	0	2895	728	0	0	3623	0	0	0	30	1				
36	25	Tel.SismoRes	0	54	5	6.88	6.88	0	0	0	0	0	0	2893	728	0	0	3621	0	0	0	30	1				
37	25	Tel.SismoRes	0	2	1	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
38	25	Tel.SismoRes	0	9	10	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
39	25	Tel.SismoRes	0	2	3	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
40	25	Tel.SismoRes	0	7	9	6.88	6.88	0	0	0	0	0	0	2890	728	0	0	3618	0	0	0	30	1				
41	25	Tel.SismoRes	0	5	2	6.88	6.88	0	0	0	0	0	0	2887	728	0	0	3615	0	0	0	30	1				
42	25	Tel.SismoRes	0	1	9	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
43	25	Tel.SismoRes	0	53	54	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
44	25	Tel.SismoRes	0	54	66	6.88	6.88	0	0	0	1	0	0	0	728	0	0	728	0	0	0	0	1				
45	25	Tel.SismoRes	0	69	70	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
46	25	Tel.SismoRes	0	70	73	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
47	25	Tel.SismoRes	0	73	16	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
48	25	Tel.SismoRes	0	17	11	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				

TRAVI IN C.A. ALLA QUOTA 6.88 m																										
		DATI GENERALI				QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit		
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo		
49	26	Tel.SismoRes	0	11	8	6.88	6.88	0	-13	0	0	-13	0	568	0	0	0	568	0	0	0	30	1			
50	26	Tel.SismoRes	0	53	4	6.88	6.88	0	13	0	0	13	0	565	0	0	0	565	0	0	0	30	1			
51	26	Tel.SismoRes	0	8	10	6.88	6.88	0	-13	0	0	-13	0	569	0	0	0	569	0	0	0	30	1			
52	26	Tel.SismoRes	0	4	3	6.88	6.88	0	13	0	0	13	0	566	0	0	0	566	0	0	0	30	1			
53	33	Tel.SismoRes	0	7	8	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
54	33	Tel.SismoRes	0	5	4	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
55	38	Tel.SismoRes	0	5	6	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
56	38	Tel.SismoRes	0	6	7	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
57	48	Tel.SismoRes	0	70	6	6.88	6.88	0	0	0	0	0	0	4620	728	0	0	5348	0	0	0	30	1			
58	48	Tel.SismoRes	0	6	1	6.88	6.88	0	0	0	0	0	0	4628	728	0	0	5356	0	0	0	30	1			
59	26	Tel.SismoRes	0	62	70	6.88	6.88	0	0	0	0	0	0	1892	0	0	0	1892	0	0	0	30	1			
60	26	Tel.SismoRes	0	26	25	6.88	6.88	0	15	0	0	15	0	852	0	0	1700	2552	0	0	0	30	1			
61	26	Tel.SismoRes	0	21	73	6.88	6.88	0	1	0	0	0	0	2193	0	0	0	2193	0	0	0	30	1			
62	26	Tel.SismoRes	0	25	21	6.88	6.88	0	15	0	0	1	0	852	0	0	1700	2552	0	0	0	30	1			
63	26	Tel.SismoRes	0	74	56	6.88	6.88	0	0	0	0	0	0	1678	728	0	0	2406	0	0	0	30	1			
64	25	Tel.SismoRes	0	26	62	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1			
65	26	Tel.SismoRes	0	16	15	6.88	6.88	0	0	0	0	0	0	1507	0	0	0	1507	0	0	0	30	1			
66	26	Tel.SismoRes	0	14	12	6.88	6.88	0	0	0	-13	0	0	0	0	0	0	0	0	0	0	0	1			
67	27	Tel.SismoRes	0	15	21	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
68	26	Tel.SismoRes	0	56	58	6.88	6.88	-14	4	0	0	0	0	92	728	0	0	820	0	0	0	30	1			
69	26	Tel.SismoRes	0	58	46	6.88	6.88	0	0	0	0	0	0	421	728	0	0	1149	0	0	0	30	1			
70	27	Tel.SismoRes	0	66	65	6.88	6.88	0	0	0	0	0	0	615	0	0	0	615	0	0	0	30	1			
71	27	Tel.SismoRes	0	65	64	6.88	6.88	0	0	0	0	0	0	645	0	0	0	645	0	0	0	30	1			
72	27	Tel.SismoRes	0	63	64	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
73	27	Tel.SismoRes	0	60	59	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
74	27	Tel.SismoRes	0	59	58	6.88	6.88	0	0	0	0	0	0	316	0	0	0	316	0	0	0	30	1			

TRAVI IN C.A. ALLA QUOTA 6.88 m																												
		DATI GENERALI					QUOTE		SCOSTAMENTI							CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit				
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo				
75	27	Tel.SismoRes	0	64	59	6.88	6.88	0	0	0	0	0	0	645	0	0	0	645	0	0	0	30	1					
76	26	Tel.SismoRes	0	56	67	6.88	6.88	0	0	0	0	0	0	1666	0	0	0	1666	0	0	0	30	1					
77	26	Tel.SismoRes	0	67	69	6.88	6.88	0	0	0	0	0	0	1888	0	0	0	1888	0	0	0	30	1					
78	34	Tel.SismoRes	0	60	63	6.88	6.88	-4	-12	0	-4	-12	0	0	0	0	0	0	0	0	0	0	1					
79	42	Tel.SismoRes	0	30	29	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
80	26	Tel.SismoRes	0	15	14	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
81	25	Tel.SismoRes	0	74	45	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
82	25	Tel.SismoRes	0	66	69	6.88	6.88	1	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
83	25	Tel.SismoRes	0	16	17	6.88	6.88	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					

SETTI ALLA QUOTA 6.88 m																											
		GEOMETRIA				QUOTE		SCOSTAMENTI						CARICHI VERTICALI								PRESSIONI		RINFORZI MUR			
Sett	Sez	Sp.	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann	Tamp	Ball	Espl	Tot.	Torc	Orizz	Assia	Ali	Psup.	Pinf.	Mat	Ini	Fin.	
N.ro	N.r	cm	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm			kg / m			kg		kg / m	%	kg/mq		Nro	cm	cm	
1	603	28	30	12	6.88	6.88	0	0	0	0	0	0	0	0	0	1700	1700	0	0	0	0	0	0				
2	603	28	25	23	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
3	602	25	60	47	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4	602	25	63	61	6.88	6.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5	602	25	47	61	6.88	6.88	-8	16	0	16	8	0	0	0	0	0	0	0	0	0	0	0	0				

TRAVI IN C.A. ALLA QUOTA 10.13 m																									
		DATI GENERALI				QUOTE		SCOSTAMENTI						CARICHI											
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit	
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo	
6	26	Tel.SismoRes	0	35	36	10.13	10.13	0	0	0	0	0	0	765	0	0	0	765	0	0	0	30	1		
7	26	Tel.SismoRes	0	41	42	10.13	10.13	0	0	0	0	0	0	774	0	0	0	774	0	0	0	30	1		
8	25	Tel.SismoRes	0	35	34	10.13	10.13	0	0	0	0	0	0	0	351	0	0	351	0	0	0	0	1		
9	25	Tel.SismoRes	0	52	51	10.13	10.13	0	0	0	0	0	0	0	351	0	0	351	0	0	0	0	1		
10	25	Tel.SismoRes	0	33	31	10.13	10.13	0	0	0	0	0	0	1437	351	0	0	1788	0	0	0	30	1		

TRAVI IN C.A. ALLA QUOTA 10.13 m																											
		DATI GENERALI					QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit			
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo			
11	25	Tel.SismoRes	0	34	33	10.13	10.13	0	0	0	0	0	0	1437	351	0	0	1788	0	0	0	30	1				
12	25	Tel.SismoRes	0	50	48	10.13	10.13	0	0	0	0	0	0	1437	351	0	0	1788	0	0	0	30	1				
13	25	Tel.SismoRes	0	51	50	10.13	10.13	0	0	0	0	0	0	1438	351	0	0	1789	0	0	0	30	1				
14	25	Tel.SismoRes	0	31	29	10.13	10.13	0	0	0	0	0	0	0	428	0	0	428	0	0	0	0	1				
15	25	Tel.SismoRes	0	29	27	10.13	10.13	0	0	0	0	0	0	0	568	0	0	568	0	0	0	0	1				
16	25	Tel.SismoRes	0	27	26	10.13	10.13	0	0	0	0	0	0	0	680	0	0	680	0	0	0	0	1				
17	25	Tel.SismoRes	0	62	74	10.13	10.13	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
18	25	Tel.SismoRes	0	45	46	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
19	25	Tel.SismoRes	0	46	48	10.13	10.13	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
20	25	Tel.SismoRes	0	62	39	10.13	10.13	0	0	0	0	0	0	3336	728	0	0	4064	0	0	0	30	1				
21	25	Tel.SismoRes	0	39	40	10.13	10.13	0	0	0	0	0	0	3335	728	0	0	4063	0	0	0	30	1				
22	25	Tel.SismoRes	0	40	41	10.13	10.13	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1				
23	25	Tel.SismoRes	0	34	37	10.13	10.13	0	0	0	0	0	0	719	491	0	0	1210	0	0	0	30	1				
24	25	Tel.SismoRes	0	37	40	10.13	10.13	0	0	0	0	0	0	700	680	0	0	1379	0	0	0	30	1				
25	25	Tel.SismoRes	0	40	43	10.13	10.13	0	0	0	0	0	0	709	680	0	0	1389	0	0	0	30	1				
26	25	Tel.SismoRes	0	43	51	10.13	10.13	0	0	0	0	0	0	706	491	0	0	1198	0	0	0	30	1				
27	39	Tel.SismoRes	0	27	38	10.13	10.13	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
28	39	Tel.SismoRes	0	45	44	10.13	10.13	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
29	39	Tel.SismoRes	0	37	36	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
30	39	Tel.SismoRes	0	38	37	10.13	10.13	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
31	39	Tel.SismoRes	0	43	42	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
32	39	Tel.SismoRes	0	44	43	10.13	10.13	0	0	0	0	0	0	2989	0	0	0	2989	0	0	0	30	1				
33	26	Tel.SismoRes	0	36	41	10.13	10.13	0	0	0	0	0	0	783	0	0	0	783	0	0	0	30	1				
34	26	Tel.SismoRes	0	42	52	10.13	10.13	0	0	0	0	0	0	776	0	0	0	776	0	0	0	30	1				
35	25	Tel.SismoRes	0	17	7	10.13	10.13	0	0	0	0	0	0	2600	0	0	0	2600	0	0	0	13	1				
36	25	Tel.SismoRes	0	54	5	10.13	10.13	0	0	0	0	0	0	3158	0	0	0	3158	0	0	0	30	1				

TRAVI IN C.A. ALLA QUOTA 10.13 m																												
		DATI GENERALI					QUOTE		SCOSTAMENTI							CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit				
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo				
37	25	Tel.SismoRes	0	2	1	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
38	25	Tel.SismoRes	0	9	10	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
39	25	Tel.SismoRes	0	2	3	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
40	25	Tel.SismoRes	0	78	9	10.13	10.13	0	0	0	0	0	0	2393	0	0	0	2393	0	0	0	0	1					
41	25	Tel.SismoRes	0	76	2	10.13	10.13	0	0	0	0	0	0	2951	0	0	0	2951	0	0	0	24	1					
42	25	Tel.SismoRes	0	1	9	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
43	25	Tel.SismoRes	0	53	54	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
44	25	Tel.SismoRes	0	54	66	10.13	10.13	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1					
45	25	Tel.SismoRes	0	69	70	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
46	25	Tel.SismoRes	0	70	73	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
47	25	Tel.SismoRes	0	73	16	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
48	25	Tel.SismoRes	0	17	11	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
49	26	Tel.SismoRes	0	11	8	10.13	10.13	0	-13	0	0	-13	0	833	0	0	0	833	0	0	0	30	1					
50	26	Tel.SismoRes	0	53	4	10.13	10.13	0	13	0	0	13	0	828	0	0	0	828	0	0	0	30	1					
51	26	Tel.SismoRes	0	79	10	10.13	10.13	0	-13	0	0	-13	0	598	0	0	0	598	0	0	0	0	1					
52	26	Tel.SismoRes	0	80	3	10.13	10.13	0	13	0	0	13	0	594	0	0	0	594	0	0	0	0	1					
53	33	Tel.SismoRes	0	7	8	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
54	33	Tel.SismoRes	0	5	4	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
55	38	Tel.SismoRes	0	5	6	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
56	38	Tel.SismoRes	0	6	7	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
57	25	Tel.SismoRes	0	70	6	10.13	10.13	0	0	0	0	0	0	4148	0	0	0	4148	0	0	0	16	1					
58	25	Tel.SismoRes	0	77	1	10.13	10.13	0	0	0	0	0	0	4152	0	0	0	4152	0	0	0	16	1					
59	26	Tel.SismoRes	0	62	70	10.13	10.13	0	0	0	0	0	-11	1892	0	0	0	1892	0	0	0	30	1					
60	26	Tel.SismoRes	0	26	25	10.13	10.13	0	15	0	0	15	0	852	0	0	1700	2552	0	0	0	30	1					
61	26	Tel.SismoRes	0	21	73	10.13	10.13	0	1	0	0	0	-11	2193	0	0	0	2193	0	0	0	30	1					
62	26	Tel.SismoRes	0	25	21	10.13	10.13	0	15	0	0	1	0	852	0	0	1700	2552	0	0	0	30	1					

TRAVI IN C.A. ALLA QUOTA 10.13 m																												
		DATI GENERALI					QUOTE		SCOSTAMENTI						CARICHI													
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit				
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo				
63	26	Tel.SismoRes	0	74	56	10.13	10.13	0	0	0	0	0	0	1678	728	0	0	2406	0	0	0	30	1					
64	25	Tel.SismoRes	0	26	62	10.13	10.13	0	0	0	0	0	0	0	728	0	0	728	0	0	0	0	1					
65	26	Tel.SismoRes	0	16	15	10.13	10.13	0	0	-11	0	0	0	1507	0	0	0	1507	0	0	0	30	1					
66	26	Tel.SismoRes	0	14	12	10.13	10.13	0	0	0	-13	0	0	0	0	0	0	0	0	0	0	0	1					
67	27	Tel.SismoRes	0	15	21	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
68	26	Tel.SismoRes	0	56	58	10.13	10.13	-14	4	0	0	0	0	92	728	0	0	820	0	0	0	30	1					
69	26	Tel.SismoRes	0	58	46	10.13	10.13	0	0	0	0	0	0	421	728	0	0	1149	0	0	0	30	1					
70	27	Tel.SismoRes	0	66	65	10.13	10.13	0	0	-11	0	0	0	615	0	0	0	615	0	0	0	30	1					
71	27	Tel.SismoRes	0	65	64	10.13	10.13	0	0	0	0	0	0	645	0	0	0	645	0	0	0	30	1					
72	27	Tel.SismoRes	0	63	64	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
73	27	Tel.SismoRes	0	60	59	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
74	27	Tel.SismoRes	0	59	58	10.13	10.13	0	0	0	0	0	0	316	0	0	0	316	0	0	0	30	1					
75	27	Tel.SismoRes	0	64	59	10.13	10.13	0	0	0	0	0	0	645	0	0	0	645	0	0	0	30	1					
76	26	Tel.SismoRes	0	56	67	10.13	10.13	0	0	0	0	0	0	1666	0	0	0	1666	0	0	0	30	1					
77	26	Tel.SismoRes	0	67	69	10.13	10.13	0	0	0	0	0	-11	1888	0	0	0	1888	0	0	0	30	1					
78	34	Tel.SismoRes	0	60	63	10.13	10.13	-4	-12	0	-4	-12	0	0	0	0	0	0	0	0	0	0	1					
79	42	Tel.SismoRes	0	30	29	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
80	26	Tel.SismoRes	0	15	14	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
81	25	Tel.SismoRes	0	74	45	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
82	25	Tel.SismoRes	0	66	69	10.13	10.13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
83	25	Tel.SismoRes	0	16	17	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1					
84	25	Tel.SismoRes	0	6	77	10.13	10.13	0	0	0	0	0	0	4190	0	0	0	4190	0	0	0	16	1					
85	25	Tel.SismoRes	0	7	78	10.13	10.13	0	0	0	0	0	0	2574	0	0	0	2574	0	0	0	13	1					
86	26	Tel.SismoRes	0	8	79	10.13	10.13	0	-13	0	0	-13	0	840	0	0	0	840	0	0	0	30	1					
87	25	Tel.SismoRes	0	5	76	10.13	10.13	0	0	0	0	0	0	3125	0	0	0	3125	0	0	0	30	1					
88	26	Tel.SismoRes	0	4	80	10.13	10.13	0	13	0	0	13	0	836	0	0	0	836	0	0	0	30	1					

SETTI ALLA QUOTA 10.13 m																												
		GEOMETRIA				QUOTE		SCOSTAMENTI						CARICHI VERTICALI										PRESSIONI		RINFORZI MUR		
Sett	Sez	Sp.	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann	Tamp	Ball	Espl	Tot.	Torc	Orizz	Assia	Ali	Psup.	Pinf.	Mat	Ini	Fin.		
N.ro	N.r	cm	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm						kg	kg / m	%	kg/mq			Nro	cm	cm		
1	603	28	30	12	10.13	10.13	0	0	0	0	0	0	0	0	0	1700	1700	0	0	0	0	0	0					
2	603	28	25	23	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
3	602	25	60	47	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
4	602	25	63	61	10.13	10.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
5	602	25	47	61	10.13	10.13	-8	16	0	16	8	0	0	0	0	0	0	0	0	0	0	0	0					

TRAVI IN C.A. ALLA QUOTA 13.88 m																											
		DATI GENERALI					QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit			
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo			
6	25	Tel.SismoRes	0	40	37	13.88	13.88	0	0	0	0	0	0	511	0	0	0	511	0	0	0	0	1				
7	25	Tel.SismoRes	0	62	26	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8	25	Tel.SismoRes	0	62	39	13.88	13.88	0	0	0	0	0	0	2702	0	0	0	2702	0	0	0	0	1				
9	25	Tel.SismoRes	0	62	45	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
10	25	Tel.SismoRes	0	45	48	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
11	25	Tel.SismoRes	0	37	34	13.88	13.88	0	0	0	0	0	0	524	0	0	0	524	0	0	0	0	1				
12	25	Tel.SismoRes	0	40	43	13.88	13.88	0	0	0	0	0	0	518	0	0	0	518	0	0	0	0	1				
13	26	Tel.SismoRes	0	51	50	13.88	13.88	0	0	0	0	0	0	1143	0	0	0	1143	0	0	0	0	1				
14	25	Tel.SismoRes	0	39	40	13.88	13.88	0	0	0	0	0	0	2701	0	0	0	2701	0	0	0	0	1				
15	26	Tel.SismoRes	0	50	48	13.88	13.88	0	0	0	0	0	0	1141	0	0	0	1141	0	0	0	0	1				
16	26	Tel.SismoRes	0	34	33	13.88	13.88	0	0	0	0	0	0	1145	0	0	0	1145	0	0	0	0	1				
17	26	Tel.SismoRes	0	33	31	13.88	13.88	0	0	0	0	0	0	1145	0	0	0	1145	0	0	0	0	1				
18	25	Tel.SismoRes	0	26	27	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
19	38	Tel.SismoRes	0	25	75	13.88	13.88	0	25	0	0	25	0	0	0	1515	0	1515	2140	0	0	0	1				
20	25	Tel.SismoRes	0	27	29	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
21	38	Tel.SismoRes	0	25	22	13.88	13.88	0	25	0	0	10	0	0	0	1515	0	1515	2140	0	0	0	1				
22	25	Tel.SismoRes	0	29	31	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				

TRAVI IN C.A. ALLA QUOTA 13.88 m																											
		DATI GENERALI					QUOTE		SCOSTAMENTI						CARICHI												
Trav	Sez.	Tipo Elem.	Ang	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann.	Tamp.	Ball.	Espl.	Tot.	Torc.	Orizz.	Assial	Ali	Cr	Cit			
N.ro	N.ro	x il sisma	Grd	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm	kg/m	kg/m	kg/m	kg/m	kg/m	kg	kg/m	kg/m	%	Nr	Geo			
23	26	Tel.SismoRes	0	37	38	13.88	13.88	0	0	0	0	0	0	2445	0	0	0	2445	0	0	0	0	1				
24	26	Tel.SismoRes	0	43	44	13.88	13.88	0	0	0	0	0	0	2445	0	0	0	2445	0	0	0	0	1				
25	26	Tel.SismoRes	0	22	12	13.88	13.88	0	0	0	-13	0	0	0	0	0	0	0	0	0	0	0	1				
26	25	Tel.SismoRes	0	43	51	13.88	13.88	0	0	0	0	0	0	516	0	0	0	516	0	0	0	0	1				
27	26	Tel.SismoRes	0	38	27	13.88	13.88	0	0	0	0	0	0	2445	0	0	0	2445	0	0	0	0	1				
28	26	Tel.SismoRes	0	44	45	13.88	13.88	0	0	0	0	0	0	2445	0	0	0	2445	0	0	0	0	1				
29	26	Tel.SismoRes	0	34	35	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
30	26	Tel.SismoRes	0	41	36	13.88	13.88	0	0	0	0	0	0	560	0	0	0	560	0	0	0	0	1				
31	26	Tel.SismoRes	0	41	42	13.88	13.88	0	0	0	0	0	0	554	0	0	0	554	0	0	0	0	1				
32	26	Tel.SismoRes	0	51	52	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
33	26	Tel.SismoRes	0	40	41	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
34	26	Tel.SismoRes	0	37	36	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
35	26	Tel.SismoRes	0	43	42	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
36	26	Tel.SismoRes	0	36	35	13.88	13.88	0	0	0	0	0	0	548	0	0	0	548	0	0	0	0	1				
38	26	Tel.SismoRes	0	75	30	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
40	26	Tel.SismoRes	0	42	52	13.88	13.88	0	0	0	0	0	0	556	0	0	0	556	0	0	0	0	1				

SETTI ALLA QUOTA 13.88 m																												
		GEOMETRIA				QUOTE		SCOSTAMENTI						CARICHI VERTICALI										PRESSIONI		RINFORZI MUR		
Sett	Sez	Sp.	Fil	Fil	Q in.	Q.fin	Dxi	Dyi	Dzi	Dxf	Dyf	Dzf	Pann	Tamp	Ball	Espl	Tot.	Torc	Orizz	Assia	Ali	Psup.	Pinf.	Mat	Ini	Fin.		
N.ro	N.r	cm	in.	fin	(m)	(m)	cm	cm	cm	cm	cm	cm			kg / m			kg	kg / m	%	kg/mq		Nro	cm	cm			
1	603	28	30	12	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2	603	28	25	23	13.88	13.88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
3	602	25	60	47	13.88	13.88	0	0	-150	0	0	-150	0	0	0	0	0	0	0	0	0	0						
4	602	25	63	61	13.88	13.88	0	0	-150	0	0	-150	0	0	0	0	0	0	0	0	0	0						
5	602	25	47	61	13.88	13.88	-8	16	-150	16	8	-150	0	0	0	0	0	0	0	0	0	0						
37	602	25	60	63	13.88	13.88	-4	-12	-150	-4	-12	-150	0	0	0	0	0	0	0	0	0	0						

GEOMETRIA PIASTRE ALLA QUOTA 0 m													
Piastra	Filo	Filo	Filo	Filo	Tipo	Quota	Quota	Quota	Quota	Tipo	Spess.	Kwinkl.	Tipo
N.ro	1	2	3	4	Car.	Filo1	Filo2	Filo3	Filo4	Sez.	cm	kg/cmc	Mat.
1	34	35	36	36	5	0	0	0	0	1	50.0	1.0	1
2	37	34	36	36	5	0	0	0	0	1	50.0	1.0	1
3	41	40	36	36	5	0	0	0	0	1	50.0	1.0	1
4	40	37	36	36	5	0	0	0	0	1	50.0	1.0	1
5	40	41	42	42	5	0	0	0	0	1	50.0	1.0	1
6	43	40	42	42	5	0	0	0	0	1	50.0	1.0	1
7	51	43	42	42	5	0	0	0	0	1	50.0	1.0	1
8	52	51	42	42	5	0	0	0	0	1	50.0	1.0	1
9	33	34	38	38	5	0	0	0	0	1	50.0	1.0	1
10	34	37	38	38	5	0	0	0	0	1	50.0	1.0	1
11	37	40	38	38	5	0	0	0	0	1	50.0	1.0	1
12	31	33	38	38	5	0	0	0	0	1	50.0	1.0	1
13	40	39	38	38	5	0	0	0	0	1	50.0	1.0	1
14	39	62	38	38	5	0	0	0	0	1	50.0	1.0	1
15	62	26	38	38	5	0	0	0	0	1	50.0	1.0	1
16	26	27	38	38	5	0	0	0	0	1	50.0	1.0	1
17	27	29	38	38	5	0	0	0	0	1	50.0	1.0	1
18	29	31	38	38	5	0	0	0	0	1	50.0	1.0	1
19	39	40	44	44	5	0	0	0	0	1	50.0	1.0	1
20	40	43	44	44	5	0	0	0	0	1	50.0	1.0	1
21	43	51	44	44	5	0	0	0	0	1	50.0	1.0	1
22	51	50	44	44	5	0	0	0	0	1	50.0	1.0	1
23	62	39	44	44	5	0	0	0	0	1	50.0	1.0	1
24	50	48	44	44	5	0	0	0	0	1	50.0	1.0	1
25	45	62	44	44	5	0	0	0	0	1	50.0	1.0	1
26	48	45	44	44	5	0	0	0	0	1	50.0	1.0	1
27	9	7	6	6	5	0	0	0	0	1	50.0	1.0	1

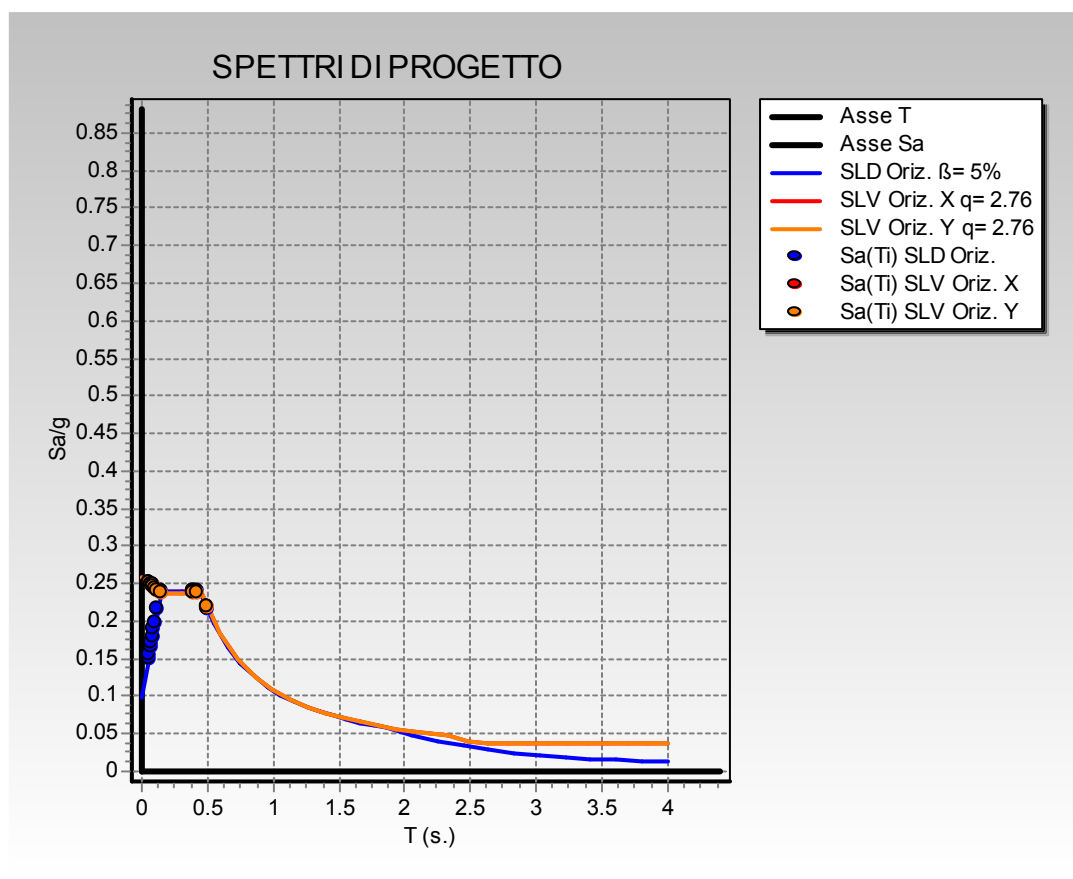
GEOMETRIA PIASTRE ALLA QUOTA 0 m													
Piastra	Filo	Filo	Filo	Filo	Tipo	Quota	Quota	Quota	Quota	Tipo	Spess.	Kwinkl.	Tipo
N.ro	1	2	3	4	Car.	Filo1	Filo2	Filo3	Filo4	Sez.	cm	kg/cmc	Mat.
28	1	9	6	6	5	0	0	0	0	1	50.0	1.0	1
29	2	1	6	6	5	0	0	0	0	1	50.0	1.0	1
30	5	2	6	6	5	0	0	0	0	1	50.0	1.0	1
31	54	5	6	6	5	0	0	0	0	1	50.0	1.0	1
32	7	17	6	6	5	0	0	0	0	1	50.0	1.0	1
33	69	54	6	6	5	0	0	0	0	1	50.0	1.0	1
34	70	69	6	6	5	0	0	0	0	1	50.0	1.0	1
35	73	70	6	6	5	0	0	0	0	1	50.0	1.0	1
36	18	73	6	6	5	0	0	0	0	1	50.0	1.0	1
37	17	18	6	6	5	0	0	0	0	1	50.0	1.0	1
38	18	17	23	23	5	0	0	0	0	1	50.0	1.0	1
39	17	12	23	23	5	0	0	0	0	1	50.0	1.0	1
40	12	30	23	23	5	0	0	0	0	1	50.0	1.0	1
41	30	29	23	23	5	0	0	0	0	1	50.0	1.0	1
42	29	27	23	23	5	0	0	0	0	1	50.0	1.0	1
43	26	25	23	27	5	0	0	0	0	1	50.0	1.0	1
44	18	23	25	73	5	0	0	0	0	1	50.0	1.0	1
45	70	73	25	25	5	0	0	0	0	1	50.0	1.0	1
46	26	62	25	25	5	0	0	0	0	1	50.0	1.0	1
47	62	70	25	25	5	0	0	0	0	1	50.0	1.0	1
48	70	62	56	56	5	0	0	0	0	1	50.0	1.0	1
49	69	70	56	56	5	0	0	0	0	1	50.0	1.0	1
50	62	45	56	56	5	0	0	0	0	1	50.0	1.0	1
51	9	10	8	8	5	0	0	0	0	1	50.0	1.0	1
52	7	9	8	8	5	0	0	0	0	1	50.0	1.0	1
53	17	7	8	8	5	0	0	0	0	1	50.0	1.0	1
54	11	17	8	8	5	0	0	0	0	1	50.0	1.0	1

GEOMETRIA PIASTRE ALLA QUOTA 0 m													
Piastra	Filo	Filo	Filo	Filo	Tipo	Quota	Quota	Quota	Quota	Tipo	Spess.	Kwinkl.	Tipo
N.ro	1	2	3	4	Car.	Filo1	Filo2	Filo3	Filo4	Sez.	cm	kg/cmc	Mat.
55	11	12	17	17	5	0	0	0	0	1	50.0	1.0	1
56	11	32	12	12	5	0	0	0	0	1	50.0	1.0	1
57	32	31	12	12	5	0	0	0	0	1	50.0	1.0	1
58	29	30	31	31	5	0	0	0	0	1	50.0	1.0	1
59	30	12	31	31	5	0	0	0	0	1	50.0	1.0	1
60	45	60	56	56	5	0	0	0	0	1	50.0	1.0	1
61	47	60	45	45	5	0	0	0	0	1	50.0	1.0	1
62	45	48	47	47	5	0	0	0	0	1	50.0	1.0	1
63	48	49	47	47	5	0	0	0	0	1	50.0	1.0	1
64	61	47	49	49	5	0	0	0	0	1	50.0	1.0	1
65	53	61	49	49	5	0	0	0	0	1	50.0	1.0	1
66	53	54	61	61	5	0	0	0	0	1	50.0	1.0	1
67	54	63	61	61	5	0	0	0	0	1	50.0	1.0	1
68	54	69	63	63	5	0	0	0	0	1	50.0	1.0	1
69	69	56	63	63	5	0	0	0	0	1	50.0	1.0	1
70	56	60	63	63	5	0	0	0	0	1	50.0	1.0	1
71	63	60	47	61	5	0	0	0	0	1	50.0	1.0	1
72	5	54	4	4	5	0	0	0	0	1	50.0	1.0	1
73	54	53	4	4	5	0	0	0	0	1	50.0	1.0	1
74	2	5	4	4	5	0	0	0	0	1	50.0	1.0	1
75	3	2	4	4	5	0	0	0	0	1	50.0	1.0	1

2.2 Metodologia di modellazione ed analisi

L'analisi sismica dinamica è stata svolta con il metodo dell'analisi modale; la ricerca dei modi e delle relative frequenze è stata perseguita con il metodo delle "iterazioni nel sottospazio". I modi di vibrazione considerati sono in numero tale da assicurare l'eccitazione di più dell'85% della massa totale della struttura. Per ciascuna direzione di ingresso del sisma si sono valutate le forze modali che vengono applicate su ciascun nodo spaziale (tre forze, in direzione X, Y e Z, e tre momenti). Per la verifica della struttura si è fatto riferimento all'analisi modale, pertanto sono prima calcolate le sollecitazioni e gli spostamenti modali e poi

viene calcolato il loro valore efficace. I valori stampati nei tabulati finali allegati sono proprio i suddetti valori efficaci e pertanto l'equilibrio ai nodi perde di significato. I valori delle sollecitazioni sismiche sono combinate linearmente (in somma e in differenza) con quelle per carichi statici per ottenere le sollecitazioni per sisma nelle due direzioni di calcolo. Gli angoli delle direzioni di ingresso dei sismi sono valutati rispetto all'asse X del sistema di riferimento globale.



Di seguito si riportano le informazioni riguardanti le analisi condotte sull'edificio sia quella per i carichi statici allo SLU che per i carichi sismici allo SLV.

ANALISI STATICA LINEARE (NON sismica)

In analisi statica non sismica, viene analizzato lo Stato Limite Ultimo (SLU) di salvaguardia della Vita (SLV).

Le Combinazioni di Carico per Analisi Statica non sismica sono le combinazioni di tipo fondamentale, impiegate per gli stati limite ultimi (2.5.1) §2.5.3, espresse dalla formulazione:

$$\gamma_{G1} * G_{1,1} + \gamma_{G2} * G_{2,2} + \gamma_P * P + \gamma_{Q1} * Q_{k,1} + \gamma_{Q2} * \psi_{0,2} Q_{k,2} + \gamma_{Q3} * \psi_{0,3} Q_{k,3} + \dots$$

La definizione delle azioni rispetta quanto formulato in §2.5.1.3 e §2.5.2; in particolare $Q_{k,1}$ è l'azione variabile dominante, mentre $Q_{k,2}$, $Q_{k,3}$, ..., sono azioni variabili che possono agire contemporaneamente a quella dominante. Le azioni variabili $Q_{k,j}$ vengono combinate con i coefficienti di combinazione ψ , i cui valori sono forniti in §2.5.3, Tab.2.5.I.

ANALISI DINAMICA LINEARE (sismica)

Dal punto di vista sismico, l'edificio può essere schematizzato con un modello tridimensionale (modellazione 3D) oppure scomposto in più modelli piani (modellazione 2D) ognuno analizzato singolarmente. La

scomposizione in modelli piani è prevista nel caso di edifici esistenti in muratura con impalcati flessibili (§8.7.1).

Nella modellazione 3D, il sisma è rappresentato da forze sismiche di nodo in coordinate globali: FX, FY, FZ, MX, MY, MZ [normalmente sono diverse da zero solo le componenti: FX, FY (forze orizzontali), MZ (momento torcente intorno all'asse verticale)], che in caso di piano rigido in ipotesi master/slave, sono applicate nel solo nodo master. Gli effetti torcenti sull'edificio vengono interpretati dai momenti torcenti MZ, determinati dal prodotto forza orizzontale per l'eccentricità aggiuntiva. Essi sono presenti nel caso di piano rigido, dove assume significato il centro delle rigidezze e quindi può essere considerata una sua eccentricità rispetto al baricentro.

Secondo Normativa, per gli edifici devono essere analizzati alcuni stati limite di riferimento.

Per tutti i nuovi edifici, si devono analizzare SLV (con verifiche di resistenza) e SLD (con verifiche degli spostamenti).

L'analisi sismica è organizzata secondo la seguente procedura:

- (A) generazione e risoluzione di apposite C.C. elementari sismiche;
- (B) determinazione degli effetti sismici risultanti dalla simultaneità delle componenti orizzontali sismiche (per 'effetti' si intendono le caratteristiche di sollecitazione e di deformazione);
- (C) combinazione degli effetti sismici con gli effetti dovuti ad altre azioni non sismiche.

Nei modelli tridimensionali, le varie componenti orizzontali dell'azione sismica (α , $\alpha+90$ ed eventualmente verticale) devono essere considerate agenti simultaneamente (§7.3.5). Per le due componenti orizzontali (α e $\alpha+90$), i valori massimi (b_1) e (b_2) vengono combinati (a seconda della scelta dell'Utente):

- o calcolando la radice quadrata della somma dei quadrati: $E = \sqrt{E_{\alpha}^2 + E_{(\alpha+90)}^2}$

- o sommando ai massimi ottenuti per l'azione applicata in una direzione, il 30% dei massimi ottenuti per l'azione applicata nell'altra direzione: $\text{Max} [(E_{\alpha} + 0.30 E_{(\alpha+90)}); (0.30 E_{\alpha} + E_{(\alpha+90)})]$ (§7.3.15), §7.3.5).

Per quanto riguarda gli effetti del sisma verticale, questo deve essere considerato ove necessario (§7.2.1). Complessivamente, viene scelto il massimo valore fra le seguenti combinazioni (regola fissa, quindi non c'è un corrispondente parametro di impostazione scelto dall'Utente):

$$0.30 E_{\alpha} + 0.30 E_{(\alpha+90)} + E_{\text{vert}}$$

$$E_{\alpha} + 0.30 E_{(\alpha+90)} + 0.30 E_{\text{vert}}$$

$$0.30 E_{\alpha} + E_{(\alpha+90)} + 0.30 E_{\text{vert}}$$

A questo punto, gli effetti sismici E_{sism} si combinano con le altre azioni (§3.2.4) per ottenere gli effetti finali da utilizzare nella verifica degli elementi strutturali.

Gli effetti delle altre azioni sono riconducibili alla sommatoria delle Condizioni di Carico elementari (NON sismiche), ognuna delle quali contribuisce con i coefficienti ψ_2 .

La Combinazione di Carico per Analisi Sismica esaminata è quindi la seguente:

$$G_{1,1} + G_{2,2} + P + E + \sum (\psi_{2,j} * Q_{k,j})$$

I risultati complessivi sono sempre espressi nella forma Estat +/- Esism, per ottenere l'effetto massimo e l'effetto minimo.

2.3 Informazioni sul codice di calcolo

Origine e caratteristiche dei codici di calcolo:

Produttore	S.T.S. srl
Titolo	CDSWin
Versione	Rel. 2018
N.ro Licenza	30336

Ragione sociale completa del produttore del software:

S.T.S. s.r.l. Software Tecnico Scientifico S.r.l.

Via Tre Torri n°11 – Complesso Tre Torri

95030 Sant'Agata li Battiati (CT).

2.4 Modellazione della geometria e delle proprietà meccaniche

Di seguito si riportano le caratteristiche delle aste di fondazione e delle travi e pilastri con i relativi criteri di progetto utilizzati:

ARCHIVIO SEZIONI ASTE IN C.A.O.									
Tipologia Rettangolare					Tipologia Rettangolare				
Sez.	Base	Altezza	Magrone		Sez.	Base	Altezza	Magrone	
N.ro	(cm)	(cm)	(cm)		N.ro	(cm)	(cm)	(cm)	
1	30.0	30.0	0.0		4	30.0	60.0	0.0	
25	30.0	45.0	0.0		26	30.0	25.0	0.0	
27	25.0	25.0	0.0		28	50.0	30.0	0.0	
29	30.0	50.0	0.0		30	30.0	80.0	4.0	
31	50.0	50.0	4.0		32	30.0	50.0	4.0	
33	50.0	18.0	0.0		34	25.0	60.0	0.0	
35	70.0	30.0	0.0		38	50.0	25.0	0.0	
39	40.0	25.0	0.0		42	28.0	30.0	0.0	

ARCHIVIO SEZIONI ASTE IN C.A.O.							
Tipologia a 'T'							
Sez.	Ala sx.	B Anima	Ala dx.	Altezza	Sp. Ali	H Anima	Largh.
N.ro	B1	B2	B3	B4	B5	B6	Magrone
	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)
44	30.0	30.0	30.0	80.0	50.0	30.0	135.0

ARCHIVIO SEZIONI ASTE IN C.A.O.							
Tipologia a 'T'							
Sez.	Ala sx.	B Anima	Ala dx.	Altezza	Sp. Ali	H Anima	Largh.
N.ro	B1	B2	B3	B4	B5	B6	Magrone
	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)
47	40.0	30.0	40.0	80.0	50.0	30.0	4.0

ARCHIVIO SEZIONI ASTE IN C.A.O.																	
Tipologia Poligonale																	
Sez.		V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	Magr	Forma	b1	b2	b3	b4
N.ro		(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	Poligon.	cm	cm	cm	cm
48	X	10.0	10.0	0.0	0.0	50.0	50.0	40.0	40.0			0	T1	10	30	10	10
	Y	0.0	35.0	35.0	45.0	45.0	35.0	35.0	0.0			0					35

ARCHIVIO SEZIONI ASTE IN C.A.O.				
CARATTERISTICHE STATICHE DELLE SEZIONI IN C.A.O.				
Sez.	Area	I _{xg}	I _{yg}	I _p
N.ro	(cm ²)	(cm ⁴)	(cm ⁴)	(cm ⁴)
1	900	67500	67500	135000
4	1800	540000	135000	675000
25	1350	227813	101250	329063
26	750	39063	56250	95313
27	625	32552	32552	65104
28	1500	112500	312500	425000
29	1500	312500	112500	425000
30	2400	1280000	180000	1460000
31	2500	520833	520833	1041667
32	1500	312500	112500	425000
33	900	24300	187500	211800
34	1500	450000	78125	528125
35	2100	157500	857500	1015000
38	1250	65104	260417	325521

ARCHIVIO SEZIONI ASTE IN C.A.O.				
CARATTERISTICHE STATICHE DELLE SEZIONI IN C.A.O.				
Sez.	Area	I _{xg}	I _{yg}	I _p
N.ro	(cm ²)	(cm ⁴)	(cm ⁴)	(cm ⁴)
39	1000	52083	133333	185417
42	840	63000	54880	117880
44	5400	2205000	3105000	5310000
47	6400	2450834	5613332	8064166
48	1550	282826	182917	465743

ARCHIVIO MATERIALI PIASTRE: MATRICE ELASTICA													
Materiale	Densita'	E _x *1E3	ν _{i,x}	Alfa.x	E _y *1E3	ν _{i,y}	Alfa.y	E ₁₁ *1E3	E ₁₂ *1E3	E ₁₃ *1E3	E ₂₂ *1E3	E ₂₃ *1E3	E ₃₃ *1E3
N.ro	kg/mc	kg/cm ^q		(*1E5)	kg/cm ^q		(*1E5)	kg/cm ^q	kg/cm ^q	kg/cm ^q	kg/cm ^q	kg/cm ^q	kg/cm ^q
1	2500	285	0.20	0.00	285	0.20	0.00	296	59	0	296	0	119
11	2000	53	0.25	1.00	53	0.25	1.00	57	14	0	57	0	21
12	1800	25	0.25	1.00	25	0.25	1.00	27	7	0	27	0	10
13	1900	50	0.25	1.00	50	0.25	1.00	53	13	0	53	0	20
14	1800	50	0.25	1.00	50	0.25	1.00	53	13	0	53	0	20
15	1900	50	0.25	1.00	50	0.25	1.00	53	13	0	53	0	20
16	1900	30	0.25	1.00	30	0.25	1.00	32	8	0	32	0	12
17	1900	30	0.25	1.00	30	0.25	1.00	32	8	0	32	0	12

ARCHIVIO SEZIONI SHELLS			
Sezione	Spessore	Tipo	Tipo Elemento
N.ro	cm	Mater.	(descrizione)
601	30	1	LASTRA-PIASTRA
602	25	1	LASTRA-PIASTRA
603	28	1	LASTRA-PIASTRA

BARICENTRI MASSE E RIGIDENZE														
IDENTIFICATORE		BARICENTRI MASSE E RIGIDENZE							RIGIDENZE FLESSIONALI E TORSIONALI					
PIANO	QUOTA	PESO	XG	YG	XR	YR	DX	DY	Lpianta	Bpianta	Rig.FleX	Rig.FleY	RigTors.	r / Is
N.ro	(m)	(t)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(t/m)	(t/m)	(t*m)	
1	3.63	399.60	-11.29	5.45	-13.61	5.29	-2.32	-0.16	14.62	22.36	102227	87555	6620734	0.99
2	6.88	429.04	-11.01	5.42	-13.61	5.24	-2.60	-0.18	14.62	22.36	61512	49850	4196464	1.02
3	10.15	223.28	-15.94	5.47	-13.70	5.24	2.24	-0.24	14.62	12.25	39422	32198	2769272	1.45
7	11.19	95.85	-3.00	5.18	-12.99	5.28	-9.99	0.10	14.62	5.43	288292	30959	8344625	1.06
5	12.38	6.94	-13.12	0.15	-13.44	3.16	-0.33	3.01	2.69	2.38	17529	24806	799826	4.77
4	12.64	79.48	-18.55	5.43	-15.46	5.30	3.09	-0.13	14.01	7.59	67340	28914	1598297	2.36
6	13.88	13.94	-13.04	9.12	-13.24	11.00	-0.19	1.88	4.73	2.90	7275	11392	20721	0.26

VARIAZIONI MASSE E RIGIDENZE DI PIANO													
				DIREZIONE X					DIREZIONE Y				
Piano	Quota	Peso	Variaz.	Tagliante	Spost.	Klat.	Variaz	Teta	Tagliante	Spost.	Klat.	Variaz	Teta
N.ro	(m)	(t)	(%)	(t)	(mm)	(t/m)	(%)		(t)	(mm)	(t/m)	(%)	
1	3.63	399.60	0.0	233.65	4.08	57270	0.0	0.017	208.05	4.63	44966	0.0	0.021
2	6.88	429.04	7.4	198.49	4.36	45476	-20.6	0.017	176.04	4.97	35397	-21.3	0.020
3	10.15	223.28	-48.0	120.33	4.30	27960	-38.5	0.013	104.07	4.80	21678	-38.8	0.016
7	11.19	95.85	-57.1	58.91	-0.15	-399584	-1529.1	-0.001	56.04	0.62	89814	314.3	0.006
5	12.38	6.94	-92.8	32.87	2.90	11342	-102.8	0.022	25.00	2.82	8873	-90.1	0.026
4	12.64	79.48	1045.7	30.57	-1.04	-29520	-360.3	-0.035	22.99	-1.94	-11872	-233.8	-0.082
6	13.88	13.94	-82.5	5.77	3.77	1532	-105.2	0.021	4.59	4.52	1016	-108.6	0.031

2.5 Modellazione dei vincoli interni ed esterni

Di seguito la modellazione dei nodi interni ed esterni:

NODI ALLA QUOTA 10.13 m																
IDENTIFICAZIONE					RIGIDENZE NODO ESTERNE						CARICHI NODALI CONCENTRATI					
Filo	Quo	D.Quo	P.	Co	Tx	Ty	Tz	Rx	Ry	Rz	Fx	Fy	Fz	Mx	My	Mz
N.ro	N.	cm	sis	di	(t/m)	(t/m)	(t/m)	(t-m)	(t-m)	(t-m)	(t)	(t)	(t)	(t-m)	(t-m)	(t-m)
1	3	5	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
2	3	5	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
3	3	5	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
4	3	174	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
5	3	174	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
6	3	174	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
7	3	174	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
8	3	174	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000

NODI ALLA QUOTA 10.13 m																
IDENTIFICAZIONE					RIGIDEZZE NODO ESTERNE						CARICHI NODALI CONCENTRATI					
Filo	Quo	D.Quo	P.	Co	Tx	Ty	Tz	Rx	Ry	Rz	Fx	Fy	Fz	Mx	My	Mz
N.ro	N.	cm	sis	di	(t/m)	(t/m)	(t/m)	(t-m)	(t-m)	(t-m)	(t)	(t)	(t)	(t-m)	(t-m)	(t-m)
9	3	5	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
10	3	5	7		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
11	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
16	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
17	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
53	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
54	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
66	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
69	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
70	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
73	3	11	3		0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
76	3	188	7	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
77	3	188	7	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
78	3	188	7	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
79	3	188	7	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
80	3	188	7	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000

NODI ALLA QUOTA 13.88 m																
IDENTIFICAZIONE					RIGIDEZZE NODO ESTERNE						CARICHI NODALI CONCENTRATI					
Filo	Quo	D.Quo	P.	Co	Tx	Ty	Tz	Rx	Ry	Rz	Fx	Fy	Fz	Mx	My	Mz
N.ro	N.	cm	sis	di	(t/m)	(t/m)	(t/m)	(t-m)	(t-m)	(t-m)	(t)	(t)	(t)	(t-m)	(t-m)	(t-m)
12	4	0	6	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
22	4	0	6	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
23	4	0	6	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
25	4	0	6	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
26	4	-56	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
27	4	-132	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
28	4	-138	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000

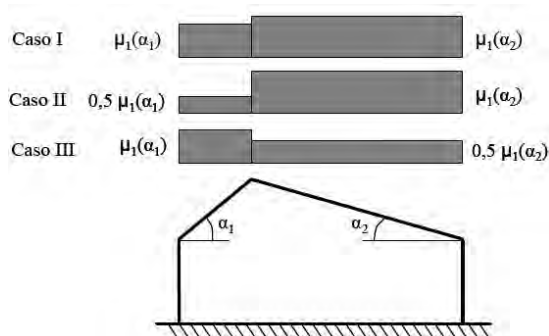
NODI ALLA QUOTA 13.88 m																
IDENTIFICAZIONE					RIGIDEZZE NODO ESTERNE						CARICHI NODALI CONCENTRATI					
Filo	Quo	D.Quo	P.	Co	Tx	Ty	Tz	Rx	Ry	Rz	Fx	Fy	Fz	Mx	My	Mz
N.ro	N.	cm	sis	di	(t/m)	(t/m)	(t/m)	(t-m)	(t-m)	(t-m)	(t)	(t)	(t)	(t-m)	(t-m)	(t-m)
29	4	-181	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
30	4	0	6	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
31	4	-240	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
33	4	-240	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
34	4	-240	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
35	4	-240	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
36	4	-132	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
37	4	-132	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
38	4	-132	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
42	4	-132	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
43	4	-132	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
44	4	-135	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
45	4	-135	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
47	4	0	5	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
48	4	-240	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
50	4	-240	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
51	4	-240	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
52	4	-240	4	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
60	4	0	5	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
61	4	0	5	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
63	4	0	5	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
75	4	0	6	A	0	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000

2.6 Modellazione delle azioni

Di seguito si riportano le azioni considerate sugli impalcati:

ARCHIVIO TIPOLOGIE DI CARICO										
Car. N.ro	Peso Strut kg/mq	Perman. NONstru kg/mq	Varia bile kg/mq	Neve kg/mq	Destinaz. d'Uso	Psi 0	Psi 1	Psi 2	Anal Car. N.ro	DESCRIZIONE SINTETICA DEL TIPO DI CARICO
1	365	330	200	0	Categ. A	0.7	0.5	0.3		
2	365	155	400	0	Categ. B	0.7	0.5	0.3		
3	260	0	0	0	Categ. B	0.7	0.5	0.3		
4	365	155	50	120	CopNeve<1 k	0.5	0.2	0.0		
5	0	100	200	0	Categ. A	0.7	0.5	0.3		
6	450	155	400	0	Categ. B	0.7	0.5	0.3		
7	0	155	400	0	Categ. B	0.7	0.5	0.3		
8	0	155	50	120	CopNeve<1 k	0.5	0.2	0.0		
9	450	155	50	120	CopNeve<1 k	0.5	0.2	0.0		

Si riporta inoltre il calcolo delle azioni derivante dalla neve e dal vento:



Regione: Emilia Romagna

Provincia: Forlì-Cesena

Ubicazione: Zona I - Mediterranea

Quota sito s.l.m.m. as: 0 m

Topografia: Normale

Coefficiente di esposizione CE: 1.0

Coefficiente termico Ct: 1.00

Valore caratteristico di carico neve al suolo (TR=50anni) qsk: 1.50 kN/m2

Angolo α_1 della falda 1 sull'orizzontale: 20°

Angolo α_2 della falda 2 sull'orizzontale: 20°

Coefficiente di forma $\mu_1(\alpha_1)$: 0.80

Coefficiente di forma $\mu_1(\alpha_2)$: 0.80

Caso (i) - Carico neve in assenza di vento

Carico neve su falda 1 q1: 1.20 kN/m2

Carico neve su falda 2 q2: 1.20 kN/m2

Caso (ii) - Carico neve in presenza di vento

Carico neve su falda 1 q1: 0.60 kN/m2

Carico neve su falda 2 q2: 1.20 kN/m2

Caso (iii) - Carico neve in presenza di vento

Carico neve su falda 1 q1: 1.20 kN/m2

Carico neve su falda 2 q2: 0.60 kN/m2

Dati sito

Regione: Emilia Romagna

Provincia: Forlì-Cesena

v0: 25.00 m/s

a0: 750.00 m

ka: 0.02 s-1

Zona: 2

Classe di rugosità: C

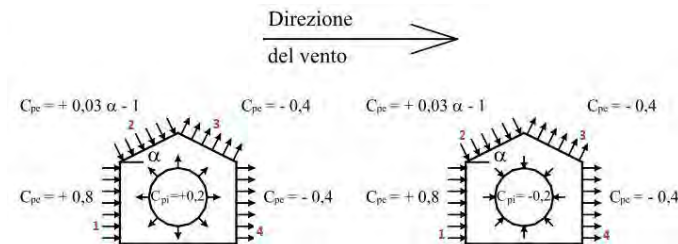
Distanza dalla costa: 0 km

Categoria di esposizione: I

kr: 0.17

z0: 0.01 m

z_{min} : 2.00 m
 Quota s.l.m.m.: 0 m
 Pendenza falda α : 20 °
 Altezza edificio sul p.c.: 15 m
 Tempo di ritorno TR: 50 anni
 Coefficiente di topografia c_t : 1.00
 Coefficiente dinamico c_d : 1.00
 Coefficiente di esposizione c_e : 3.03
 α_R : 1.00
 v_b : 25.00 m/s
 $v_b(TR)$: 25.02 m/s
 $q_b(TR)$: 391.20 N/m²
 Caso (1): Costruzioni aventi una parete con aperture di superficie <33% di quella totale



Coefficienti di pressione

$c_{pe,1} = 0.8$

$c_{pe,2} = -0.4$

$c_{pe,3} = -0.4$

$c_{pe,4} = -0.4$

$c_{pi} = \pm 0.2$

Pressioni del vento (area interna in pressione)

$p_1 = 0.71 \text{ kN/m}^2$

$p_2 = -0.71 \text{ kN/m}^2$

$p_3 = -0.71 \text{ kN/m}^2$

$p_4 = -0.71 \text{ kN/m}^2$

Pressioni del vento (area interna in depressione)

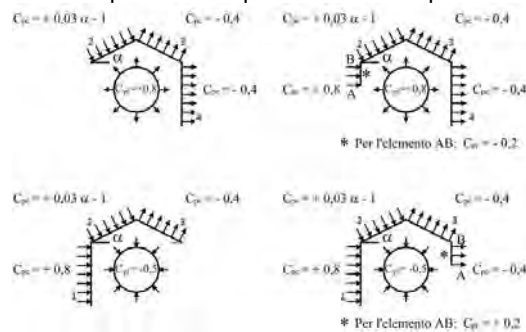
$p_1 = 1.19 \text{ kN/m}^2$

$p_2 = -0.24 \text{ kN/m}^2$

$p_3 = -0.24 \text{ kN/m}^2$

$p_4 = -0.24 \text{ kN/m}^2$

Caso (2): Costruzioni aventi una parete con aperture di superficie $\geq 33\%$ di quella totale



Coefficienti di pressione

$c_{pe,AB} = 0.8$

$c_{pe,2} = -0.4$

$c_{pe,3} = -0.4$

$c_{pe,4} = -0.4$

$c_{pi,sop} = 0.8$

$c_{pi,sot} = -0.5$

$c_{pi,AB} = -0.2$

Pressioni del vento (apertura sopravvento)

$p_{AB} = 1.19 \text{ kN/m}^2$

$p_2 = -1.42 \text{ kN/m}^2$

$p_3 = -1.42 \text{ kN/m}^2$

$p_4 = -1.42 \text{ kN/m}^2$

Pressioni del vento (apertura sottovento)

$p_1 = 1.54 \text{ kN/m}^2$

$$p_2 = 0.12 \text{ kN/m}^2$$

$$p_3 = 0.12 \text{ kN/m}^2$$

$$p_{AB} = -0.24 \text{ kN/m}^2$$

Caso (3): Costruzioni che presentano su due pareti opposte, normali alla direzione del vento, aperture di superficie $\geq 33\%$ di quella totale

Coefficienti di pressione

$$c_{pe} + c_{pi} = \pm 1.2$$

$$c_{pi} = \pm 0.2$$

Pressioni del vento

$$p_1 = 1.42 \text{ kN/m}^2$$

$$p_2 = -0.24 \text{ kN/m}^2$$

$$p_3 = -0.24 \text{ kN/m}^2$$

$$p_4 = -1.42 \text{ kN/m}^2$$

2.7 Combinazioni e/o percorsi di carico

Di seguito si riportano le combinazioni di carico considerate nella fase di progettazione:

COMBINAZIONI CARICHI A1 - S.L.V. / S.L.D.															
DESCRIZIONI	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Peso Strutturale	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.00
Perm.Non Strutturale	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.00
Var.Abitazioni	1.50	1.05	1.50	1.05	1.05	1.50	1.05	1.05	1.50	1.05	1.05	1.50	1.05	1.05	0.30
Var.Uffici	1.50	1.05	1.50	1.05	1.05	1.50	1.05	1.05	1.50	1.05	1.05	1.50	1.05	1.05	0.30
Var.Neve h<=1000	0.75	1.50	0.75	1.50	0.75	0.75	1.50	0.75	0.75	1.50	0.75	0.75	1.50	0.75	0.00
Var.Coperture	1.50	0.00	1.50	0.00	0.00	1.50	0.00	0.00	1.50	0.00	0.00	1.50	0.00	0.00	0.00
Vento dir. 0	0.00	0.00	0.90	0.90	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 90	0.00	0.00	0.00	0.00	0.00	0.90	0.90	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.90	1.50	0.00	0.00	0.00	0.00
Vento dir. 270	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.90	1.50	0.00
Corr. Tors. dir. 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Corr. Tors. dir. 90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
Sisma direz. grd 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Sisma direz. grd 90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30

COMBINAZIONI CARICHI A1 - S.L.V. / S.L.D.															
DESCRIZIONI	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Peso Strutturale	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Perm.Non Strutturale	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Var.Abitazioni	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Var.Uffici	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Var.Neve h<=1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Var.Coperture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 270	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMBINAZIONI CARICHI A1 - S.L.V. / S.L.D.															
DESCRIZIONI	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Corr. Tors. dir. 0	-1.00	1.00	-1.00	1.00	-1.00	1.00	-1.00	-1.00	1.00	-1.00	1.00	-1.00	1.00	-1.00	1.00
Corr. Tors. dir. 90	0.30	-0.30	-0.30	-0.30	-0.30	0.30	0.30	0.30	0.30	-0.30	-0.30	-0.30	-0.30	0.30	0.30
Sisma direz. grd 0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Sisma direz. grd 90	0.30	0.30	0.30	-0.30	-0.30	-0.30	-0.30	0.30	0.30	0.30	0.30	-0.30	-0.30	-0.30	-0.30

COMBINAZIONI CARICHI A1 - S.L.V. / S.L.D.															
DESCRIZIONI	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Peso Strutturale	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Perm.Non Strutturale	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Var.Abitazioni	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Var.Uffici	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Var.Neve h<=1000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Var.Coperture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 270	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corr. Tors. dir. 0	0.30	-0.30	0.30	-0.30	0.30	-0.30	0.30	-0.30	-0.30	0.30	-0.30	0.30	-0.30	0.30	-0.30
Corr. Tors. dir. 90	1.00	1.00	-1.00	-1.00	-1.00	-1.00	1.00	1.00	1.00	1.00	-1.00	-1.00	-1.00	-1.00	1.00
Sisma direz. grd 0	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30
Sisma direz. grd 90	1.00	1.00	1.00	1.00	-1.00	-1.00	-1.00	-1.00	1.00	1.00	1.00	1.00	-1.00	-1.00	-1.00

COMBINAZIONI CARICHI A1 - S.L.V. / S.L.D.	
DESCRIZIONI	46
Peso Strutturale	1.00
Perm.Non Strutturale	1.00
Var.Abitazioni	0.30
Var.Uffici	0.30
Var.Neve h<=1000	0.00
Var.Coperture	0.00
Vento dir. 0	0.00

COMBINAZIONI CARICHI A1 - S.L.V. / S.L.D.

DESCRIZIONI	46
Vento dir. 90	0.00
Vento dir. 180	0.00
Vento dir. 270	0.00
Corr. Tors. dir. 0	0.30
Corr. Tors. dir. 90	1.00
Sisma direz. grd 0	-0.30
Sisma direz. grd 90	-1.00

COMBINAZIONI RARE - S.L.E.

DESCRIZIONI	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Peso Strutturale	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Perm.Non Strutturale	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Var.Abitazioni	1.00	0.70	1.00	0.70	0.70	1.00	0.70	0.70	1.00	0.70	0.70	1.00	0.70	0.70
Var.Uffici	1.00	0.70	1.00	0.70	0.70	1.00	0.70	0.70	1.00	0.70	0.70	1.00	0.70	0.70
Var.Neve h<=1000	0.50	1.00	0.50	1.00	0.50	0.50	1.00	0.50	0.50	1.00	0.50	0.50	1.00	0.50
Var.Coperture	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Vento dir. 0	0.00	0.00	0.60	0.60	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 90	0.00	0.00	0.00	0.00	0.00	0.60	0.60	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	1.00	0.00	0.00	0.00
Vento dir. 270	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	1.00
Corr. Tors. dir. 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corr. Tors. dir. 90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sisma direz. grd 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sisma direz. grd 90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

COMBINAZIONI FREQUENTI - S.L.E.

DESCRIZIONI	1	2	3	4	5	6
Peso Strutturale	1.00	1.00	1.00	1.00	1.00	1.00
Perm.Non Strutturale	1.00	1.00	1.00	1.00	1.00	1.00
Var.Abitazioni	0.50	0.30	0.30	0.30	0.30	0.30
Var.Uffici	0.50	0.30	0.30	0.30	0.30	0.30

COMBINAZIONI FREQUENTI - S.L.E.

DESCRIZIONI	1	2	3	4	5	6
Var.Neve h<=1000	0.00	0.20	0.00	0.00	0.00	0.00
Var.Coperture	0.00	0.00	0.00	0.00	0.00	0.00
Vento dir. 0	0.00	0.00	0.20	0.00	0.00	0.00
Vento dir. 90	0.00	0.00	0.00	0.20	0.00	0.00
Vento dir. 180	0.00	0.00	0.00	0.00	0.20	0.00
Vento dir. 270	0.00	0.00	0.00	0.00	0.00	0.20
Corr. Tors. dir. 0	0.00	0.00	0.00	0.00	0.00	0.00
Corr. Tors. dir. 90	0.00	0.00	0.00	0.00	0.00	0.00
Sisma direz. grd 0	0.00	0.00	0.00	0.00	0.00	0.00
Sisma direz. grd 90	0.00	0.00	0.00	0.00	0.00	0.00

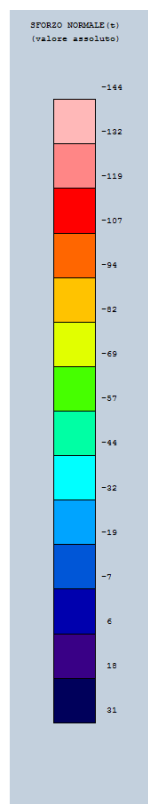
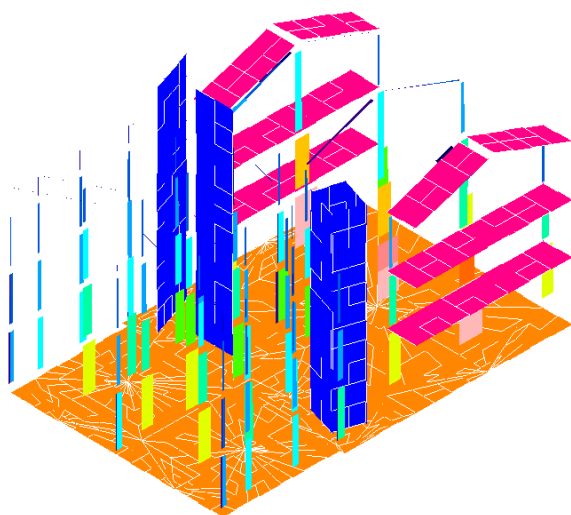
COMBINAZIONI PERMANENTI - S.L.E.

DESCRIZIONI	1
Peso Strutturale	1.00
Perm.Non Strutturale	1.00
Var.Abitazioni	0.30
Var.Uffici	0.30
Var.Neve h<=1000	0.00
Var.Coperture	0.00
Vento dir. 0	0.00
Vento dir. 90	0.00
Vento dir. 180	0.00
Vento dir. 270	0.00
Corr. Tors. dir. 0	0.00
Corr. Tors. dir. 90	0.00
Sisma direz. grd 0	0.00
Sisma direz. grd 90	0.00

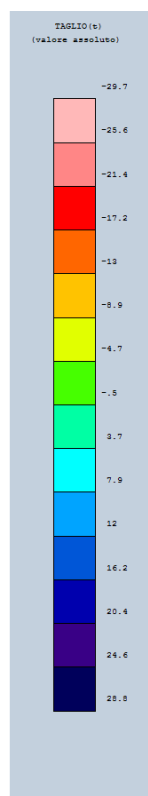
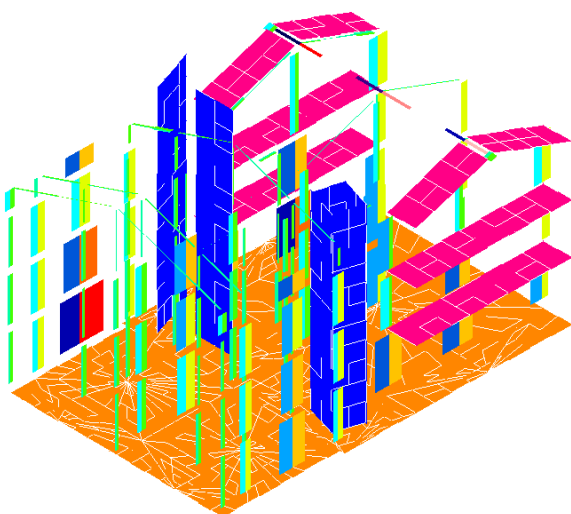
2.8 Principali risultati

Di seguito si riportano gli involuipi delle sollecitazioni principali:

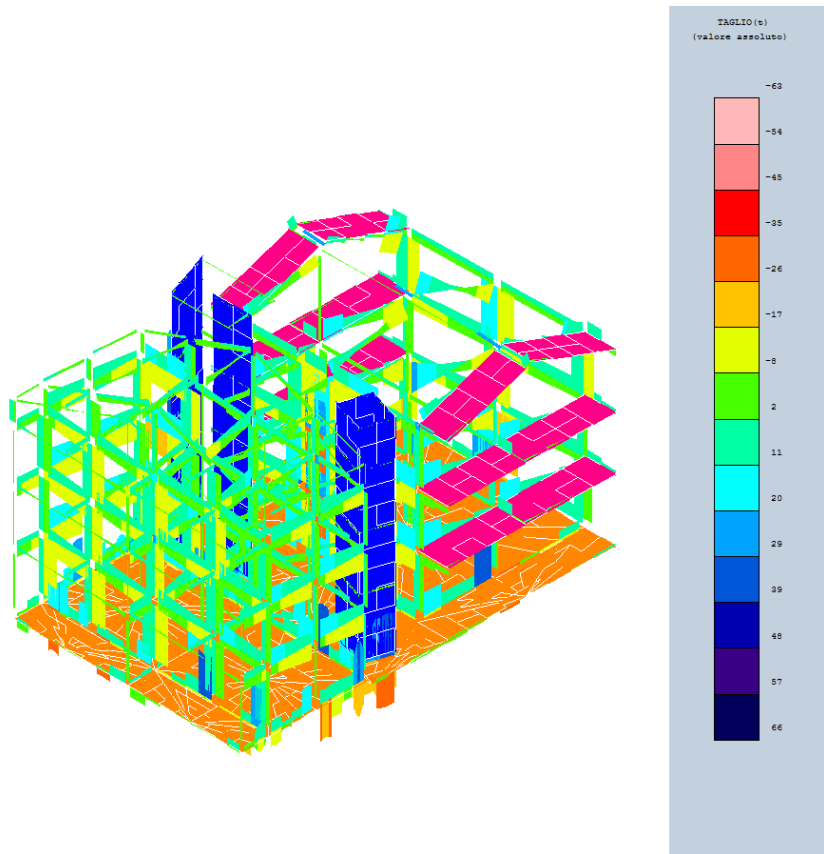
Sforzo Normale - Inviluppo



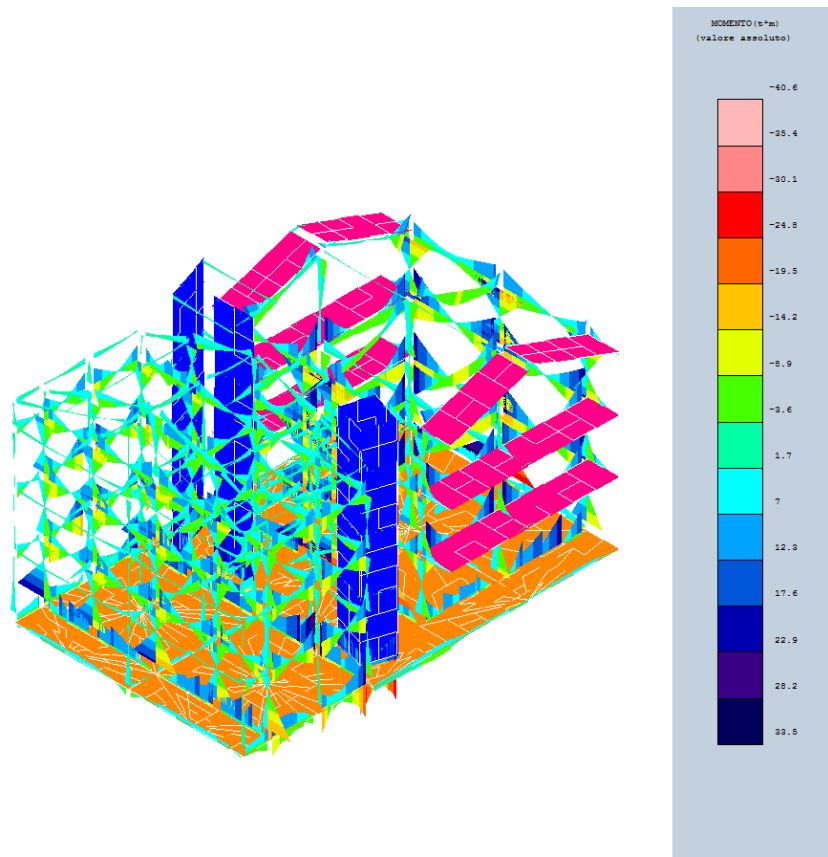
Taglio X - Inviluppo



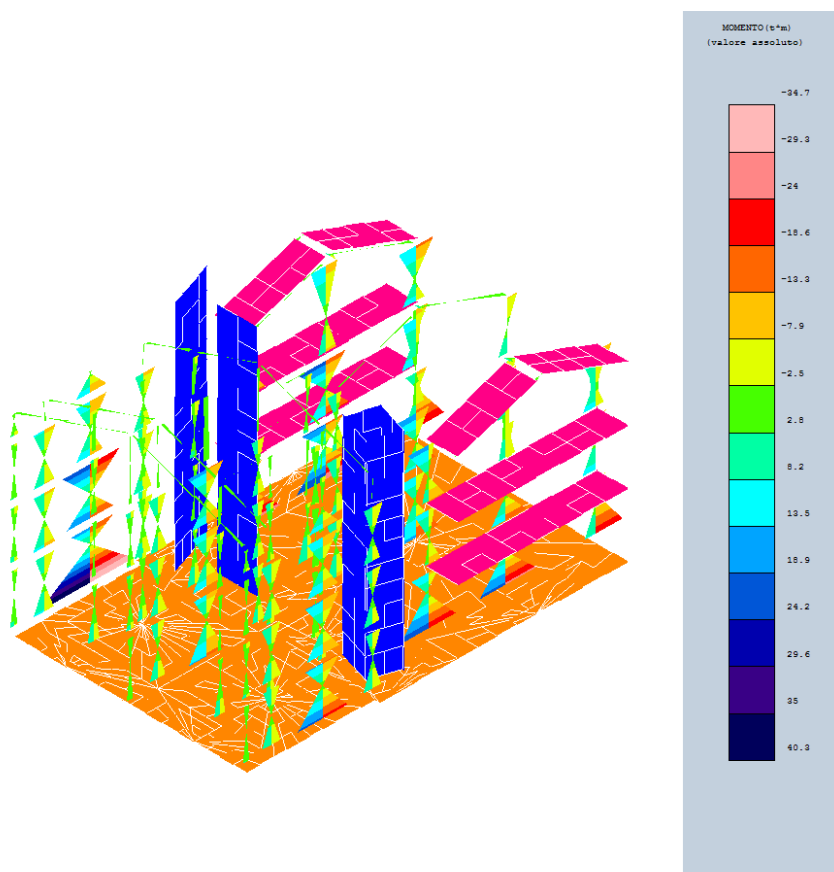
Taglio Y - Inviluppo



Momento Flettente 1 - Inviluppo



Momento Flettente 2 - Involuppo



STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a Bas t Alt	Sez n Co	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE														staffe Pas Lun Fi		
				Nr	GamRd	M Exd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area sup cmq	Co Nr	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq								
34 37 2.5	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	14.1 14.1 8.7	0.0 0.0 0.0	21 21 19	16 16 12	5 5 3	4.8 4.8 4.8	5.8 5.8 4.8	8.9 8.9 4.8	30 0 0	0.0 0.0 0.0	-34.7 0.0 0.0	-0.6 0.0 0.0	14.6 11.7 11.7	42.1 33.7 33.7	10.3 8.2 8.2	0.9 0.0 0.0	79 0 0	88 0 0	3.2 0.0 0.0	16 20 20	61 0 0	8 8 8			
37 40 2.5	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	21.6 21.6 -15.1	0.0 0.0 0.0	26 26 21	16 16 17	6 6 5	5.8 5.8 5.8	8.9 8.9 4.8	4.8 0 0	0.0 0.0 0.0	-30.8 0.0 0.0	0.0 0.0 0.0	14.6 10.6 10.6	42.1 30.6 30.6	10.3 7.5 7.5	0.0 0.0 0.0	61 0 0	73 0 0	0.0 0.0 0.0	16 22 21	60 0 24	8 8 8				
40 43 2.5	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	9.4 9.4 9.4	0.0 0.0 0.0	19 19 19	13 13 13	3 3 3	4.8 4.8 4.8	4.8 4.8 4.8	4.8 4.8 0	0.0 0.0 0.0	-13.5 -13.8 0.0	0.0 0.0 0.0	14.6 10.6 10.6	42.1 30.6 30.6	10.3 7.5 7.5	0.0 0.0 0.0	27 28 0	32 45 0	0.0 0.0 0.0	16 22 22	77 5 0	8 8 8				
43 51 2.5	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	-13.2 -13.2 -13.2	0.0 0.0 0.0	21 21 21	15 15 15	4 4 4	5.8 5.8 5.8	4.8 4.8 4.8	3 0 0	0.0 0.0 0.0	-13.3 0.0 0.0	0.0 0.0 0.0	14.6 10.6 10.6	42.1 30.6 30.6	10.3 7.5 7.5	0.0 0.0 0.0	26 0 0	32 0 0	0.0 0.0 0.0	16 22 22	64 0 0	8 8 8				
51 50 2.5	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	-15.5 -15.5 -15.5	0.0 0.0 0.0	21 21 21	17 17 17	5 5 5	5.9 5.9 5.9	5.8 5.8 5.8	21 0 0	0.0 0.0 0.0	-12.6 0.0 0.0	0.0 0.0 0.0	14.6 10.6 10.6	42.1 30.6 30.6	10.3 7.5 7.5	0.0 0.0 0.0	25 0 0	30 0 0	0.0 0.0 0.0	16 22 22	62 0 0	8 8 8				
34 33 2.5	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	14.6 14.6 14.6	0.0 0.0 0.0	21 21 21	17 17 17	5 5 5	5.8 5.8 5.8	5.8 5.8 5.8	20 0 0	0.0 0.0 0.0	-13.4 0.0 0.0	0.0 0.0 0.0	14.6 10.6 10.6	42.1 30.6 30.6	10.3 7.5 7.5	0.0 0.0 0.0	27 0 0	32 0 0	0.0 0.0 0.0	16 22 22	59 0 0	8 8 8				
50 48 2.5	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	19.5 19.5 19.5	0.0 0.0 0.0	26 26 26	16 16 16	6 6 6	4.8 4.8 4.8	8.2 8.2 8.2	15 0 0	0.0 0.0 0.0	-29.2 0.0 0.0	0.0 0.0 0.0	14.6 10.6 10.6	42.1 30.6 30.6	10.3 7.5 7.5	0.0 0.0 0.0	58 0 0	69 0 0	0.0 0.0 0.0	16 22 22	67 0 0	8 8 8				
33 31 2.2	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	24.7 24.7 24.1	0.0 0.0 0.0	28 28 28	17 17 17	7 7 7	4.9 4.8 4.8	9.9 9.9 9.7	20 0 0	0.0 0.0 0.0	-42.4 0.0 0.0	-1.2 0.0 0.0	50.7 10.3 10.3	54.9 29.6 29.6	6.2 7.2 7.2	1.2 0.0 0.0	97 0 0	96 0 0	4.0 0.0 0.0	12 20 20	64 0 0	8 8 8				
48 45 2.5	0.00 0.00 4	1 / 4	30 30 80	1 30 5	1.10 1.10 1.10	-11.0 -11.0 -11.0	0.0 0.0 0.0	20 20 20	15 15 15	4 4 4	4.8 4.8 4.8	4.8 4.8 4.8	40 0 0	0.0 0.0 0.0	-12.2 0.0 0.0	1.2 0.0 0.0	46.4 11.7 11.7	50.2 33.7 33.7	5.7 8.2 8.2	1.2 0.0 0.0	45 0 0	42 0 0	4.4 0.0 0.0	16 20 20	66 0 0	8 8 8				

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Bas n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE															
				Co	Gam	Rd	M Exd (t°m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area cmq sup inf	Co	Nr	V Exd (t)	V Eyd (t)	T Sdu (t°m)	V Rxd (t)	V Ryd (t)	TRd (t°m)	TRld (t°m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun Fi				
62	0.00	1	30	1	41	1.10	-12.6	0.0	19	17	4	4.8	5.8	37	0.0	-9.7	0.0	14.6	42.1	10.3	0.0	19	23	0.0	16	75	8		
26	0.00	/	30	3	41	1.10	-12.6	0.0	19	17	4	4.8	5.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
2.5		2	80	5	41	1.10	-12.6	0.0	19	17	4	4.8	5.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
27	0.00	1	30	1	36	1.10	-17.7	0.0	23	16	5	7.7	7.6	40	0.0	-25.0	0.0	14.6	42.1	10.3	0.0	50	60	0.0	16	59	8		
29	0.00	/	30	3	36	1.10	-17.7	0.0	23	16	5	7.7	7.6	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
2.5		2	80	5	36	1.10	-17.7	0.0	23	16	5	7.7	7.6	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
35	0.00	1	30	1	24	1.10	-5.1	0.0	19	7	2	4.8	4.8	24	0.0	-2.8	1.1	46.4	50.2	5.7	1.1	24	17	3.9	16	67	8		
34	0.00	/	30	3	24	1.10	-5.1	0.0	19	7	2	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8		
2.5		2	80	5	24	1.10	-5.1	0.0	19	7	2	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8		
45	0.00	1	30	1	34	1.10	35.9	0.0	30	17	8	12.9	14.5	34	0.0	-32.4	0.0	14.6	42.1	10.3	0.0	64	77	0.0	16	61	8		
62	0.00	/	30	3	34	1.10	35.9	0.0	30	17	8	12.9	14.5	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
2.5		4	80	5	34	1.10	34.4	0.0	30	17	7	12.6	14.0	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	20	28	8		
52	0.00	1	30	1	27	1.10	-5.6	0.0	19	8	2	4.8	4.8	27	0.0	-3.6	-1.0	46.4	50.2	5.7	1.0	25	18	3.7	16	67	8		
51	0.00	/	30	3	27	1.10	-5.6	0.0	19	8	2	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8		
2.5		2	80	5	27	1.10	-5.6	0.0	19	8	2	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8		
35	0.00	1	32	1	24	1.10	2.2	0.0	19	8	2	3.1	3.1	24	0.0	-5.2	-0.6	29.0	30.5	3.4	0.6	35	30	2.5	16	47	8		
36	0.00	/	30	3	24	1.10	2.2	0.0	19	8	2	3.1	3.1	24	0.0	-5.2	-0.6	29.0	30.5	3.4	0.6	34	30	2.5	16	29	8		
2.5		4	50	5	40	1.10	-1.9	0.0	19	7	2	3.1	3.1	0	0.0	0.0	0.0	14.6	25.6	6.0	0.0	0	0	0.0	16	0	8		
17	0.00	1	30	1	18	1.10	16.3	0.0	21	18	5	7.5	6.2	30	0.0	21.2	-1.0	14.6	42.1	10.3	1.0	60	60	3.7	16	77	8		
7	0.00	/	30	3	18	1.10	16.3	0.0	21	18	5	7.5	6.2	30	0.0	20.7	-1.0	11.7	33.7	8.2	1.0	59	74	3.7	20	26	8		
2.5		4	80	5	45	1.10	-8.3	0.0	19	12	3	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8		
41	0.00	1	32	1	24	1.10	5.1	0.0	22	14	4	3.1	4.1	24	0.0	-7.8	0.0	14.6	25.6	6.0	0.0	26	31	0.0	16	47	8		
42	0.00	/	30	3	24	1.10	5.1	0.0	22	14	4	3.1	4.1	24	0.0	-7.8	0.0	10.6	18.6	4.4	0.0	26	42	0.0	22	46	8		
2.5		4	50	5	30	1.10	-2.1	0.0	19	8	2	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8		
9	0.00	1	30	1	36	1.10	10.8	0.0	19	15	4	4.8	4.8	20	0.0	-10.8	0.0	14.6	42.1	10.3	0.0	22	26	0.0	16	77	8		
1	0.00	/	30	3	36	1.10	10.8	0.0	19	15	4	4.8	4.8	20	0.0	-10.8	0.0	10.6	30.6	7.5	0.0	22	35	0.0	22	49	8		
2.5		4	80	5	43	1.10	6.3	0.0	19	9	2	4.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
54	0.00	1	30	1	41	1.10	-14.9	0.0	21	17	5	5.8	4.8	41	0.0	18.2	0.9	14.6	42.1	10.3	1.1	52	52	4.1	16	77	8		
5	0.00	/	30	3	41	1.10	-14.9	0.0	21	17	5	5.8	4.8	41	0.0	17.9	0.9	11.7	33.7	8.2	1.1	51	64	4.1	20	26	8		
2.5		4	80	5	41	1.10	3.5	0.0	19	5	1	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8		
54	0.00	1	30	1	31	1.10	15.7	0.0	22	18	5	5.8	6.0	43	0.0	-14.9	1.3	46.4	50.2	5.7	1.4	53	51	5.2	16	77	8		
69	0.00	/	30	3	31	1.10	16.1	0.0	22	18	5	5.8	6.2	27	0.0	-17.0	0.9	11.7	33.7	8.2	1.4	53	61	5.2	20	14	8		
2.5		2	80	5	31	1.10	16.1	0.0	22	18	5	5.8	6.2	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8		
7	0.00	1	30	1	20	1.10	17.0	0.0	24	15	5	4.8	7.4	3	0.0	-28.4	0.0	14.6	42.1	10.3	0.0	57	68	0.0	16	77	8		
9	0.00	/	30	3	18	1.10	-15.9	0.0	21	18	5	6.1	7.4	3	0.0	-28.7	0.0	10.6	30.6	7.5	0.0	57	94	0.0	22	44	8		
2.5		4	80	5	18	1.10	-15.9	0.0	22	18	5	6.1	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
1	0.00	1	30	1	36	1.10	26.0	0.0	29	17	7	5.1	10.3	36	0.0	-25.4	0.0	14.6	42.1	10.3	0.0	51	60	0.0	16	77	8		
2	0.00	/	30	3	36	1.10	26.0	0.0	29	17	7	4.8	10.3	36	0.0	-25.4	0.0	10.6	30.6	7.5	0.0	51	83	0.0	22	49	8		
2.5		4	80	5	21	1.10	-7.0	0.0	19	10	2	4.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
5	0.00	1	30	1	15	1.10	17.0	0.0	24	15	5	4.8	7.4	3	0.0	-29.2	0.0	14.6	42.1	10.3	0.0	58	69	0.0	16	77	8		
2	0.00	/	30	3	21	1.10	-16.0	0.0	21	18	5	6.1	7.4	3	0.0	-29.5	0.0	10.6	30.6	7.5	0.0	59	96	0.0	22	44	8		
2.5		4	80	5	21	1.10	-16.0	0.0	22	17	5	6.4	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
73	0.00	1	30	1	40	1.10	16.1	0.0	21	18	5	6.1	6.1	40	0.0	-22.5	0.0	14.6	42.1	10.3	0.0	45	53	0.0	16	77	8		
18	0.00	/	30	3	40	1.10	16.1	0.0	21	18	5	6.1	6.1	40	0.0	-22.2	0.0	10.6	30.6	7.5	0.0	44	73	0.0	22	23	8		
2.5		2	80	5	36	1.10	-13.8	0.0	21	16	5	5.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8		
70	0.00	1	31	1	15	1.10	8.3	0.0	21	15	5	5.0	6.0	15	0.0	-9.6	0.0	31.5	31.5	13.9	0.0	19	30	0.0	13	47	8		
6	0.00	/	50	3	15	1																							

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz. Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Bas Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE															
					Co	Gam	Rd	M Exd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area cmq sup inf	Co	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun Fi					
6 7 2.5	0.00 0.00	1 /	31 50 50	1 3 5	24 24 24	1.10 1.10 1.10	2.2 2.2 1.5	0.0 0.0 0.0	19 19 19	5 5 3	1 1 1	5.0 5.0 5.0	5.0 5.0 5.0	24 24 0	0.0 0.0 0.0	-1.0 -1.4 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	2 3 0	3 4 0	0.0 0.0 0.0	13 13 13	47 82 0	8 8 8			
9 10 2.5	0.00 0.00	1 /	32 30 50	1 3 5	15 15 31	1.10 1.10 1.10	5.9 5.9 3.3	0.0 0.0 0.0	23 23 20	16 16 12	5 5 3	3.1 3.1 3.1	4.1 4.1 3.1	18 18 0	0.0 0.0 0.0	-7.7 -7.7 0.0	0.0 0.0 0.0	14.6 10.6 10.6	25.6 18.6 18.6	6.0 4.4 4.4	0.0 0.0 0.0	25 25 0	30 42 0	0.0 0.0 0.0	16 22 22	47 40 0	8 8 8			
10 8 2.5	0.00 0.00	1 /	32 30 50	1 3 5	136 18 18	1.10 1.10 1.10	-0.5 -2.4 -2.4	0.0 0.0 0.0	19 19 19	2 8 8	0 2 2	3.1 3.1 3.1	3.1 3.1 3.1	16 18 0	0.0 0.0 0.0	-1.8 -1.9 0.0	0.0 0.0 0.0	14.6 10.6 10.6	25.6 18.6 18.6	6.0 4.4 4.4	0.0 0.0 0.0	6 6 0	7 10 0	0.0 0.0 0.0	16 22 22	47 89 0	8 8 8			
2 3 2.5	0.00 0.00	1 /	32 30 50	1 3 5	136 36 43	1.10 1.10 1.10	6.3 6.3 3.3	0.0 0.0 0.0	23 23 20	17 17 12	5 5 3	3.1 3.1 3.1	4.2 4.2 3.1	21 21 0	0.0 0.0 0.0	-8.0 -8.0 0.0	0.0 0.0 0.0	14.6 10.6 10.6	25.6 18.6 18.6	6.0 4.4 4.4	0.0 0.0 0.0	26 26 0	31 43 0	0.0 0.0 0.0	16 22 22	47 40 0	8 8 8			
49 53 2.5	0.00 0.00	1 /	32 30 50	1 3 5	143 37 37	1.10 1.10 1.10	2.8 3.0 3.0	0.0 0.0 0.0	20 20 20	10 11 11	3 3 3	3.1 3.1 3.1	3.1 3.1 3.1	21 21 0	0.0 0.0 0.0	1.6 1.6 0.0	0.0 0.0 0.0	14.6 10.6 10.6	25.6 18.6 18.6	6.0 4.4 4.4	0.0 0.0 0.0	5 5 0	6 9 0	0.0 0.0 0.0	16 22 22	47 70 0	8 8 8			
8 11 2.5	0.00 0.00	1 /	32 30 50	1 3 5	130 30 30	1.10 1.10 1.10	1.8 1.8 1.8	0.0 0.0 0.0	19 19 19	7 7 7	2 2 2	3.1 3.1 3.1	3.1 3.1 3.1	1 27 0	0.0 0.0 0.0	0.2 -0.2 0.0	0.0 0.0 0.0	14.6 10.6 10.6	25.6 18.6 18.6	6.0 4.4 4.4	0.0 0.0 0.0	1 1 0	1 1 0	0.0 0.0 0.0	16 22 22	47 71 0	8 8 8			
11 32 2.5	0.00 0.00	1 /	32 30 50	1 3 5	124 24 24	1.10 1.10 1.10	-6.9 -8.3 -8.3	0.0 0.0 0.0	23 26 26	17 15 15	6 6 6	4.5 6.3 6.3	4.5 6.2 6.2	20 20 0	0.0 0.0 0.0	2.4 2.4 0.0	0.0 0.0 0.0	14.6 10.6 10.6	25.6 18.6 18.6	6.0 4.4 4.4	0.0 0.0 0.0	8 8 0	9 13 0	0.0 0.0 0.0	16 22 22	47 70 0	8 8 8			
4 3 2.5	0.00 0.00	1 /	32 30 50	1 3 5	137 37 37	1.10 1.10 1.10	-1.7 -1.7 -1.7	0.0 0.0 0.0	19 19 19	6 6 6	2 2 2	3.1 3.1 3.1	3.1 3.1 3.1	39 39 0	0.0 0.0 0.0	0.3 0.2 0.0	0.0 0.0 0.0	14.6 10.6 10.6	25.6 18.6 18.6	6.0 4.4 4.4	0.0 0.0 0.0	1 1 0	1 1 0	0.0 0.0 0.0	16 22 22	47 89 0	8 8 8			
53 4 2.5	0.00 0.00	1 /	32 30 50	1 3 5	127 27 27	1.10 1.10 1.10	-3.2 -3.2 -2.2	0.0 0.0 0.0	20 20 19	11 11 8	3 3 2	3.1 3.1 3.1	3.1 3.1 3.1	37 31 0	0.0 0.0 0.0	-1.7 -1.5 0.0	-0.5 0.5 0.0	29.0 29.0 14.6	30.5 30.5 25.6	3.4 3.4 6.0	0.6 0.6 0.0	19 20 0	14 14 0	2.4 2.4 0.0	16 16 16	47 71 0	8 8 8			
41 40 2.5	0.00 0.00	1 /	31 50 50	1 3 5	125 25 24	1.10 1.10 1.10	-2.7 -2.7 -2.4	0.0 0.0 0.0	19 19 19	6 6 5	2 2 1	5.0 5.0 5.0	5.0 5.0 5.0	23 23 0	0.0 0.0 0.0	2.9 2.7 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	6 5 0	9 9 0	0.0 0.0 0.0	13 13 13	47 20 0	8 8 8			
62 70 2.5	0.00 0.00	1 /	31 50 50	1 3 5	143 43 36	1.10 1.10 1.10	3.6 3.6 2.9	0.0 0.0 0.0	19 19 19	8 8 6	2 2 2	5.0 5.0 5.0	5.0 5.0 5.0	31 31 0	0.0 0.0 0.0	-3.7 -4.2 0.0	1.0 1.0 0.0	50.9 50.9 31.5	50.9 50.9 31.5	6.3 6.3 13.9	1.1 1.1 0.0	23 24 0	19 20 0	3.2 3.2 0.0	13 13 13	47 62 0	8 8 8			
39 62 2.5	0.00 0.00	1 /	31 50 50	1 3 5	120 20 21	1.10 1.10 1.10	9.6 9.6 -4.6	0.0 0.0 0.0	23 23 19	15 15 10	5 5 3	5.0 5.0 5.0	7.0 7.0 5.0	20 20 0	0.0 0.0 0.0	-21.3 -21.4 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	42 42 0	68 68 0	0.0 0.0 0.0	13 13 13	47 20 0	8 8 8			
40 39 2.5	0.00 0.00	1 /	31 50 50	1 3 5	120 20 20	1.10 1.10 1.10	5.1 5.1 4.5	0.0 0.0 0.0	19 19 19	11 11 10	3 3 3	5.0 5.0 5.0	5.0 5.0 5.0	19 19 0	0.0 0.0 0.0	-6.7 -6.8 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	13 13 0	21 22 0	0.0 0.0 0.0	13 13 13	47 15 0	8 8 8			
30 12 2.5	0.00 0.00	1 /	44 30 80	1 3 5	124 24 24	1.10 1.10 1.10	44.4 44.4 44.4	0.0 0.0 0.0	32 32 32	18 18 18	9 9 9	14.9 14.9 14.9	16.9 16.9 16.9	24 0 0	0.0 0.0 0.0	-31.6 0.0 0.0	4.5 0.0 0.0	13.7 11.7 11.7	39.6 33.7 33.7	23.6 20.0 20.0	4.5 0.0 0.0	95 0 0	99 0 0	10.5 0.0 0.0	17 20 18	38 0 38	8 8 8			
12 17 2.5	0.00 0.00	1 /	32 30 50	1 3 5	124 24 24	1.10 1.10 1.10	-12.0 -12.0 -9.6	0.0 0.0 0.0	29 29 27	17 17 16	7 7 6	8.1 8.1 6.9	8.0 8.0 6.7	24 20 0	0.0 0.0 0.0	10.9 -11.8 0.0	-0.9 0.8 0.0	29.0 29.0 14.6	30.5 30.5 25.6	3.4 3.4 6.0	1.1 1.1 0.0	63 62 0	59 59 0	4.6 4.6 0.0	16 16 16	47 28 0	8 8 8			
29 31 2.5	0.00 0.00	1 /	30 30 80	1 3 5	120 20 20	1.10 1.10 1.10	-16.4 -16.4 -16.4	0.0 0.0 0.0	22 22 22	18 18 18	5 5 5	6.2 6.2 6.2	5.8 5.8 5.8	40 0 0	0.0 0.0 0.0	-21.2 0.0 0.0	0.0 0.0 0.0	14.6 10.6 10.6	42.1 30.6 30.6	10.3 7.5 7.5	0.0 0.0 0.0	42 0 0	50 0 0	0.0 0.0 0.0	16 22 22	69 0 0	8 8 8			
30 29 2.5	0.00 0.00		44 30 80	1 3 5	120 20 20	1.10 1.10 1.10	-34.3 -34.3 -33.0	0.0 0.0 0.0	0 0 0	0 0 0	0 0 0	3.1 3.1 3.1	3.1 3.1 3.1	20 20 20	0.0 0.0 0.0	70.8 71.2 72.7	-5.3 -5.3 -5.3	67.3 67.3 67.3	72.8 72.8 72.8	20.2 20.2 20.2	0.0 0.0 0.0	124 124 126	0 0 0	0.0 0.0 0.0	0 0 0	0 0 0	8 8 8			
62 56 2.5	0.00 0.00	1 /	32 30 50	1 3 5	136 36 40	1.10 1.10 1.10	5.7 5.7 0.9	0.0 0.0 0.0	22 22 19	15 15 3	5 5 1	4.1 4.1 3.1	4.1 4.1 3.1	40 40 0	0.0 0.0 0.0	11.6 11.5 0.0	0.0 0.0 0.0	14.6 10.6 10.6	25.6 18.6 18.6	6.0 4.4 4.4	0.0 0.0 0.0	38 38 0	45 62 0	0.0 0.0 0.0	16 22 22	47 6 0	8 8 8			
56 45 2.5	0.00 0.00	1 /	32 30 50	1 3 5	131 31 31	1.10 1.10 1.10	8.4 8.4 6.3	0.0 0.0 0.0	27 27 23	15 15 17	6 6 5	4.1 4.1 3.1	6.3 6.3 4.2	27 15 0	0.0 0.0 0.0	5.0 -8.7 0.0	-0.6 0.0 0.0	29.0 14.6 14.6	30.5 25.6 25.6	3.4 6.0 6.0	0.7 0.7 0.0	34 34 0	34 35 0	2.8 2.8 0.0	16 16 16	47 34 0	8 8 8			
56 69 2.5	0.00 0.00	1 /	32 30 50	1 3 5	134 34 34	1.10 1.10 1.10	2.3 2.7 2.7	0.0 0.0 0.0	19 20 20	8 10 10	2 3 3	3.1 3.1 3.1	3.1 3.1 3.1	21 21 0	0.0 0.0 0.0	1.8 1.8 0.0	0.7 0.7 0.0	29.0 29.0 14.6	30.5 30.5 25.6	3.4 3.4 6.0	0.7 0.7 0.0	27 27 0	19 19 0	3.0 3.0 0.0	16 16 16	47 34 0	8 8 8			

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Bas n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE													
				Co	Gam	Rd	M Exd (t*m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area cmq sup inf	Co	Nr	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRId (t*m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun Fi		
25	0.00	1	44	1	43	1.10	38.8	0.0	32	17	8	12.8	15.4	46	0.0	-26.6	-4.0	11.7	33.7	20.0	5.3	82	99	12.2	20	0	8
23	0.00	/	30	3	43	1.10	38.8	0.0	32	17	8	12.8	15.4	46	0.0	-26.2	-4.0	11.7	33.7	20.0	5.4	81	98	12.5	20	119	8
2.5		2	80	5	46	1.10	30.3	0.0	29	17	7	11.3	11.8	0	0.0	0.0	0.0	11.7	33.7	20.0	0.0	0	0	0.0	20	0	8
23	0.00	1	32	1	46	1.10	-3.5	0.0	20	12	3	3.1	3.1	20	0.0	-1.8	-0.6	29.0	30.5	3.4	0.6	24	17	2.7	16	47	8
18	0.00	/	30	3	46	1.10	-3.6	0.0	20	13	3	3.1	3.1	20	0.0	-1.9	-0.6	29.0	30.5	3.4	0.6	25	18	2.7	16	31	8
2.5		4	50	5	46	1.10	-3.6	0.0	20	13	3	3.1	3.1	0	0.0	0.0	0.0	14.6	25.6	6.0	0.0	0	0	0.0	16	0	8
27	0.00	1	32	1	30	1.10	7.3	0.0	24	17	6	3.1	4.8	46	0.0	-12.9	0.0	14.6	25.6	6.0	0.0	42	51	0.0	16	47	8
23	0.00	/	30	3	30	1.10	7.3	0.0	24	17	6	3.1	4.8	46	0.0	-12.9	0.0	10.6	18.6	4.4	0.0	42	70	0.0	22	25	8
2.5		2	50	5	43	1.10	-2.4	0.0	19	9	2	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8
26	0.00	1	30	1	30	1.10	5.5	0.0	19	8	2	4.8	4.8	34	0.0	-7.8	-1.0	46.4	50.2	5.7	1.0	34	29	3.8	16	77	8
25	0.00	/	30	3	46	1.10	6.6	0.0	19	9	2	4.8	4.8	33	0.0	-7.9	-1.0	11.7	33.7	8.2	1.0	34	36	3.8	20	2	8
2.5		2	80	5	46	1.10	6.6	0.0	19	9	2	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8
26	0.00	1	30	1	31	1.10	-16.8	0.0	24	15	5	7.4	4.8	31	0.0	6.1	1.1	46.4	50.2	5.7	1.2	32	28	4.4	16	77	8
27	0.00	/	30	3	31	1.10	-16.8	0.0	24	15	5	7.4	4.8	40	0.0	8.0	0.8	11.7	33.7	8.2	1.2	31	33	4.4	20	21	8
2.5		2	80	5	34	1.10	-16.3	0.0	22	18	5	6.2	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8
18	0.00	1	30	1	20	1.10	-10.1	0.0	19	14	4	4.8	4.8	24	0.0	3.9	0.0	14.6	42.1	10.3	0.0	8	9	0.0	16	63	8
17	0.00	/	30	3	20	1.10	-10.1	0.0	19	14	4	4.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8
2.5		2	80	5	20	1.10	-10.1	0.0	19	14	4	4.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8
60	0.00	1	47	1	31	1.10	30.2	0.0	29	16	7	12.8	12.8	31	0.0	-19.3	3.8	11.7	33.7	24.3	5.2	61	73	11.4	20	0	8
47	0.00	/	30	3	31	1.10	30.2	0.0	29	16	7	12.8	12.8	31	0.0	-20.9	3.8	11.7	33.7	24.3	5.2	64	78	11.4	20	113	8
2.5		2	80	5	34	1.10	25.4	0.0	29	13	6	12.8	12.8	0	0.0	0.0	0.0	11.7	33.7	24.3	0.0	0	0	0.0	20	0	8
60	0.00	1	47	1	41	1.10	22.2	0.0	29	11	5	12.8	12.8	25	0.0	-26.2	-8.0	46.4	50.2	16.9	8.8	99	88	19.1	16	61	8
63	0.00	/	30	3	41	1.10	22.2	0.0	29	11	5	12.8	12.8	0	0.0	0.0	0.0	11.7	33.7	24.3	0.0	0	0	0.0	20	0	8
2.5		2	80	5	41	1.10	21.2	0.0	29	11	5	12.8	12.8	0	0.0	0.0	0.0	11.7	33.7	24.3	0.0	0	0	0.0	17	28	8
63	0.00	1	47	1	31	1.10	33.5	0.0	29	17	8	12.8	12.8	25	0.0	-8.2	4.5	46.4	50.2	16.9	5.5	43	43	12.0	20	0	8
61	0.00	/	30	3	31	1.10	33.5	0.0	29	17	8	12.8	12.8	25	0.0	-9.8	4.5	11.7	33.7	24.3	5.5	46	48	12.0	20	113	8
2.5		2	80	5	31	1.10	31.3	0.0	29	16	7	12.8	12.8	0	0.0	0.0	0.0	11.7	33.7	24.3	0.0	0	0	0.0	20	0	8
61	0.00	1	47	1	21	1.10	32.5	0.0	29	17	7	12.8	12.8	21	0.0	-36.5	-5.4	15.6	44.9	32.3	6.7	90	98	11.7	12	0	8
47	0.00	/	30	3	21	1.10	32.5	0.0	29	17	7	12.8	12.8	15	0.0	-37.9	-6.7	53.8	58.2	19.6	6.7	99	96	11.7	11	89	8
2		2	80	5	37	1.10	25.2	0.0	29	13	6	12.8	12.8	0	0.0	0.0	0.0	9.3	26.9	19.4	0.0	0	0	0.0	20	0	8
36	0.00	1	32	1	41	1.10	-3.2	0.0	20	11	3	3.1	3.1	39	0.0	-0.8	0.0	14.6	25.6	6.0	0.0	3	3	0.0	16	47	8
41	0.00	/	30	3	41	1.10	-3.5	0.0	20	13	3	3.1	3.1	39	0.0	-0.8	0.0	10.6	18.6	4.4	0.0	3	4	0.0	22	46	8
2.5		4	50	5	41	1.10	-3.5	0.0	20	13	3	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8
42	0.00	1	32	1	30	1.10	-3.6	0.0	20	13	3	3.1	3.1	30	0.0	-1.2	0.0	14.6	25.6	6.0	0.0	4	5	0.0	16	47	8
52	0.00	/	30	3	30	1.10	-3.8	0.0	20	14	4	3.1	3.1	30	0.0	-1.1	0.0	10.6	18.6	4.4	0.0	4	6	0.0	22	29	8
2.5		4	50	5	30	1.10	-3.8	0.0	20	14	4	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8
34	0.00	2	30	1	34	1.10	-17.1	0.0	24	15	5	7.5	4.8	34	0.0	21.7	0.0	10.6	30.6	7.5	0.0	43	71	0.0	22	0	8
37	0.00	/	30	3	34	1.10	-17.1	0.0	24	15	5	7.5	4.8	34	0.0	21.6	0.0	10.6	30.6	7.5	0.0	43	71	0.0	22	61	8
2.5		4	80	5	34	1.10	-17.1	0.0	24	15	5	7.5	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8
34	0.00	3	30	1	41	1.10	-14.5	0.0	21	17	5	5.8	4.8	20	0.0	8.5	0.0	10.6	30.6	7.5	0.0	17	28	0.0	22	0	8
37	0.00	/	30	3	41	1.10	-14.5	0.0	21	17	5	5.8	4.8	20	0.0	8.2	0.0	10.6	30.6	7.5	0.0	16	27	0.0	22	61	8
2.5		4	80	5	41	1.10	-14.5	0.0	21	17	5	5.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8
34	0.00	4	30	1	41	1.10	-11.1	0.0	20	15	4	4.8	4.8	12	0.0	15.9	0.0	10.6	30.6	7.5	0.0	32	52	0.0	22	0	8
37	0.00	/	30	3	41	1.10	-11.1	0.0	20	15	4	4.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8
2.5		4	80	5	41	1.10	-11.1	0.0	20	15	4	4.8	4.8	12	0.0	15.9	0.0	14.6	42.1	10.3	0.0	32	38	0.0	16	61	8
37	0.00	2	30	1	41	1.10	-14.5	0.0	21	17	5	5.8	4.8	37	0.0	-8.6	0.0	10.6	30.6	7.5	0.0	17	28	0.0	22	0	8
40	0.00	/	30	3																							

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Bas Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE															
					Co	Gam	Rd	M Exd (t*m)	N Ed (t)	x/ /d	εf% /100	εc% /100	Area cmq sup inf	Co	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun	Fi				
40 43 2.5	0.00 0.00	4	30 30 4	3 3 80	146 34 534	1.10 1.10 1.10	-16.2 21.3 21.3	0.0 0.0 0.0	22 26 26	18 16 16	5 6 6	6.2 8.2 6.2	4.8 8.8 8.8	34 0 34	0.0 0.0 0.0	32.7 0.0 32.4	0.0 0.0 0.0	11.7 10.6 14.6	33.7 30.6 42.1	8.2 7.5 10.3	0.0 0.0 0.0	65 0 65	97 0 77	0.0 0.0 0.0	20 22 16	22 0 59	8 8 8			
43 51 2.5	0.00 0.00	2 /	30 30 80	3 3 5	146 46 46	1.10 1.10 1.10	-18.2 -18.2 -18.2	0.0 0.0 0.0	25 25 25	16 16 16	6 6 6	7.8 7.8 7.8	4.8 4.8 4.8	37 37 0	0.0 0.0 0.0	-11.9 -12.1 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	24 24 0	39 40 0	0.0 0.0 0.0	22 22 22	0 64 0	8 8 8			
43 51 2.5	0.00 0.00	3 /	30 30 80	3 3 5	146 46 46	1.10 1.10 1.10	-19.3 -19.3 -19.3	0.0 0.0 0.0	25 25 25	16 16 16	6 6 6	8.2 8.2 8.2	4.8 4.8 4.8	46 46 0	0.0 0.0 0.0	-24.9 -25.0 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	50 50 0	81 82 0	0.0 0.0 0.0	22 22 22	0 64 0	8 8 8			
43 51 2.5	0.00 0.00	4 /	30 30 80	3 3 5	125 41 41	1.10 1.10 1.10	-6.9 13.1 13.1	0.0 0.0 0.0	19 21 21	10 15 15	2 4 4	4.8 4.8 4.8	4.8 5.8 5.8	41 0 41	0.0 0.0 0.0	30.4 0.0 30.7	0.0 0.0 0.0	10.6 10.6 14.6	30.6 30.6 42.1	7.5 7.5 10.3	0.0 0.0 0.0	61 0 61	99 0 73	0.0 0.0 0.0	21 22 16	15 0 48	8 8 8			
51 50 2.5	0.00 0.00	2 /	30 30 80	3 3 5	127 27 27	1.10 1.10 1.10	-11.5 -11.5 -11.5	0.0 0.0 0.0	20 20 20	16 16 16	4 4 4	4.8 4.8 4.8	4.8 4.8 4.8	37 37 0	0.0 0.0 0.0	-5.2 -5.4 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	10 11 0	17 18 0	0.0 0.0 0.0	22 22 22	0 62 0	8 8 8			
51 50 2.5	0.00 0.00	3 /	30 30 80	3 3 5	127 27 27	1.10 1.10 1.10	-8.9 -8.9 -8.9	0.0 0.0 0.0	19 19 19	12 12 12	3 3 3	4.8 4.8 4.8	4.8 4.8 4.8	25 25 0	0.0 0.0 0.0	7.6 7.4 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	15 15 0	25 24 0	0.0 0.0 0.0	22 22 22	0 62 0	8 8 8			
51 50 2.5	0.00 0.00	4 /	30 30 80	3 3 5	141 41 41	1.10 1.10 1.10	7.8 7.8 7.8	0.0 0.0 0.0	19 19 19	11 11 11	3 3 3	4.8 4.8 4.8	4.8 4.8 4.8	27 0 25	0.0 0.0 0.0	18.2 0.0 19.1	0.0 0.0 0.0	10.6 10.6 14.6	30.6 30.6 42.1	7.5 7.5 10.3	0.0 0.0 0.0	36 0 38	60 0 45	0.0 0.0 0.0	22 22 16	0 0 62	8 8 8			
34 33 2.5	0.00 0.00	2 /	30 30 80	3 3 5	124 24 24	1.10 1.10 1.10	-8.6 -8.6 -8.6	0.0 0.0 0.0	19 19 19	12 12 12	3 3 3	4.8 4.8 4.8	4.8 4.8 4.8	30 18 0	0.0 0.0 0.0	6.9 -7.1 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	14 14 0	23 23 0	0.0 0.0 0.0	22 22 22	0 60 0	8 8 8			
34 33 2.5	0.00 0.00	3 /	30 30 80	3 3 5	140 40 40	1.10 1.10 1.10	-5.7 -5.7 -5.7	0.0 0.0 0.0	19 19 19	8 8 8	2 2 2	4.8 4.8 4.8	4.8 4.8 4.8	24 24 0	0.0 0.0 0.0	13.9 13.8 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	28 28 0	45 45 0	0.0 0.0 0.0	22 22 22	0 60 0	8 8 8			
34 33 2.5	0.00 0.00	4 /	30 30 80	3 3 5	140 24 24	1.10 1.10 1.10	-4.6 14.5 14.5	0.0 0.0 0.0	19 21 21	6 17 17	2 5 5	4.8 4.8 4.8	4.8 5.8 5.8	24 0 24	0.0 0.0 0.0	29.9 0.0 30.8	1.2 0.0 1.2	12.3 11.7 14.6	35.4 33.7 42.1	8.6 8.2 10.3	1.2 0.0 1.2	81 0 83	98 0 85	4.4 0.0 4.4	19 20 16	14 0 45	8 8 8			
50 48 2.5	0.00 0.00	2 /	30 30 80	3 3 5	143 43 43	1.10 1.10 1.10	-7.0 -7.0 -7.0	0.0 0.0 0.0	19 19 19	10 10 10	2 2 2	4.8 4.8 4.8	4.8 4.8 4.8	15 15 0	0.0 0.0 0.0	-15.2 -15.5 0.0	-0.3 -0.3 0.0	11.7 11.7 11.7	33.7 33.7 33.7	8.2 8.2 8.2	0.9 0.9 0.0	36 37 0	49 50 0	3.2 3.2 0.0	20 20 20	0 67 0	8 8 8			
50 48 2.5	0.00 0.00	3 /	30 30 80	3 3 5	121 21 21	1.10 1.10 1.10	-12.2 -12.2 -12.2	0.0 0.0 0.0	20 20 20	17 17 17	4 4 4	4.8 4.8 4.8	4.8 4.8 4.8	27 27 0	0.0 0.0 0.0	11.9 11.8 0.0	-0.7 -0.7 0.0	11.7 11.7 11.7	33.7 33.7 33.7	8.2 8.2 8.2	1.1 1.1 0.0	37 39 0	44 44 0	4.1 4.1 0.0	20 20 20	0 67 0	8 8 8			
50 48 2.5	0.00 0.00	4 /	30 30 80	3 3 5	127 27 27	1.10 1.10 1.10	26.3 26.3 26.3	0.0 0.0 0.0	27 27 27	17 17 17	7 7 7	9.4 9.4 9.4	10.4 10.4 10.4	27 0 43	0.0 0.0 0.0	23.9 0.0 32.4	-1.3 0.0 -0.2	11.7 11.7 14.6	33.7 33.7 42.1	8.2 8.2 10.3	1.7 0.0 1.7	71 0 79	87 0 79	6.3 0.0 6.3	20 20 16	0 0 67	8 8 8			
33 31 2.5	0.00 0.00	2 /	30 30 80	3 3 5	136 36 43	1.10 1.10 1.10	10.0 10.0 7.8	0.0 0.0 0.0	19 19 19	14 14 11	4 4 3	4.8 4.8 4.8	4.8 4.8 4.8	20 20 0	0.0 0.0 0.0	-21.2 -21.5 0.0	-0.2 -0.2 0.0	11.7 11.7 11.7	33.7 33.7 33.7	8.2 8.2 8.2	0.9 0.9 0.0	46 46 0	65 66 0	3.4 3.4 0.0	20 20 20	0 64 0	8 8 8			
33 31 2.5	0.00 0.00	3 /	30 30 80	3 3 5	120 20 20	1.10 1.10 1.10	-13.3 -13.3 -13.3	0.0 0.0 0.0	21 21 21	15 15 15	4 4 4	5.8 5.8 5.8	4.8 4.8 4.8	24 40 0	0.0 0.0 0.0	11.5 16.2 0.0	1.1 0.9 0.0	11.7 11.7 11.7	33.7 33.7 33.7	8.2 8.2 8.2	1.1 1.1 0.0	42 49 0	47 60 0	3.9 3.9 0.0	20 20 20	0 64 0	8 8 8			
33 31 2.5	0.00 0.00	4 /	30 30 80	3 3 5	120 20 20	1.10 1.10 1.10	-26.3 -26.3 -26.3	0.0 0.0 0.0	27 27 27	17 17 17	7 7 7	10.4 10.4 10.4	9.9 9.9 9.9	24 0 24	0.0 0.0 0.0	22.7 0.0 22.7	1.6 0.0 1.6	11.7 11.7 46.4	33.7 33.7 50.2	8.2 8.2 5.7	1.6 0.0 1.6	73 0 73	87 0 69	5.8 0.0 5.8	20 20 16	0 0 64	8 8 8			
48 45 2.5	0.00 0.00	2 /	30 30 80	3 3 5	121 21 21	1.10 1.10 1.10	-13.1 -13.1 -13.1	0.0 0.0 0.0	21 21 21	15 15 15	4 4 4	5.8 5.8 5.8	4.8 4.8 4.8	31 31 0	0.0 0.0 0.0	10.9 10.6 0.0	1.2 1.2 0.0	11.7 11.7 11.7	33.7 33.7 33.7	8.2 8.2 8.2	1.5 1.5 0.0	43 43 0	47 46 0	5.5 5.5 0.0	20 20 20	0 66 0	8 8 8			
48 45 2.5	0.00 0.00	3 /	30 30 80	3 3 5	137 37 37	1.10 1.10 1.10	-12.9 -12.9 -12.9	0.0 0.0 0.0	21 21 21	15 15 15	4 4 4	5.8 5.8 5.8	5.8 5.8 5.8	31 31 0	0.0 0.0 0.0	8.5 8.2 0.0	1.2 1.2 0.0	11.7 11.7 11.7	33.7 33.7 33.7	8.2 8.2 8.2	1.5 1.5 0.0	38 38 0	40 39 0	5.3 5.3 0.0	20 20 20	0 66 0	8 8 8			
48 45 2.5	0.00 0.00	4 /	30 30 80	3 3 5	141 41 41	1.10 1.10 1.10	31.0 31.0 31.0	0.0 0.0 0.0	29 29 29	16 16 16	7 7 7	10.4 10.4 10.4	12.9 12.9 12.9	41 0 41	0.0 0.0 0.0	35.6 0.0 37.2	0.6 0.0 0.6	13.7 11.7 14.6	39.6 33.7 42.1	9.7 8.2 10.3	0.8 0.0 0.8	81 0 84	96 0 94	3.0 0.0 3.0	17 20 16	16 0 50	8 8 8			
62 26 2.5	0.00 0.00	2 /	30 30 80	3 3 5	134 34 34	1.10 1.10 1.10	-16.8 -16.8 -16.8	0.0 0.0 0.0	24 24 24	15 15 15	5 5 5	7.4 7.4 7.4	5.8 5.8 5.8	30 0 30	0.0 0.0 0.0	4.3 0.0 14.3	0.0 0.0 0.0	10.6 10.6 14.6	30.6 30.6 42.1	7.5 7.5 10.3	0.0 0.0 0.0	9 0 29	14 0 34	0.0 0.0 0.0	22 0 16	0 0 75	8 8 8			

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Bas Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE													
					Co	Gam	Rd	M Exd (t*m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area cmq sup inf	Co	Nr	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun	Fi	
27	0.00	2	30	1	24	1.10	15.4	0.0	20	17	5	8.4	5.9	36	0.0	14.3	1.3	11.7	33.7	8.2	1.6	52	58	5.8	20	0	8	
29	0.00	/	30	3	24	1.10	15.4	0.0	20	17	5	8.4	5.9	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8	
2.5		2	80	5	24	1.10	15.4	0.0	20	17	5	8.4	5.9	40	0.0	-11.9	-1.6	46.4	50.2	5.7	1.6	52	46	5.8	16	59	8	
35	0.00	2	30	1	20	1.10	8.0	0.0	19	11	3	4.8	4.8	24	0.0	-3.7	1.0	46.4	50.2	5.7	1.0	25	24	3.7	20	0	8	
34	0.00	/	30	3	20	1.10	8.0	0.0	19	11	3	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8	
2.5		2	80	5	20	1.10	8.0	0.0	19	11	3	4.8	4.8	24	0.0	-5.0	1.0	46.4	50.2	5.7	1.0	28	22	3.7	16	67	8	
45	0.00	2	30	1	46	1.10	-21.3	0.0	25	16	6	8.8	7.3	34	0.0	-13.8	0.0	10.6	30.6	7.5	0.0	27	45	0.0	22	0	8	
62	0.00	/	30	3	46	1.10	-21.3	0.0	25	16	6	8.8	7.3	34	0.0	-14.1	0.0	10.6	30.6	7.5	0.0	28	46	0.0	22	89	8	
2.5		4	80	5	34	1.10	16.1	0.0	21	17	5	8.7	6.1	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8	
45	0.00	3	30	1	46	1.10	-12.2	0.0	20	17	4	4.8	4.8	41	0.0	-7.3	0.0	10.6	30.6	7.5	0.0	15	24	0.0	22	0	8	
62	0.00	/	30	3	46	1.10	-12.2	0.0	20	17	4	4.8	4.8	41	0.0	-7.7	0.0	10.6	30.6	7.5	0.0	15	25	0.0	22	89	8	
2.5		4	80	5	46	1.10	-12.0	0.0	20	17	4	4.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8	
45	0.00	4	30	1	21	1.10	8.3	0.0	19	12	3	4.8	4.8	37	0.0	10.9	0.0	10.6	30.6	7.5	0.0	22	36	0.0	22	0	8	
62	0.00	/	30	3	21	1.10	8.7	0.0	19	12	3	4.8	4.8	37	0.0	11.1	0.0	10.6	30.6	7.5	0.0	22	36	0.0	22	12	8	
2.5		4	80	5	21	1.10	8.7	0.0	19	12	3	4.8	4.8	37	0.0	11.5	0.0	14.6	42.1	10.3	0.0	23	27	0.0	16	77	8	
52	0.00	2	30	1	21	1.10	8.7	0.0	19	12	3	4.8	4.8	25	0.0	-5.3	-0.8	11.7	33.7	8.2	0.8	25	26	3.1	20	0	8	
51	0.00	/	30	3	21	1.10	8.7	0.0	19	12	3	4.8	4.8	0	0.0	0.0	0.0	11.7	33.7	8.2	0.0	0	0	0.0	20	0	8	
2.5		2	80	5	21	1.10	8.7	0.0	19	12	3	4.8	4.8	41	0.0	-10.5	-0.6	46.4	50.2	5.7	0.8	32	31	3.1	16	67	8	
35	0.00	2	32	1	41	1.10	-2.4	0.0	19	9	2	3.1	3.1	24	0.0	-0.8	-0.5	29.0	30.5	3.4	0.5	18	11	2.2	16	0	8	
36	0.00	/	30	3	41	1.10	-2.4	0.0	19	9	2	3.1	3.1	24	0.0	-0.7	-0.5	29.0	30.5	3.4	0.5	17	11	2.2	16	75	8	
2.5		4	50	5	41	1.10	-2.4	0.0	19	9	2	3.1	3.1	0	0.0	0.0	0.0	14.6	25.6	6.0	0.0	0	0	0.0	16	0	8	
35	0.00	3	32	1	41	1.10	-3.5	0.0	20	13	3	3.1	3.1	34	0.0	0.7	0.0	10.6	18.6	4.4	0.0	2	4	0.0	22	0	8	
36	0.00	/	30	3	41	1.10	-3.5	0.0	20	13	3	3.1	3.1	34	0.0	0.6	0.0	10.6	18.6	4.4	0.0	2	3	0.0	22	75	8	
2.5		4	50	5	41	1.10	-3.4	0.0	20	12	3	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8	
35	0.00	4	32	1	41	1.10	-3.7	0.0	20	13	4	3.1	3.1	41	0.0	1.1	0.0	10.6	18.6	4.4	0.0	4	6	0.0	22	0	8	
36	0.00	/	30	3	41	1.10	-3.7	0.0	20	13	4	3.1	3.1	41	0.0	1.1	0.0	10.6	18.6	4.4	0.0	4	6	0.0	22	29	8	
2.5		4	50	5	41	1.10	-3.4	0.0	20	12	3	3.1	3.1	41	0.0	1.1	0.0	14.6	25.6	6.0	0.0	4	4	0.0	16	47	8	
17	0.00	2	30	1	24	1.10	-9.8	0.0	19	14	3	4.8	4.8	24	0.0	10.9	0.0	10.6	30.6	7.5	0.0	22	35	0.0	22	0	8	
7	0.00	/	30	3	24	1.10	-9.8	0.0	19	14	3	4.8	4.8	24	0.0	10.8	0.0	10.6	30.6	7.5	0.0	21	35	0.0	22	102	8	
2.5		4	80	5	40	1.10	-8.5	0.0	19	12	3	4.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8	
17	0.00	3	30	1	34	1.10	-8.3	0.0	19	12	3	4.8	4.8	24	0.0	10.5	0.0	10.6	30.6	7.5	0.0	21	34	0.0	22	0	8	
7	0.00	/	30	3	34	1.10	-8.3	0.0	19	12	3	4.8	4.8	24	0.0	10.2	0.0	10.6	30.6	7.5	0.0	20	33	0.0	22	102	8	
2.5		4	80	5	18	1.10	-7.9	0.0	19	11	3	4.8	4.8	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8	
17	0.00	4	30	1	31	1.10	-9.9	0.0	19	14	4	4.8	4.8	9	0.0	32.8	0.0	11.7	33.7	8.2	0.0	65	97	0.0	20	38	8	
7	0.00	/	30	3	24	1.10	26.4	0.0	29	17	8	4.8	10.4	0	0.0	0.0	0.0	10.6	30.6	7.5	0.0	0	0	0.0	22	0	8	
2.5		4	80	5	24	1.10	26.4	0.0	29	17	7	5.2	10.4	9	0.0	32.6	0.0	14.6	42.1	10.3	0.0	65	78	0.0	16	64	8	
41	0.00	2	32	1	30	1.10	-1.7	0.0	19	6	2	3.1	3.1	30	0.0	-1.8	0.0	10.6	18.6	4.4	0.0	6	10	0.0	22	0	8	
42	0.00	/	30	3	30	1.10	-2.5	0.0	20	9	2	3.1	3.1	30	0.0	-1.8	0.0	10.6	18.6	4.4	0.0	6	10	0.0	22	92	8	
2.5		4	50	5	30	1.10	-2.5	0.0	20	9	2	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8	
41	0.00	3	32	1	30	1.10	-3.1	0.0	20	11	3	3.1	3.1	43	0.0	0.1	0.0	10.6	18.6	4.4	0.0	0	1	0.0	22	0	8	
42	0.00	/	30	3	30	1.10	-3.1	0.0	20	11	3	3.1	3.1	15	0.0	-0.2	0.0	10.6	18.6	4.4	0.0	1	1	0.0	22	92	8	
2.5		4	50	5	30	1.10	-3.1	0.0	20	11	3	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8	
41	0.00	4	32	1	30	1.10	-3.6	0.0	20	13	3	3.1	3.1	27	0.0	0.9	0.0	10.6	18.6	4.4	0.0	3	5	0.0	22	0	8	
42	0.00	/	30	3	30	1.10	-3.6	0.0	20	13	3	3.1	3.1	27	0.0	0.9	0.0	10.6	18.6	4.4	0.0	3	5	0.0	22	46	8	
2.5		4	50	5	30	1.10	-3.2	0.0	20	12	3	3.1	3.1	27	0.0	0.9	0.0	14.6	25.6	6.0	0.0	3	3	0.0	16	47	8	
9	0.00	2	30	1	15	1.10	-6.5	0.0	19	9	2	4.8	4.8	36	0.0	-5.3	0.0	10.6	30.6	7.5	0.0	10	17	0.0	22	0	8	
1	0.00	/																										

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE															
					Co Nr	Gam	Rd	M (t*m)	Exd (t)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area cmq sup inf	Co Nr	V (t)	Exd (t)	Eyd (t)	T Sdu (t*m)	V Rxd (t)	Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun	Fi		
54 5 2.5	0.00 0.00	4 30 4	30 3 80	1 3 5	1.10 1.10 1.10	-10.5 23.8 23.8	0.0 0.0 0.0	19 28 28	15 17 17	4 7 7	4.8 4.8 4.8	4.8 9.6 9.6	9 0 9	0.0 0.0 0.0	33.6 0.0 33.4	0.0 0.0 0.0	11.7 10.6 14.6	33.7 30.6 42.1	8.2 7.5 10.3	0.0 0.0 0.0	67 0 67	100 0 79	0.0 0.0 0.0	20 22 16	38 0 64	8 8 8				
54 69 2.5	0.00 0.00	2 /	30 30 80	1 3 5	1.10 1.10 1.10	14.6 15.0 15.0	0.0 0.0 0.0	21 21 21	17 17 17	5 5 5	4.8 4.8 4.8	5.8 34 34	34 0.0 0.0	0.0 11.2 11.1 11.0	-0.3 -0.3 -0.3	11.7 11.7 14.6	33.7 33.7 42.1	8.2 8.2 10.3	0.8 0.8 0.8	28 28 28	37 37 29	3.1 3.1 3.1	20 20 16	0 14 77	8 8 8					
7 9 2.5	0.00 0.00	2 /	30 30 80	1 3 5	1.10 1.10 1.10	-13.4 -15.2 -15.2	0.0 0.0 0.0	21 22 22	16 17 17	4 5 5	5.8 5.9 5.9	4.8 3 0	3 0.0 0.0	0.0 -6.9 -7.4 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	14 15 0	23 24 0	0.0 0.0 0.0	22 22 22	0 121 0	8 8 8					
7 9 2.5	0.00 0.00	3 /	30 30 80	1 3 5	1.10 1.10 1.10	-17.3 -21.0 -21.0	0.0 0.0 0.0	24 26 26	16 16 16	5 6 6	7.5 8.7 8.7	4.8 3 0	3 0.0 0.0	0.0 -10.9 -11.4 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	22 23 0	35 37 0	0.0 0.0 0.0	22 22 22	0 121 0	8 8 8					
7 9 2.5	0.00 0.00	4 /	30 30 80	1 3 5	1.10 1.10 1.10	-2.4 -18.9 -18.9	0.0 0.0 0.0	19 25 25	3 16 16	1 6 6	4.8 8.0 8.0	4.8 20 20	20 0.0 0.0	0.0 -15.8 -15.9 -16.2	0.0 0.0 0.0	10.6 10.6 14.6	30.6 30.6 42.1	7.5 7.5 10.3	0.0 0.0 0.0	31 32 32	51 52 38	0.0 0.0 0.0	22 22 16	0 44 77	8 8 8					
1 2 2.5	0.00 0.00	2 /	30 30 80	1 3 5	1.10 1.10 1.10	-6.5 -6.7 -6.7	0.0 0.0 0.0	19 19 19	9 9 9	2 2 2	4.8 4.8 4.8	4.8 43 43 0	43 0.0 0.0	0.0 -6.5 -6.9 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	13 14 0	21 23 0	0.0 0.0 0.0	22 22 22	0 126 0	8 8 8					
1 2 2.5	0.00 0.00	3 /	30 30 80	1 3 5	1.10 1.10 1.10	-8.4 -8.4 -6.7	0.0 0.0 0.0	19 19 19	12 12 9	3 3 2	4.8 4.8 4.8	4.8 15 0	15 0.0 0.0	0.0 5.5 0.0 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	11 11 0	18 18 0	0.0 0.0 0.0	22 22 22	0 126 0	8 8 8					
1 2 2.5	0.00 0.00	4 /	30 30 80	1 3 5	1.10 1.10 1.10	7.4 10.0 10.0	0.0 0.0 0.0	19 19 19	10 14 14	3 4 4	4.8 4.8 4.8	4.8 15 15	15 0.0 0.0	0.0 10.2 10.7 10.7	0.0 0.0 0.0	10.6 10.6 14.6	30.6 30.6 42.1	7.5 7.5 10.3	0.0 0.0 0.0	20 21 21	33 35 25	0.0 0.0 0.0	22 22 16	0 49 77	8 8 8					
5 2 2.5	0.00 0.00	2 /	30 30 80	1 3 5	1.10 1.10 1.10	-13.7 -15.3 -15.3	0.0 0.0 0.0	21 22 22	16 17 17	5 5 5	5.8 6.2 6.2	4.8 3 0	3 0.0 0.0	0.0 -7.0 -7.5 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	14 15 0	23 25 0	0.0 0.0 0.0	22 22 22	0 121 0	8 8 8					
5 2 2.5	0.00 0.00	3 /	30 30 80	1 3 5	1.10 1.10 1.10	-17.3 -21.1 -21.1	0.0 0.0 0.0	24 26 26	16 16 16	5 6 6	7.5 8.7 8.7	4.8 3 0	3 0.0 0.0	0.0 -11.5 -12.0 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	23 24 0	38 39 0	0.0 0.0 0.0	22 22 22	0 121 0	8 8 8					
5 2 2.5	0.00 0.00	4 /	30 30 80	1 3 5	1.10 1.10 1.10	-9.4 -17.5 -17.5	0.0 0.0 0.0	19 24 24	13 16 16	3 5 5	4.8 7.6 7.6	4.8 21 21	21 0.0 0.0	0.0 -14.5 -14.6 -14.9	0.0 0.0 0.0	10.6 10.6 14.6	30.6 30.6 42.1	7.5 7.5 10.3	0.0 0.0 0.0	29 29 30	48 48 35	0.0 0.0 0.0	22 22 16	0 44 77	8 8 8					
73 18 2.5	0.00 0.00	2 /	30 30 80	1 3 5	1.10 1.10 1.10	-13.2 -13.2 -12.8	0.0 0.0 0.0	21 21 21	15 15 15	4 4 4	5.8 5.8 5.8	4.8 36 36	36 0.0 0.0	0.0 3.9 3.8 3.5	0.0 0.0 0.0	10.6 10.6 14.6	30.6 30.6 42.1	7.5 7.5 10.3	0.0 0.0 0.0	8 8 7	13 12 8	0.0 0.0 0.0	22 22 16	0 23 8	8 8 8					
70 6 2.5	0.00 0.00	2 /	31 50 50	1 3 5	1.10 1.10 1.10	-3.0 -3.0 -3.0	0.0 0.0 0.0	19 19 19	7 7 7	2 2 2	5.0 5.0 5.0	5.0 15 0	15 0.0 0.0	0.0 -2.5 -2.9 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	5 6 0	8 9 0	0.0 0.0 0.0	13 13 13	0 107 0	8 8 8					
70 6 2.5	0.00 0.00	3 /	31 50 50	1 3 5	1.10 1.10 1.10	-2.5 -3.2 -3.2	0.0 0.0 0.0	19 19 19	6 7 7	1 2 2	5.0 5.0 5.0	5.0 23 0	23 0.0 0.0	0.0 2.2 2.1 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	4 4 0	7 7 0	0.0 0.0 0.0	13 13 13	0 107 0	8 8 8					
70 6 2.5	0.00 0.00	4 /	31 50 50	1 3 5	1.10 1.10 1.10	-1.0 5.7 5.7	0.0 0.0 0.0	19 19 19	2 13 13	1 3 3	5.0 5.0 5.0	5.0 25 25	25 0.0 0.0	0.0 5.7 5.4	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	11 11 11	18 18 17	0.0 0.0 0.0	13 13 13	0 61 47	8 8 8					
70 73 2.5	0.00 0.00	2 /	30 30 80	1 3 5	1.10 1.10 1.10	11.5 11.5 11.5	0.0 0.0 0.0	20 20 20	16 16 16	4 4 4	4.8 4.8 4.8	4.8 0 30	30 0.0 0.0	0.0 0.0 10.5	0.0 0.0 0.0	10.6 10.6 14.6	30.6 30.6 42.1	7.5 7.5 10.3	0.0 0.0 0.0	21 0 21	34 0 25	0.0 0.0 0.0	22 22 16	0 0 65	8 8 8					
5 6 2.5	0.00 0.00	2 /	31 50 50	1 3 5	1.10 1.10 1.10	-2.5 -3.3 -3.3	0.0 0.0 0.0	19 19 19	6 7 7	1 2 2	5.0 5.0 5.0	5.0 6 0	6 0.0 0.0	0.0 -1.7 -2.3 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	3 5 0	5 7 0	0.0 0.0 0.0	13 13 13	0 128 0	8 8 8					
5 6 2.5	0.00 0.00	3 /	31 50 50	1 3 5	1.10 1.10 1.10	-3.7 -3.7 -2.6	0.0 0.0 0.0	19 19 19	8 8 6	2 2 2	5.0 5.0 5.0	5.0 12 0	12 0.0 0.0	0.0 1.9 1.8 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	4 4 0	6 6 0	0.0 0.0 0.0	13 13 13	0 128 0	8 8 8					
5 6 2.5	0.00 0.00	4 /	31 50 50	1 3 5	1.10 1.10 1.10	1.2 1.8 1.8	0.0 0.0 0.0	19 19 19	3 4 4	1 1 1	5.0 5.0 5.0	5.0 27 43	27 0.0 0.0	0.0 1.2 1.2 1.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	2 2 2	4 4 3	0.0 0.0 0.0	13 13 13	0 82 47	8 8 8					
69 70 2.5	0.00 0.00	2 /	30 30 80	1 3 5	1.10 1.10 1.10	-12.7 -12.7 -12.7	0.0 0.0 0.0	20 20 20	18 18 18	5 5 5	4.8 4.8 4.8	4.8 31 0	31 0.0 0.0	0.0 -10.9 -11.2 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	22 22 0	36 36 0	0.0 0.0 0.0	22 22 22	0 68 0	8 8 8					

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Bas Alt	C o n c	VERIFICA A PRESSO-FLESSIONE											VERIFICA A TAGLIO E TORSIONE													
					Co	Gam	Rd	M Exd (t*m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area cmq sup inf	Co	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun Fi				
69 70 2.5	0.00 0.00 2.5	3 4	30 30 80	1 3 5	15 15 15	1.10 1.10 1.10	-11.8 -11.8 -11.8	0.0 0.0 0.0	20 20 20	16 16 16	4 4 4	4.8 4.8 4.8	4.8 4.8 4.8	31 31 0	0.0 0.0 0.0	-16.1 -16.9 0.0	0.0 0.0 0.0	10.6 10.6 10.6	30.6 30.6 30.6	7.5 7.5 7.5	0.0 0.0 0.0	32 34 0	52 55 0	0.0 0.0 0.0	22 22 22	0 68 0	8 8 8		
69 70 2.09	0.00 0.00 2.09	4 /	30 30 80	1 3 5	15 31 43	1.10 1.10 1.10	-20.7 -26.0 29.0	0.0 0.0 0.0	26 25 28	16 17 17	6 6 7	8.6 10.3 10.3	4.8 12.3 11.3	43 43 43	0.0 0.0 0.0	52.1 51.9 51.8	0.0 0.0 0.0	52.2 19.6 52.2	56.5 56.6 56.5	6.4 13.8 6.4	0.0 0.0 0.0	92 92 92	92 92 92	0.0 0.0 0.0	10 10 10	0 0 68	8 8 8		
6 1 2.5	0.00 0.00 2.5	2 /	31 50 50	1 3 5	121 21 21	1.10 1.10 1.10	-4.9 -5.1 -5.1	0.0 0.0 0.0	19 19 19	11 11 11	3 3 3	5.0 5.0 5.0	5.0 5.0 5.0	15 12 0	0.0 0.0 0.0	0.2 -0.8 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	0 2 0	1 2 0	0.0 0.0 0.0	13 13 13	0 126 0	8 8 8		
6 1 2.5	0.00 0.00 2.5	3 /	31 50 50	1 3 5	121 21 21	1.10 1.10 1.10	-6.0 -6.0 -5.9	0.0 0.0 0.0	19 19 19	13 13 13	3 3 3	5.0 5.0 5.0	5.0 5.0 5.0	23 23 0	0.0 0.0 0.0	1.0 0.9 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	2 2 0	3 3 0	0.0 0.0 0.0	13 13 13	0 126 0	8 8 8		
6 1 2.5	0.00 0.00 2.5	4 /	31 50 50	1 3 5	121 21 21	1.10 1.10 1.10	-4.6 -4.6 -3.5	0.0 0.0 0.0	19 19 19	10 10 8	3 3 2	5.0 5.0 5.0	5.0 5.0 5.0	43 43 43	0.0 0.0 0.0	3.1 3.1 2.8	1.1 1.1 1.1	50.9 50.9 50.9	50.9 50.9 50.9	6.3 6.3 6.3	1.1 1.1 1.1	24 24 23	20 20 19	3.3 3.3 3.3	13 13 13	0 79 47	8 8 8		
6 7 2.5	0.00 0.00 2.5	2 /	31 50 50	1 3 5	120 18 18	1.10 1.10 1.10	-2.9 -3.6 -3.6	0.0 0.0 0.0	19 19 19	7 8 8	2 2 2	5.0 5.0 5.0	5.0 5.0 5.0	6 6 0	0.0 0.0 0.0	-1.2 -1.9 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	2 4 0	4 6 0	0.0 0.0 0.0	13 13 13	0 128 0	8 8 8		
6 7 2.5	0.00 0.00 2.5	3 /	31 50 50	1 3 5	120 20 18	1.10 1.10 1.10	-3.6 -3.6 -2.6	0.0 0.0 0.0	19 19 19	8 8 6	2 2 1	5.0 5.0 5.0	5.0 5.0 5.0	12 12 0	0.0 0.0 0.0	2.2 2.2 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	4 4 0	7 7 0	0.0 0.0 0.0	13 13 13	0 128 0	8 8 8		
6 7 2.5	0.00 0.00 2.5	4 /	31 50 50	1 3 5	120 36 36	1.10 1.10 1.10	-3.9 7.7 7.7	0.0 0.0 0.0	19 21 21	9 14 14	2 4 4	5.0 5.0 5.0	5.0 6.2 6.2	3 12 3	0.0 0.0 0.0	11.6 11.6 11.2	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	23 23 22	37 37 36	0.0 0.0 0.0	13 13 13	0 82 47	8 8 8		
9 10 2.5	0.00 0.00 2.5	2 /	32 30 50	1 3 5	131 31 20	1.10 1.10 1.10	1.2 1.2 -0.3	0.0 0.0 0.0	19 19 19	4 4 1	1 1 0	3.1 3.1 3.1	3.1 3.1 3.1	15 15 15	0.0 0.0 0.0	-1.6 -1.6 -1.6	0.0 0.0 0.0	10.6 10.6 14.6	18.6 18.6 25.6	4.4 4.4 6.0	0.0 0.0 0.0	5 5 5	9 9 6	0.0 0.0 0.0	22 22 16	0 40 47	8 8 8		
10 8 2.5	0.00 0.00 2.5	2 /	32 30 50	1 3 5	118 18 18	1.10 1.10 1.10	-2.7 -3.1 -3.1	0.0 0.0 0.0	20 20 20	10 11 11	3 3 3	3.1 3.1 3.1	3.1 3.1 3.1	18 15 0	0.0 0.0 0.0	-0.4 -0.5 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	1 2 0	2 3 0	0.0 0.0 0.0	22 22 22	0 136 0	8 8 8		
10 8 2.5	0.00 0.00 2.5	3 /	32 30 50	1 3 5	118 18 18	1.10 1.10 1.10	-2.5 -2.5 -2.5	0.0 0.0 0.0	20 20 20	9 9 9	2 2 2	3.1 3.1 3.1	3.1 3.1 3.1	28 30 0	0.0 0.0 0.0	0.4 0.4 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	1 1 0	2 2 0	0.0 0.0 0.0	22 22 22	0 136 0	8 8 8		
10 8 2.5	0.00 0.00 2.5	4 /	32 30 50	1 3 5	118 18 18	1.10 1.10 1.10	-1.7 -1.7 -1.7	0.0 0.0 0.0	19 19 19	6 6 6	2 2 2	3.1 3.1 3.1	3.1 3.1 3.1	20 28 28	0.0 0.0 0.0	0.2 -0.2 -0.3	0.0 0.0 0.0	10.6 10.6 14.6	18.6 18.6 25.6	4.4 4.4 6.0	0.0 0.0 0.0	1 1 1	1 1 0	0.0 0.0 0.0	22 22 16	0 89 47	8 8 8		
2 3 2.5	0.00 0.00 2.5	2 /	32 30 50	1 3 5	136 36 21	1.10 1.10 1.10	1.3 1.3 -0.3	0.0 0.0 0.0	19 19 19	5 5 1	1 1 0	3.1 3.1 3.1	3.1 3.1 3.1	35 35 36	0.0 0.0 0.0	-1.8 -1.8 -1.8	0.0 0.0 0.0	10.6 10.6 14.6	18.6 18.6 25.6	4.4 4.4 6.0	0.0 0.0 0.0	6 6 6	10 10 7	0.0 0.0 0.0	22 22 16	0 40 47	8 8 8		
49 53 2.5	0.00 0.00 2.5	2 /	32 30 50	1 3 5	137 37 37	1.10 1.10 1.10	3.1 3.2 3.2	0.0 0.0 0.0	20 20 20	11 11 11	3 3 3	3.1 3.1 3.1	3.1 3.1 3.1	21 21 0	0.0 0.0 0.0	0.4 0.4 0.0	-0.8 -0.8 0.0	29.0 29.0 14.6	30.5 30.5 25.6	3.4 3.4 6.0	0.8 0.8 0.0	24 24 0	14 14 0	3.2 3.2 0.0	16 16 16	0 117 0	8 8 8		
49 53 2.5	0.00 0.00 2.5	3 /	32 30 50	1 3 5	137 21 21	1.10 1.10 1.10	3.9 4.4 4.4	0.0 0.0 0.0	20 20 20	14 16 16	4 4 4	3.1 3.1 3.1	3.1 3.1 3.1	15 15 0	0.0 0.0 0.0	1.8 1.7 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	6 6 0	9 9 0	0.0 0.0 0.0	22 22 22	0 117 0	8 8 8		
49 53 2.5	0.00 0.00 2.5	4 /	32 30 50	1 3 5	121 21 21	1.10 1.10 1.10	4.9 4.9 4.5	0.0 0.0 0.0	20 20 20	18 18 16	5 5 4	3.1 3.1 3.1	3.1 3.1 3.1	43 43 43	0.0 0.0 0.0	-1.3 -1.3 -1.3	-0.6 -0.6 -0.6	29.0 29.0 29.0	30.5 30.5 30.5	3.4 3.4 3.4	0.6 0.6 0.6	23 23 23	16 16 16	2.7 2.7 2.7	16 16 16	0 70 47	8 8 8		
8 11 2.5	0.00 0.00 2.5	2 /	32 30 50	1 3 5	118 18 18	1.10 1.10 1.10	-2.0 -2.0 -1.8	0.0 0.0 0.0	19 19 19	7 7 6	2 2 2	3.1 3.1 3.1	3.1 3.1 3.1	30 30 0	0.0 0.0 0.0	-0.7 -1.0 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	2 3 0	4 6 0	0.0 0.0 0.0	22 22 22	0 117 0	8 8 8		
8 11 2.5	0.00 0.00 2.5	3 /	32 30 50	1 3 5	118 18 34	1.10 1.10 1.10	-1.9 -1.9 -1.2	0.0 0.0 0.0	19 19 19	7 7 4	2 2 1	3.1 3.1 3.1	3.1 3.1 3.1	18 30 0	0.0 0.0 0.0	1.2 -1.6 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	4 5 0	7 9 0	0.0 0.0 0.0	22 22 22	0 117 0	8 8 8		
8 11 2.5	0.00 0.00 2.5	4 /	32 30 50	1 3 5	130 30 30	1.10 1.10 1.10	-1.5 -3.2 -3.2	0.0 0.0 0.0	19 20 20	5 12 12	1 3 3	3.1 3.1 3.1	3.1 3.1 3.1	18 18 18	0.0 0.0 0.0	3.2 3.2 3.2	0.0 0.0 0.0	10.6 10.6 14.6	18.6 18.6 25.6	4.4 4.4 6.0	0.0 0.0 0.0	10 10 10	17 17 13	0.0 0.0 0.0	22 22 16	0 71 47	8 8 8		
11 32 2.5	0.00 0.00 2.5	2 /	32 30 50	1 3 5	120 20 24	1.10 1.10 1.10	9.2 9.2 -6.4	0.0 0.0 0.0	27 27 22	15 15 17	6 6 5	6.7 6.7 4.2	6.7 6.7 4.2	20 20 0	0.0 0.0 0.0	-4.4 -4.4 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	15 15 0	24 24 0	0.0 0.0 0.0	22 22 22	0 116 0	8 8 8		

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Bas Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE													
					Co	Gam	Rd	M Exd (t*m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area cmq sup inf	Co	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun Fi			
11 32 2.5	0.00 0.00 2.5	3 4 4	32 30 50	2 3 5	124 24 36	1.10 1.10 1.10	-4.6 -4.6 -0.7	0.0 0.0 0.0	20 20 19	17 17 2	5 5 1	3.1 3.1 3.1	3.1 24 3.1	24 24 0	0.0 0.0 0.0	4.4 4.4 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	14 14 0	24 24 0	0.0 0.0 0.0	22 22 22	0 116 0	8 8 8	
11 32 2.5	0.00 0.00 2.5	4 / 4	32 30 50	2 3 5	120 20 20	1.10 1.10 1.10	-2.6 -3.7 -3.7	0.0 0.0 0.0	20 20 20	9 13 13	2 4 4	3.1 3.1 3.1	3.1 24 3.1	24 24 24	0.0 0.0 0.0	2.0 1.9 1.8	0.0 0.0 0.0	10.6 10.6 14.6	18.6 18.6 25.6	4.4 4.4 6.0	0.0 0.0 0.0	6 6 6	10 10 7	0.0 0.0 0.0	22 22 16	0 70 47	8 8 8	
4 3 2.5	0.00 0.00 2.5	2 / 4	32 30 50	2 3 5	137 37 37	1.10 1.10 1.10	-2.5 -2.5 -2.5	0.0 0.0 0.0	20 20 20	9 9 9	2 2 2	3.1 3.1 3.1	3.1 31 0	1 31 0	0.0 0.0 0.0	-0.1 -0.4 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	0 1 0	1 2 0	0.0 0.0 0.0	22 22 22	0 136 0	8 8 8	
4 3 2.5	0.00 0.00 2.5	3 / 4	32 30 50	2 3 5	137 37 37	1.10 1.10 1.10	-3.1 -3.1 -2.6	0.0 0.0 0.0	20 20 20	11 11 10	3 3 3	3.1 3.1 3.1	3.1 35 3.1	35 35 0	0.0 0.0 0.0	0.6 0.6 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	2 2 0	3 3 0	0.0 0.0 0.0	22 22 22	0 136 0	8 8 8	
4 3 2.5	0.00 0.00 2.5	4 / 4	32 30 50	2 3 5	121 21 31	1.10 1.10 1.10	-2.3 -2.3 -0.3	0.0 0.0 0.0	19 19 19	8 8 1	2 2 0	3.1 3.1 3.1	3.1 21 37	21 21 37	0.0 0.0 0.0	1.8 1.8 1.7	0.0 0.0 0.0	10.6 10.6 14.6	18.6 18.6 25.6	4.4 4.4 6.0	0.0 0.0 0.0	6 6 6	10 10 7	0.0 0.0 0.0	22 22 16	0 89 47	8 8 8	
53 4 2.5	0.00 0.00 2.5	2 / 4	32 30 50	2 3 5	143 43 37	1.10 1.10 1.10	-2.1 -2.1 -2.1	0.0 0.0 0.0	19 19 19	8 8 8	2 2 2	3.1 3.1 3.1	3.1 25 3.1	25 25 0	0.0 0.0 0.0	1.2 1.3 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	4 4 0	6 7 0	0.0 0.0 0.0	22 22 22	0 117 0	8 8 8	
53 4 2.5	0.00 0.00 2.5	3 / 4	32 30 50	2 3 5	137 37 37	1.10 1.10 1.10	-1.8 -1.9 -1.9	0.0 0.0 0.0	19 19 19	7 7 7	2 2 2	3.1 3.1 3.1	3.1 41 3.1	41 41 0	0.0 0.0 0.0	0.8 0.8 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	3 3 0	4 4 0	0.0 0.0 0.0	22 22 22	0 117 0	8 8 8	
53 4 2.5	0.00 0.00 2.5	4 / 4	32 30 50	2 3 5	141 41 41	1.10 1.10 1.10	1.4 1.4 1.4	0.0 0.0 0.0	19 19 19	5 5 5	1 1 1	3.1 3.1 3.1	3.1 21 15	23 21 15	0.0 0.0 0.0	0.1 -0.2 -0.2	0.0 0.0 0.0	10.6 10.6 14.6	18.6 18.6 25.6	4.4 4.4 6.0	0.0 0.0 0.0	0 0 1	1 1 1	0.0 0.0 0.0	22 22 16	0 71 47	8 8 8	
41 40 2.5	0.00 0.00 2.5	2 / 2	31 50 50	1 3 5	124 20 20	1.10 1.10 1.10	-2.1 2.4 2.4	0.0 0.0 0.0	19 19 19	5 5 5	1 1 1	5.0 5.0 5.0	5.0 6 6	6 6 6	0.0 0.0 0.0	3.9 3.9 3.8	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	8 8 7	12 12 12	0.0 0.0 0.0	13 13 13	0 20 47	8 8 8	
62 70 2.5	0.00 0.00 2.5	2 / 4	31 50 50	1 3 5	143 43 36	1.10 1.10 1.10	3.8 3.8 2.5	0.0 0.0 0.0	19 19 19	8 8 6	2 2 1	5.0 5.0 5.0	5.0 27 5.0	43 27 0	0.0 0.0 0.0	-2.5 -3.3 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	5 6 0	8 10 0	0.0 0.0 0.0	13 13 13	0 109 0	8 8 8	
62 70 2.5	0.00 0.00 2.5	3 / 4	31 50 50	1 3 5	131 31 27	1.10 1.10 1.10	-3.8 -3.8 -3.0	0.0 0.0 0.0	19 19 19	8 8 7	2 2 2	5.0 5.0 5.0	5.0 34 34	34 34 0	0.0 0.0 0.0	5.1 5.1 0.0	-1.5 -1.5 0.0	50.9 50.9 31.5	50.9 50.9 31.5	6.3 6.3 13.9	1.5 1.5 0.0	33 33 0	27 27 0	4.3 4.3 0.0	13 13 13	0 109 0	8 8 8	
62 70 2.5	0.00 0.00 2.5	4 / 4	31 50 50	1 3 5	131 31 31	1.10 1.10 1.10	-1.3 5.1 5.1	0.0 0.0 0.0	19 19 19	3 11 11	1 3 3	5.0 5.0 5.0	5.0 31 31	31 31 31	0.0 0.0 0.0	6.1 6.1 5.9	-1.5 -1.5 -1.5	50.9 50.9 50.9	50.9 50.9 50.9	6.3 6.3 6.3	1.5 1.5 1.5	35 35 35	30 30 29	4.3 4.3 4.3	13 13 13	0 62 47	8 8 8	
39 62 2.5	0.00 0.00 2.5	2 / 4	31 50 50	1 3 5	124 24 30	1.10 1.10 1.10	-3.9 -3.9 -2.9	0.0 0.0 0.0	19 19 19	9 9 6	2 2 2	5.0 5.0 5.0	5.0 23 0	23 23 0	0.0 0.0 0.0	5.9 5.9 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	12 12 0	19 19 0	0.0 0.0 0.0	13 13 13	0 67 0	8 8 8	
39 62 2.5	0.00 0.00 2.5	3 / 4	31 50 50	1 3 5	124 24 37	1.10 1.10 1.10	-2.4 -2.4 -2.1	0.0 0.0 0.0	19 19 19	5 5 5	1 1 1	5.0 5.0 5.0	5.0 23 0	23 23 0	0.0 0.0 0.0	5.1 5.1 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	10 10 0	16 16 0	0.0 0.0 0.0	13 13 13	0 67 0	8 8 8	
39 62 2.5	0.00 0.00 2.5	4 / 4	31 50 50	1 3 5	140 41 41	1.10 1.10 1.10	-1.4 4.6 4.6	0.0 0.0 0.0	19 19 19	3 10 10	1 3 3	5.0 5.0 5.0	5.0 41 41	41 41 41	0.0 0.0 0.0	9.1 9.1 9.1	0.7 0.7 0.7	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.9 0.9 0.9	29 29 29	34 34 34	2.7 2.7 2.7	13 13 13	0 20 47	8 8 8	
40 39 2.5	0.00 0.00 2.5	2 / 4	31 50 50	1 3 5	124 24 24	1.10 1.10 1.10	-3.9 -4.1 -4.1	0.0 0.0 0.0	19 19 19	9 9 9	2 2 2	5.0 5.0 5.0	5.0 9 0	28 9 0	0.0 0.0 0.0	-1.9 -2.2 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	4 4 0	6 7 0	0.0 0.0 0.0	13 13 13	0 62 0	8 8 8	
40 39 2.5	0.00 0.00 2.5	3 / 4	31 50 50	1 3 5	124 24 24	1.10 1.10 1.10	-3.0 -3.1 -3.1	0.0 0.0 0.0	19 19 19	7 7 7	2 2 2	5.0 5.0 5.0	5.0 28 0	28 28 0	0.0 0.0 0.0	-1.8 -2.0 0.0	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	4 4 0	6 6 0	0.0 0.0 0.0	13 13 13	0 62 0	8 8 8	
40 39 2.5	0.00 0.00 2.5	4 / 4	31 50 50	1 3 5	125 25 25	1.10 1.10 1.10	-4.2 4.7 4.7	0.0 0.0 0.0	19 19 19	9 10 10	2 3 3	5.0 5.0 5.0	5.0 9 25	9 9 25	0.0 0.0 0.0	14.5 14.4 14.4	0.0 0.0 0.0	31.5 31.5 31.5	31.5 31.5 31.5	13.9 13.9 13.9	0.0 0.0 0.0	28 28 28	46 46 46	0.0 0.0 0.0	13 13 13	0 15 47	8 8 8	
30 12 2	0.00 0.00 2.5	2 / 4	44 30 80	1 3 5	124 24 40	1.10 1.10 1.10	24.4 24.4 19.6	0.0 0.0 0.0	28 28 28	15 15 12	6 6 5	10.8 10.8 10.8	10.8 0 10.8	24 0 0	0.0 0.0 0.0	-36.1 0.0 0.0	5.9 0.0 0.0	53.8 9.3 9.3	58.2 26.9 26.9	16.2 16.0 16.0	5.9 0.0 0.0	99 0 0	94 0 0	11.0 0.0 0.0	11 20 12	38 0 38	8 8 8	
30 12 2.5	0.00 0.00 2.5	3 / 4	44 30 80	1 3 5	118 18 18	1.10 1.10 1.10	21.0 21.0 21.0	0.0 0.0 0.0	28 28 28	13 13 13	5 5 5	10.8 10.8 10.8	10.8 24 0	24 24 0	0.0 0.0 0.0	-22.1 -20.8 0.0	7.5 7.5 0.0	12.3 11.7 11.7	35.4 33.7 33.7	21.1 20.0 20.0	7.5 7.6 7.6	98 95 99	98 99 0	17.5 17.6 0	19 20 20	7 70 0	8 8 8	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a t	Sez a Bas Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE															
					Co	Gam	Rd	M Exd (t*m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area cmq sup inf	Co	Nr	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	staffe Pas Lun Fi				
30 12 1.89	0.00 0.00	4 30 4	44 3 80	1 20 5	1.20 1.10 1.10	39.0 39.0 36.0	0.0 0.0 0.0	31 31 30	18 18 17	18 9 8	12.8 12.8 12.3	14.8 40 13.8	20 40 0	0.0 0.0 0.0	-24.7 34.0 0.0	-7.5 6.9 0.0	13.6 55.4 8.9	39.4 60.0 25.6	23.4 16.7 15.2	9.5 9.5 0.0	86 98 92	95 16.8 0	13 10 0	0 77 20	8 8 8					
12 17 2.5	0.00 0.00	2 30 2	32 3 50	1 24 5	1.10 1.10 1.10	-3.9 6.1 6.1	0.0 0.0 0.0	20 23 23	14 17 17	4 5 5	3.1 3.1 3.1	3.1 4.1 4.1	24 24 24	0.0 0.0 0.0	13.5 13.5 13.5	-0.9 -0.9 -0.9	29.0 29.0 29.0	30.5 30.5 30.5	3.4 3.4 3.4	0.9 0.9 0.9	71 71 71	68 68 68	3.9 3.9 3.9	16 16 16	0 28 47	8 8 8				
29 31 2.5	0.00 0.00	2 30 2	30 3 80	1 20 5	1.20 1.10 1.10	-6.7 11.7 11.7	0.0 0.0 0.0	19 20 20	9 16 16	2 4 4	4.8 4.8 4.8	4.8 0 36	36 0 36	0.0 0.0 0.0	26.4 0.0 26.7	0.5 0.0 0.5	11.7 11.7 14.6	33.7 33.7 42.1	8.2 8.2 10.3	1.3 0.0 1.3	63 0 64	85 0 69	4.9 0.0 4.9	20 20 16	0 0 69	8 8 8				
62 56 2.5	0.00 0.00	2 30 4	32 3 50	1 31 5	1.10 1.10 1.10	-2.6 -2.6 -2.6	0.0 0.0 0.0	20 20 20	9 9 9	2 2 2	3.1 3.1 3.1	3.1 3.1 3.1	31 31 0	0.0 0.0 0.0	3.6 3.6 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	12 12 0	19 19 0	0.0 0.0 0.0	22 22 22	0 53 0	8 8 8				
62 56 2.5	0.00 0.00	3 30 4	32 3 50	1 21 5	1.10 1.10 1.10	-3.1 -4.0 -4.0	0.0 0.0 0.0	20 20 20	11 14 14	3 4 4	3.1 3.1 3.1	3.1 4.1 3.1	46 46 0	0.0 0.0 0.0	-7.3 -7.8 0.0	0.5 0.5 0.0	29.0 29.0 14.6	30.5 30.5 25.6	3.4 3.4 6.0	0.6 0.6 0.0	38 40 0	38 38 0	2.5 2.5 0.0	16 16 16	0 53 0	8 8 8				
62 56 2.5	0.00 0.00	4 30 4	32 3 50	1 37 5	1.10 1.10 1.10	-3.3 -8.1 -8.1	0.0 0.0 0.0	20 24 24	12 18 18	3 6 6	3.1 5.2 5.2	3.1 5.1 5.1	37 37 37	0.0 0.0 0.0	-21.0 -21.0 -21.0	0.3 0.3 0.3	14.6 14.6 14.6	25.6 25.6 25.6	6.0 6.0 6.0	0.8 0.8 0.8	79 79 79	88 88 88	3.4 3.4 3.4	16 16 16	0 6 47	8 8 8				
56 45 2.5	0.00 0.00	2 30 2	32 3 50	1 34 5	1.10 1.10 1.10	5.0 5.0 4.9	0.0 0.0 0.0	22 22 20	14 14 17	4 4 5	3.1 3.1 3.1	4.1 4.1 3.1	43 43 43	0.0 0.0 0.0	1.6 1.5 1.5	-1.2 -1.2 -1.2	29.0 29.0 29.0	30.5 30.5 30.5	3.4 3.4 3.4	1.2 1.2 1.2	41 41 41	26 26 26	5.2 5.2 5.2	16 16 16	0 34 47	8 8 8				
56 69 2.5	0.00 0.00	2 30 4	32 3 50	1 27 5	1.10 1.10 1.10	1.9 -2.7 -2.7	0.0 0.0 0.0	19 20 20	7 10 10	2 3 3	3.1 3.1 3.1	3.1 25 3.1	25 0	0.0 0.0 0.0	-3.3 -3.5 0.0	-0.6 -0.6 0.0	29.0 29.0 14.6	30.5 30.5 25.6	3.4 3.4 6.0	0.6 0.6 0.0	28 29 0	23 23 0	2.6 2.6 0.0	16 16 16	0 80 0	8 8 8				
56 69 2.5	0.00 0.00	3 30 4	32 3 50	1 25 5	1.10 1.10 1.10	3.5 -4.1 -4.1	0.0 0.0 0.0	20 19 19	12 15 15	3 4 4	3.1 3.1 3.1	3.1 4.1 4.1	21 37 0	0.0 0.0 0.0	5.3 5.5 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	17 18 0	28 29 0	0.0 0.0 0.0	22 22 22	0 80 0	8 8 8				
56 69 2.5	0.00 0.00	4 30 4	32 3 50	1 21 5	1.10 1.10 1.10	3.4 4.9 4.9	0.0 0.0 0.0	20 22 22	12 13 13	3 4 4	3.1 3.1 3.1	3.1 4.1 4.1	46 37 37	0.0 0.0 0.0	4.2 6.3 6.3	0.4 0.3 0.3	29.0 14.6 14.6	30.5 25.6 25.6	3.4 6.0 6.0	0.5 0.5 0.5	25 29 29	25 29 29	2.1 2.1 2.1	16 16 16	0 34 47	8 8 8				
25 23 2.5	0.00 0.00	2 30 2	44 3 80	1 40 5	1.10 1.10 1.10	22.9 29.9 29.9	0.0 0.0 0.0	28 28 28	14 17 17	6 7 7	10.8 11.9 11.9	10.8 11.3 11.3	36 36 0	0.0 0.0 0.0	-27.1 -27.0 0.0	2.7 2.7 0.0	11.7 11.7 11.7	33.7 33.7 33.7	20.0 20.0 20.0	5.6 5.8 0.0	73 73 0	94 93 0	13.0 13.4 0.0	20 20 20	0 119 0	8 8 8				
23 18 2.5	0.00 0.00	2 30 4	32 3 50	1 24 5	1.10 1.10 1.10	-3.2 -3.9 -3.9	0.0 0.0 0.0	20 20 20	12 14 14	3 4 4	3.1 3.1 3.1	3.1 3.1 3.1	36 36 0	0.0 0.0 0.0	3.6 4.7 0.0	-0.7 -0.7 0.0	29.0 29.0 14.6	30.5 30.5 25.6	3.4 3.4 6.0	0.7 0.7 0.0	34 38 0	26 31 0	3.2 3.2 0.0	16 16 16	0 77 0	8 8 8				
23 18 2.5	0.00 0.00	3 30 4	32 3 50	1 24 5	1.10 1.10 1.10	-3.3 -3.3 -3.0	0.0 0.0 0.0	20 20 20	12 12 11	3 3 3	3.1 3.1 3.1	3.1 3.1 3.1	40 31 0	0.0 0.0 0.0	2.4 3.9 0.0	0.0 0.0 0.0	10.6 10.6 10.6	18.6 18.6 18.6	4.4 4.4 4.4	0.0 0.0 0.0	8 13 0	13 21 0	0.0 0.0 0.0	22 22 22	0 77 0	8 8 8				
23 18 2.5	0.00 0.00	4 30 4	32 3 50	1 24 5	1.10 1.10 1.10	-2.9 -2.9 2.4	0.0 0.0 0.0	20 20 19	10 10 9	3 3 2	3.1 3.1 3.1	3.1 3.1 3.1	40 40 40	0.0 0.0 0.0	2.8 3.6 3.7	0.0 0.0 0.0	10.6 10.6 14.6	18.6 18.6 25.6	4.4 4.4 6.0	0.0 0.0 0.0	9 12 12	15 19 14	0.0 0.0 0.0	22 22 16	0 31 47	8 8 8				
27 23 2.5	0.00 0.00	2 30 2	32 3 50	1 40 5	1.10 1.10 1.10	4.6 4.6 3.8	0.0 0.0 0.0	20 20 20	17 17 14	4 4 4	3.1 3.1 3.1	3.1 3.1 3.1	24 24 24	0.0 0.0 0.0	-5.1 -5.6 -5.7	0.6 0.6 0.6	29.0 29.0 29.0	30.5 30.5 30.5	3.4 3.4 3.4	0.6 0.6 0.6	34 36 36	29 32 32	2.5 2.5 2.5	16 16 16	0 25 47	8 8 8				
26 25 2.5	0.00 0.00	2 30 2	30 3 80	1 43 5	1.10 1.10 1.10	13.7 13.7 13.7	0.0 0.0 0.0	21 21 21	16 16 16	5 5 5	4.8 4.8 4.8	5.8 5.8 5.8	18 0 18	0.0 0.0 0.0	2.7 0.0 2.5	-1.0 0.0 -1.0	46.4 11.7 46.4	50.2 33.7 50.2	5.7 8.2 5.7	1.0 0.0 1.0	23 0 23	20 0 16	3.7 0.0 3.7	20 20 16	0 2 77	8 8 8				
26 27 2.5	0.00 0.00	2 30 2	30 3 80	1 18 5	1.10 1.10 1.10	-9.3 16.1 16.1	0.0 0.0 0.0	19 22 22	13 18 18	3 5 5	4.8 5.8 5.8	4.8 6.2 6.2	24 24 24	0.0 0.0 0.0	23.4 23.9 24.2	-0.8 -0.8 -0.8	11.7 11.7 14.6	33.7 33.7 42.1	8.2 8.2 10.3	1.3 1.3 1.3	61 62 62	79 81 65	4.7 4.7 4.7	20 16 16	0 21 77	8 8 8				
18 17 2.5	0.00 0.00	2 30 2	30 3 80	1 24 5	1.10 1.10 1.10	12.8 12.8 12.8	0.0 0.0 0.0	21 21 21	15 15 15	4 4 4	4.8 4.8 4.8	5.8 5.8 5.8	30 0 30	0.0 0.0 0.0	11.0 0.0 11.0	1.0 0.0 1.0	11.7 11.7 46.4	33.7 33.7 50.2	8.2 8.2 5.7	1.1 0.0 1.1	39 0 39	45 0 36	3.8 0.0 3.8	20 20 16	0 0 63	8 8 8				
60 47 2.5	0.00 0.00	2 30 2	47 3 80	1 25 5	1.10 1.10 1.10	21.7 21.7 13.2	0.0 0.0 0.0	29 29 29	11 11 7	5 5 3	12.8 12.8 12.8	12.8 41 0	41 41 0	0.0 0.0 0.0	-17.5 -22.2 0.0	6.2 6.2 0.0	11.7 11.7 11.7	33.7 33.7 33.7	24.3 24.3 24.3	7.8 7.8 0.0	72 81 0	78 92 0	17.1 17.1 0.0	20 20 20	0 113 0	8 8 8				
60 63 2.29	0.00 0.00	2 30 2	47 3 80	1 15 5	1.10 1.10 1.10	31.5 33.5 33.5	0.0 0.0 0.0	29 29 29	16 17 17	7 8 8	12.8 12.8 12.8	12.8 21 25	21 21 25	0.0 0.0 0.0	26.3 24.9 -24.4	9.0 9.0 -9.4	13.4 49.2 49.2	38.7 53.2 53.2	27.9 17.9 17.9	9.4 9.4 9.4	100 97 98	100 97 98	18.8 18.8 18.8	16 16 16	0 13 77	8 8 8				

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - FONDAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final	T r a	Sez a	C o	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE													staffe		
					Co	Gam	Rd	M Exd	N Ed	x/	εf%	εc%	Area cmq	Co	V Exd	V Eyd	T Sdu	V Rxd	V Ryd	TRd	TRLd	Coe	Coe	ALon	Pas	Lun	Fi			
		t	Alt	c	Nr		(t*m)	(t)	/d	100	100	sup	inf	Nr	(t)	(t)	(t*m)	(t)	(t)	(t*m)	(t*m)	Cls	Sta	cmq						
63	0.00	2	47	1	15	1.10	18.0	0.0	29	9	4	12.8	12.8	15	0.0	-23.2	-2.8	11.7	33.7	24.3	3.7	63	80	8.1	20	0	8			
61	0.00	/	30	3	15	1.10	18.0	0.0	29	9	4	12.8	12.8	15	0.0	-24.7	-2.8	11.7	33.7	24.3	3.7	66	85	8.1	20	113	8			
2.5		2	80	5	43	1.10	9.4	0.0	28	5	2	12.8	12.8	0	0.0	0.0	0.0	11.7	33.7	24.3	0.0	0	0	0.0	20	0	8			
61	0.00	2	47	1	27	1.10	34.7	0.0	30	17	8	13.3	13.8	25	0.0	33.6	0.6	12.3	35.4	25.5	4.4	71	97	9.6	19	0	8			
47	0.00	/	30	3	27	1.10	35.8	0.0	30	17	8	13.3	13.8	21	0.0	-30.0	-2.4	11.7	33.7	24.3	4.4	74	99	9.6	20	89	8			
2.5		2	80	5	27	1.10	35.8	0.0	30	17	8	13.3	13.8	0	0.0	0.0	0.0	11.7	33.7	24.3	0.0	0	0	0.0	20	0	8			
36	0.00	2	32	1	41	1.10	-3.0	0.0	20	11	3	3.1	3.1	20	0.0	0.2	0.0	10.6	18.6	4.4	0.0	1	1	0.0	22	0	8			
41	0.00	/	30	3	41	1.10	-3.0	0.0	20	11	3	3.1	3.1	20	0.0	0.2	0.0	10.6	18.6	4.4	0.0	1	1	0.0	22	93	8			
2.5		4	50	5	41	1.10	-3.0	0.0	20	11	3	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8			
36	0.00	3	32	1	41	1.10	-2.3	0.0	19	8	2	3.1	3.1	41	0.0	1.8	0.0	10.6	18.6	4.4	0.0	6	9	0.0	22	0	8			
41	0.00	/	30	3	41	1.10	-2.3	0.0	19	8	2	3.1	3.1	41	0.0	1.8	0.0	10.6	18.6	4.4	0.0	6	9	0.0	22	93	8			
2.5		4	50	5	40	1.10	-1.6	0.0	19	6	2	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8			
36	0.00	4	32	1	25	1.10	-2.1	0.0	19	7	2	3.1	3.1	25	0.0	7.7	0.0	10.6	18.6	4.4	0.0	25	41	0.0	22	0	8			
41	0.00	/	30	3	25	1.10	5.0	0.0	22	14	4	3.1	4.1	25	0.0	7.7	0.0	10.6	18.6	4.4	0.0	25	41	0.0	22	46	8			
2.5		4	50	5	25	1.10	5.0	0.0	22	14	4	3.1	4.1	25	0.0	7.7	0.0	14.6	25.6	6.0	0.0	25	30	0.0	16	47	8			
42	0.00	2	32	1	30	1.10	-3.5	0.0	20	13	3	3.1	3.1	46	0.0	-0.7	0.0	10.6	18.6	4.4	0.0	2	4	0.0	22	0	8			
52	0.00	/	30	3	30	1.10	-3.6	0.0	20	13	3	3.1	3.1	46	0.0	-0.7	0.0	10.6	18.6	4.4	0.0	2	4	0.0	22	75	8			
2.5		4	50	5	30	1.10	-3.6	0.0	20	13	3	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8			
42	0.00	3	32	1	30	1.10	-2.5	0.0	20	9	2	3.1	3.1	41	0.0	0.6	0.0	10.6	18.6	4.4	0.0	2	3	0.0	22	0	8			
52	0.00	/	30	3	30	1.10	-2.5	0.0	20	9	2	3.1	3.1	25	0.0	0.6	0.0	10.6	18.6	4.4	0.0	2	3	0.0	22	75	8			
2.5		4	50	5	30	1.10	-2.5	0.0	19	9	2	3.1	3.1	0	0.0	0.0	0.0	10.6	18.6	4.4	0.0	0	0	0.0	22	0	8			
42	0.00	4	32	1	27	1.10	-2.0	0.0	19	7	2	3.1	3.1	27	0.0	4.8	0.6	29.0	30.5	3.4	0.6	32	28	2.4	16	0	8			
52	0.00	/	30	3	27	1.10	-2.0	0.0	19	7	2	3.1	3.1	27	0.0	4.7	0.6	29.0	30.5	3.4	0.6	32	28	2.4	16	29	8			
2.5		4	50	5	25	1.10	1.8	0.0	19	6	2	3.1	3.1	27	0.0	4.9	0.6	29.0	30.5	3.4	0.6	33	28	2.4	16	47	8			

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a	Sez a Alt	C o n c m	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE												
					Co	M Exd	M Eyd	N Ed	x/d	εf%	εc%	Area cmq	Co	V Exd	V Eyd	T Sdu	V Rxd	V Ryd	TRd	TRLd	Coe	Coe	ALon	Staffe			
		t		mb	(t*m)	(t*m)	(t)					sup	inf	Nr	(t)	(t)	(t*m)	(t)	(t)	(t*m)	(t*m)	Cls	Sta	cmq	Pas	Lun	Fi
30	3.63	1	42	1	20	-2.5	0.0	0.0	27	12	5	4.0	4.0	20	0.0	5.1	0.0	10.3	11.1	2.2	0.0	31	45	0.0	21	0	8
12	3.63	/	28	3	20	-2.5	0.0	0.0	27	12	5	4.0	4.0	20	0.0	5.0	0.0	10.3	11.1	2.2	0.0	31	45	0.0	21	77	8
2.5	1.00	4	30	5	20	1.3	0.0	0.0	27	7	3	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8
25	3.63	1	42	1	6	0.2	0.0	0.0	26	1	1	4.0	4.0	12	0.0	-0.3	0.0	10.3	11.1	2.2	0.0	2	3	0.0	21	0	8
23	3.63	/	28	3	43	-0.3	0.0	0.0	26	2	1	4.0	4.0	12	0.0	-0.7	0.0	10.3	11.1	2.2	0.0	4	6	0.0	21	119	8
2.5	1.00	2	30	5	43	-0.4	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8
60	3.63	1	27	1	27	-0.5	0.0	0.0	29	3	2	4.0	4.0	27	0.0	1.0	0.0	11.1	11.1	1.9	0.0	8	9	0.0	17	0	8
47	3.63	/	25	3	27	-0.3	0.0	0.0	29	2	1	4.0	4.0	27	0.0	1.0	0.0	11.1	11.1	1.9	0.0	8	9	0.0	17	113	8
2.5	1.00	2	25	5	25	0.5	0.0	0.0	29	3	1	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8
63	3.63	1	27	1	15	-0.7	0.0	0.0	29	5	2	4.0	4.0	15	0.0	1.3	0.0	11.1	11.1	1.9	0.0	11	12	0.0	17	0	8
61	3.63	/	25	3	15	-0.4	0.0	0.0	29	3	1	4.0	4.0	15	0.0	1.3	0.0	11.1	11.1	1.9	0.0	11	11	0.0	17	113	8
2.5	1.00	2	25	5	15	0.6	0.0	0.0	29	4	2	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8
47	3.63	1	27	1	25	-0.3	0.0	0.0	29	2	1	4.0	4.0	25	0.0	0.7	0.0	11.1	11.1	1.9	0.0	6	7	0.0	17	0	8
61	3.63	/	25	3	25	-0.2	0.0	0.0	29	2	1	4.0	4.0	25	0.0	0.7	0.0	11.1	11.1	1.9	0.0	6	7	0.0	17	89	8
2.5	1.00	2	25	5	21	-0.3	0.0	0.0	29	2	1	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8
35	3.63		26	1	6	-1.6	0.0	0.0	26	13	5	3.1	3.1	6	0.0	2.4	0.0	14.5	14.1	1.4	0.0	17	6	0.0	5	25	8
36	3.63		30	3	30	1.0	0.0	0.0	25	8	3	3.1	3.1	6	0.0	2.1	0.0	13.7	11.1	2.4	0.0	15	19	0.0	17	251	8
2.5	1.00		25	5	30	0.6	0.0	0.0	25	5	2	3.1	3.1	12	0.0	-1.5	0.0	14.5	14.1	1.4	0.0	11	4	0.0	5	25	8
41	3.63		26	1	6	-3.0	0.0	0.0	30	19	10	4.1	3.1	6	0.0	3.2	0.0	14.5	14.1	1.4	0.0	23	9	0.0	5	25	8
42	3.63		30	3	12	1.0	0.0	0.0	25	8	3	3.1	3.1	6	0.0	2.8	0.0	13.7	11.1	2.4	0.0	20	26	0.0	17	320	8
2.5	1.00		25	5	37	-0.6	0.0	0.0	25	5	2	3.1	3.1	12	0.0	-1.8	0.0	14.5	14.1	1.4	0.0	13	5	0.0	5	25	8
35	3.63		25	1	20	6.1	0.0	0.0	23	18	6	4.3	4.3	20	0.0	-7.1	0.0	26.1	27.2	3.0	0.0	26	20	0.0	10	45	8
34	3.63		30	3	20	5.8	0.0	0.0	23	17	6	4.3	4.3	20	0.0	-7.6	0.0	11.1	17.4	4.1	0.0	28	44	0.0	21	44	8
2.5	1.00		45	5	36	-3.8	0.0	0.0	23	11	4	4.3	4.3	20	0.0	-8.1	0.0	26.1	27.2	3.0	0.0	30	22	0.0	10	45	8
52	3.63		25	1	15	5.4	0.0	0.0	23	16	5	4.3	4.3	15	0.0	-7.0	0.0	26.1	27.2	3.0	0.0	26	19	0.0	10	45	8
51	3.63		30	3	15	5.1	0.0	0.0	23	15	5	4.3	4.3	15	0.0	-7.5	0.0	11.1	17.4	4.1	0.0	27	43	0.0	21	44	8
2.5	1.00		45	5	15	-4.3	0.0	0.0	23	13	4	4.3	4.3	15	0.0	-8.0	0.0	26.1	27.2	3.0	0.0	29	22	0.0	10	45	8
33	3.63		25	1	20	17.5	0.0	0.0	29	25	12	11.8	12.0	24	0.0	14.1	0.0	26.1	27.2	3.0	0.0	52	39	0.0	10	45	8
31	3.63		30	3	24	-9.6	0.0	0.0	21	30	9	6.5	8.6	20	0.0	-14.6	0.0	11.1	17.4	4.1	0.0	54	84	0.0	21	167	8

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a a	Sez a n c	C o n c	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE														
					Co mb	M Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area cmq sup inf	Co mb	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi			
2.5	1.00		45	5	20	-15.3	0.0	0.0	33	19	10	10.7	8.6	20	0.0	-15.7	0.0	26.1	27.2	3.0	0.0	58	43	0.0	10	45	8
34	3.63		25	1	24	-14.2	0.0	0.0	32	18	10	10.1	9.3	24	0.0	15.4	0.0	26.1	27.2	3.0	0.0	57	42	0.0	10	45	8
33	3.63		30	3	20	-11.9	0.0	0.0	30	17	9	8.7	8.3	20	0.0	-15.1	0.0	12.3	19.2	4.5	0.0	56	79	0.0	19	148	8
2.5	1.00		45	5	20	-19.3	0.0	0.0	36	18	11	14.0	11.1	20	0.0	-16.2	0.0	26.1	27.2	3.0	0.0	60	44	0.0	10	45	8
50	3.63		25	1	27	-15.3	0.0	0.0	33	18	10	10.7	9.3	27	0.0	13.1	0.0	26.1	27.2	3.0	0.0	48	36	0.0	10	45	8
48	3.63		30	3	15	8.4	0.0	0.0	27	18	7	5.5	5.8	27	0.0	12.0	0.0	11.1	17.4	4.1	0.0	44	69	0.0	21	177	8
2.5	1.00		45	5	15	-13.7	0.0	0.0	32	18	9	9.8	8.7	15	0.0	-13.0	0.0	26.1	27.2	3.0	0.0	48	36	0.0	10	45	8
51	3.63		25	1	15	9.8	0.0	0.0	20	34	9	9.2	6.5	27	0.0	12.7	0.0	26.1	27.2	3.0	0.0	46	35	0.0	10	45	8
50	3.63		30	3	27	7.6	0.0	0.0	26	18	7	5.3	5.3	27	0.0	11.5	0.0	11.1	17.4	4.1	0.0	42	66	0.0	21	158	8
2.5	1.00		45	5	17	-13.5	0.0	0.0	31	18	9	9.7	8.7	15	0.0	-12.2	0.0	26.1	27.2	3.0	0.0	45	33	0.0	10	45	8
31	3.63		25	1	36	18.7	0.0	0.0	36	18	11	10.1	13.6	36	0.0	-19.4	0.0	26.1	27.2	3.0	0.0	71	53	0.0	10	45	8
29	3.63		30	3	36	16.6	0.0	0.0	31	24	12	9.1	11.4	36	0.0	-19.7	0.0	13.0	20.3	4.7	0.0	72	97	0.0	18	47	8
2.5	1.00		45	5	20	-10.7	0.0	0.0	17	70	15	7.1	6.4	36	0.0	-20.4	0.0	26.1	27.2	3.0	0.0	75	56	0.0	10	45	8
29	3.63		25	1	20	-10.1	0.0	0.0	18	49	12	6.7	6.2	30	0.0	-15.3	0.0	26.1	27.2	3.0	0.0	56	42	0.0	10	45	8
27	3.63		30	3	46	-13.1	0.0	0.0	33	18	10	9.4	6.2	30	0.0	-15.6	0.0	11.1	17.4	4.1	0.0	57	89	0.0	21	28	8
2.5	1.00		45	5	46	-13.1	0.0	0.0	33	18	10	9.4	5.8	30	0.0	-16.1	0.0	26.1	27.2	3.0	0.0	59	44	0.0	10	45	8
27	3.63		25	1	34	-9.7	0.0	0.0	20	39	11	6.5	5.3	34	0.0	6.1	0.0	26.1	27.2	3.0	0.0	22	17	0.0	10	45	8
26	3.63		30	3	34	-7.9	0.0	0.0	27	18	7	5.5	4.3	34	0.0	5.5	0.0	11.1	17.4	4.1	0.0	20	32	0.0	21	105	8
2.5	1.00		45	5	46	3.6	0.0	0.0	24	11	4	3.1	4.3	34	0.0	4.4	0.0	26.1	27.2	3.0	0.0	16	12	0.0	10	45	8
62	3.63		25	1	41	-8.5	0.0	0.0	28	18	8	5.8	4.3	41	0.0	7.0	0.0	26.1	27.2	3.0	0.0	26	19	0.0	10	45	8
74	3.63		30	3	41	-7.2	0.0	0.0	26	17	7	5.3	4.3	41	0.0	6.5	0.0	11.1	17.4	4.1	0.0	24	37	0.0	21	78	8
2.5	1.00		45	5	41	1.8	0.0	0.0	23	5	2	4.3	4.3	41	0.0	5.7	0.0	26.1	27.2	3.0	0.0	21	16	0.0	10	45	8
45	3.63		25	1	41	-2.6	0.0	0.0	24	8	3	4.3	3.1	41	0.0	4.1	0.0	26.1	27.2	3.0	0.0	15	11	0.0	10	45	8
46	3.63		30	3	34	3.7	0.0	0.0	23	11	4	4.3	4.3	41	0.0	3.9	0.0	11.1	17.4	4.1	0.0	14	22	0.0	21	105	8
2.5	1.00		45	5	34	4.7	0.0	0.0	23	14	5	4.3	4.3	41	0.0	3.6	0.0	26.1	27.2	3.0	0.0	13	10	0.0	10	45	8
46	3.63		25	1	34	3.9	0.0	0.0	23	11	4	4.3	4.3	45	0.0	-2.2	0.0	26.1	27.2	3.0	0.0	8	6	0.0	10	36	8
48	3.63		30	3	34	4.0	0.0	0.0	23	12	4	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
2.5	1.00		45	5	34	4.0	0.0	0.0	23	12	4	4.3	4.3	45	0.0	-2.6	0.0	26.1	27.2	3.0	0.0	10	7	0.0	10	36	8
62	3.63		25	1	20	-10.1	0.0	0.0	18	53	13	6.7	5.3	20	0.0	11.9	0.0	26.1	27.2	3.0	0.0	44	32	0.0	10	45	8
39	3.63		30	3	20	6.3	0.0	0.0	23	18	6	5.3	4.3	24	0.0	-11.2	0.0	11.1	17.4	4.1	0.0	41	64	0.0	21	177	8
2.5	1.00		45	5	24	-13.9	0.0	0.0	34	18	11	9.9	5.4	24	0.0	-13.0	0.0	26.1	27.2	3.0	0.0	48	36	0.0	10	45	8
39	3.63		25	1	20	-12.3	0.0	0.0	33	18	10	9.0	5.3	20	0.0	12.6	0.0	26.1	27.2	3.0	0.0	46	34	0.0	10	45	8
40	3.63		30	3	20	-6.0	0.0	0.0	23	18	6	4.3	4.3	20	0.0	10.7	0.0	11.1	17.4	4.1	0.0	39	61	0.0	21	158	8
2.5	1.00		45	5	24	-9.8	0.0	0.0	19	45	12	6.6	5.3	24	0.0	-11.8	0.0	26.1	27.2	3.0	0.0	43	32	0.0	10	45	8
40	3.63		25	1	20	-5.1	0.0	0.0	23	15	5	4.3	4.3	19	0.0	8.5	0.0	26.1	27.2	3.0	0.0	31	23	0.0	10	45	8
41	3.63		30	3	20	5.0	0.0	0.0	23	15	5	4.3	4.3	19	0.0	8.0	0.0	11.1	17.4	4.1	0.0	29	46	0.0	21	44	8
2.5	1.00		45	5	20	5.3	0.0	0.0	23	16	5	4.3	4.3	19	0.0	7.5	0.0	26.1	27.2	3.0	0.0	28	21	0.0	10	45	8
34	3.63		25	1	30	14.8	0.0	0.0	35	19	11	5.7	10.4	30	0.0	-10.6	0.0	26.1	27.2	3.0	0.0	39	29	0.0	10	45	8
37	3.63		30	3	30	9.7	0.0	0.0	20	46	12	4.3	6.5	30	0.0	-12.9	0.0	11.1	17.4	4.1	0.0	47	74	0.0	21	156	8
2.5	1.00		45	5	30	-14.2	0.0	0.0	34	18	11	10.0	5.0	30	0.0	-13.7	0.0	26.1	27.2	3.0	0.0	50	37	0.0	10	45	8
37	3.63		25	1	34	-12.6	0.0	0.0	31	18	9	9.2	8.3	34	0.0	9.2	0.0	26.1	27.2	3.0	0.0	34	25	0.0	10	45	8
40	3.63		30	3	46	6.1	0.0	0.0	23	18	6	4.3	4.3	46	0.0	-9.5	0.0	11.1	17.4	4.1	0.0	35	54	0.0	21	245	8
2.5	1.00		45	5	34	9.7	0.0	0.0	20	31	9	10.2	6.5	46	0.0	-10.2	0.0	26.1	27.2	3.0	0.0	37	28	0.0	10	45	8
40	3.63		25	1	46	10.6	0.0	0.0	17	56	12	9.6	7.0	34	0.0	9.8	0.0	26.1	27.2	3.0	0.0	36	27	0.0	10	45	8
43	3.63		30	3	46	5.9	0.0	0.0	23	17	6	4.3	4.3	46	0.0	-9.2	0.0	11.1	17.4	4.1	0.0	34	53	0.0	21	235	8
2.5	1.00		45	5	34	10.4	0.0	0.0	17	51	11	9.7	6.9	46	0.0	-9.9	0.0	26.1	27.2	3.0	0.0	36	27	0.0</			

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a n c	C o n b	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE												Staffe Pas Lun Fi			
					Co mb	M Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area sup inf	Co mb	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRLd (t*m)	Coe Cls	Coe Sta	ALon cmq					
2.5	1.00		25	5	24	-5.3	0.0	0.0	34	19	12	7.4	3.7	24	0.0	-6.1	0.0	20.0	18.8	2.0	0.0	32	16	0.0	5	25	8	
43	3.63		39	1	12	-5.1	0.0	0.0	34	18	12	7.2	3.6	3	0.0	3.8	0.0	20.0	18.8	2.0	0.0	20	10	0.0	5	25	8	
42	3.63		40	3	12	-3.8	0.0	0.0	31	17	9	5.9	3.1	12	0.0	3.7	0.0	20.1	11.8	3.6	0.0	20	31	0.0	16	99	8	
2.5	1.00		25	5	12	0.1	0.0	0.0	23	1	0	3.1	3.2	12	0.0	3.4	0.0	20.0	18.8	2.0	0.0	18	9	0.0	5	25	8	
44	3.63		39	1	21	-4.5	0.0	0.0	32	18	11	6.6	3.3	21	0.0	6.1	0.0	20.0	18.8	2.0	0.0	32	16	0.0	5	25	8	
43	3.63		40	3	21	2.0	0.0	0.0	23	16	6	3.2	3.2	21	0.0	5.4	0.0	20.1	11.8	3.6	0.0	29	46	0.0	16	208	8	
2.5	1.00		25	5	25	-5.2	0.0	0.0	34	18	12	7.3	3.7	25	0.0	-6.0	0.0	20.0	18.8	2.0	0.0	32	16	0.0	5	25	8	
36	3.63		26	1	18	-0.6	0.0	0.0	25	5	2	3.1	3.1	6	0.0	1.8	0.0	14.5	14.1	1.4	0.0	12	5	0.0	5	25	8	
41	3.63		30	3	6	1.0	0.0	0.0	25	8	3	3.1	3.1	12	0.0	-2.9	0.0	13.7	11.1	2.4	0.0	21	26	0.0	17	320	8	
2.5	1.00		25	5	12	-3.1	0.0	0.0	25	31	12	4.2	3.1	12	0.0	-3.3	0.0	14.5	14.1	1.4	0.0	23	9	0.0	5	25	8	
42	3.63		26	1	41	0.5	0.0	0.0	25	4	2	3.1	3.1	6	0.0	1.5	0.0	14.5	14.1	1.4	0.0	11	4	0.0	5	25	8	
52	3.63		30	3	41	0.9	0.0	0.0	25	7	3	3.1	3.1	12	0.0	-2.2	0.0	13.7	11.1	2.4	0.0	15	19	0.0	17	251	8	
2.5	1.00		25	5	12	-1.6	0.0	0.0	26	13	6	3.1	3.1	12	0.0	-2.5	0.0	14.5	14.1	1.4	0.0	18	7	0.0	5	25	8	
17	3.63	1	25	1	24	-25.4	0.0	0.0	30	39	19	17.5	10.9	24	0.0	20.8	0.5	26.1	27.2	3.0	0.5	93	63	2.3	10	45	8	
7	3.63	/	30	3	24	-25.4	0.0	0.0	41	18	15	18.4	10.9	24	0.0	19.2	0.5	15.6	24.4	5.7	0.5	87	88	2.3	15	57	8	
2.5	1.00	4	45	5	24	-14.3	0.0	0.0	32	18	10	10.1	8.9	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8	
54	3.63	1	25	1	25	-22.6	0.0	0.0	36	22	14	15.8	10.0	25	0.0	18.9	-0.4	26.1	27.2	3.0	0.5	83	57	2.2	10	45	8	
5	3.63	/	30	3	25	-22.6	0.0	0.0	40	18	13	16.8	10.0	25	0.0	17.4	-0.4	15.6	24.4	5.7	0.5	78	79	2.2	15	57	8	
2.5	1.00	4	45	5	25	-12.5	0.0	0.0	31	18	9	9.1	8.3	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8	
2	3.63		25	1	43	-20.9	0.0	0.0	38	18	13	14.9	9.8	43	0.0	10.2	0.0	26.1	27.2	3.0	0.0	37	28	0.0	10	45	8	
1	3.63		30	3	43	8.0	0.0	0.0	27	18	8	3.7	5.5	43	0.0	9.7	0.0	11.1	17.4	4.1	0.0	36	56	0.0	21	413	8	
2.5	1.00		45	5	31	-19.3	0.0	0.0	35	18	11	13.9	11.5	31	0.0	-9.2	0.0	26.1	27.2	3.0	0.0	34	25	0.0	10	45	8	
9	3.63	1	25	1	6	-9.5	0.0	0.0	21	41	12	6.4	3.2	3	0.0	7.3	0.5	26.1	27.2	3.0	0.6	45	26	2.5	10	45	8	
10	3.63	/	30	3	6	-9.5	0.0	0.0	21	41	12	6.4	3.1	3	0.0	7.1	0.5	26.1	27.2	3.0	0.6	45	39	2.5	15	42	8	
2.5	1.00	2	45	5	6	-6.6	0.0	0.0	27	16	7	5.3	3.1	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8	
2	3.63	1	25	1	12	-9.4	0.0	0.0	22	37	11	6.3	3.2	3	0.0	7.3	-0.5	26.1	27.2	3.0	0.5	45	26	2.4	10	45	8	
3	3.63	/	30	3	12	-9.4	0.0	0.0	22	38	12	6.3	3.1	3	0.0	7.1	-0.5	26.1	27.2	3.0	0.5	44	39	2.4	15	42	8	
2.5	1.00	2	45	5	12	-6.6	0.0	0.0	17	43	10	4.3	3.1	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8	
7	3.63	1	25	1	24	-23.8	0.0	0.0	31	37	19	16.5	8.3	9	0.0	17.1	0.7	26.1	27.2	3.0	0.7	86	55	3.1	10	45	8	
9	3.63	/	30	3	24	-23.8	0.0	0.0	45	19	18	17.5	4.4	9	0.0	14.5	0.7	26.1	27.2	3.0	0.7	77	76	3.1	15	76	8	
2.5	1.00	4	45	5	24	-11.7	0.0	0.0	33	18	10	8.6	4.3	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8	
5	3.63	1	25	1	25	-22.2	0.0	0.0	36	26	16	15.6	7.8	9	0.0	17.2	-0.7	26.1	27.2	3.0	0.7	86	55	3.1	10	45	8	
2	3.63	/	30	3	25	-22.2	0.0	0.0	32	45	24	15.6	4.3	9	0.0	14.6	-0.7	26.1	27.2	3.0	0.7	77	72	3.1	15	76	8	
2.5	1.00	4	45	5	25	-10.7	0.0	0.0	17	84	18	7.1	4.3	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8	
1	3.63		25	1	43	-20.2	0.0	0.0	36	18	12	14.5	11.0	43	0.0	9.6	0.0	26.1	27.2	3.0	0.0	35	26	0.0	10	45	8	
9	3.63		30	3	31	7.6	0.0	0.0	27	18	7	3.6	5.3	31	0.0	-9.3	0.0	11.1	17.4	4.1	0.0	34	54	0.0	21	413	8	
2.5	1.00		45	5	31	-20.0	0.0	0.0	37	18	12	14.4	10.3	31	0.0	-9.8	0.0	26.1	27.2	3.0	0.0	36	27	0.0	10	45	8	
53	3.63	1	25	1	43	-1.1	0.0	0.0	23	3	1	4.3	4.3	12	0.0	-3.8	0.0	26.1	27.2	3.0	0.0	14	10	0.0	10	45	8	
54	3.63	/	30	3	12	-3.2	0.0	0.0	24	9	3	4.3	3.1	12	0.0	-4.0	0.0	11.1	17.4	4.1	0.0	15	23	0.0	21	42	8	
2.5	1.00	2	45	5	12	-3.2	0.0	0.0	24	9	3	4.3	3.1	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8	
54	3.63		25	1	43	-14.5	0.0	0.0	32	18	10	10.2	8.7	31	0.0	-13.8	0.7	26.1	27.2	3.0	0.9	51	38	3.8	10	45	8	
66	3.63		30	3	43	-14.5	0.0	0.0	32	18	10	10.2	8.7	31	0.0	-13.9	0.7	15.6	24.4	5.7	0.9	51	57	3.8	15	2	8	
2.5	1.00		45	5	43	-7.4	0.0	0.0	27	18	7	5.3	3.7	31	0.0	-14.3	0.7	26.1	27.2	3.0	0.9	53	39	3.8	10	45	8	
69	3.63		25	1	31	18.2	0.0	0.0	30	22	11	14.3	12.5	43	0.0	15.4	0.0	26.1	27.2	3.0	0.0	57	42	0.0	10	45	8	
70	3.63		30	3	31	10.3	0.0	0.0	18	54	13	6.8	6.8	43	0.0	14.9	0.0	11.7	18.3	4.3	0.0	55	82	0.0	20	181	8	
2.5	1.00		45	5	31	-18.5	0.0	0.0	24	40	14	12.5	12.2	31	0.0	-15.0	0.0	26.1	27.2	3.0								

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a l t	Sez a Bas n	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE														
					Co	M	Exd	M	Eyd	N	Ed	x/ d	εf 100	εc 100	Area sup	cmq inf	Co mb	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRLd
2.5	1.00	4	25	5	21	0.8	0.0	0.0	0.0	25	7	3	3.1	3.1	3	0.0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
8	3.63	1	26	1	3	-1.2	0.0	0.0	0.0	25	10	4	3.1	3.1	3	0.0	1.9	0.0	14.5	14.1	1.4	0.0	13	5	0.0	5	25	8	
10	3.63	/	30	3	3	-0.7	0.0	0.0	0.0	25	5	2	3.1	3.1	3	0.0	1.6	0.0	13.7	11.1	2.4	0.0	11	14	0.0	17	111	8	
2.5	1.00	4	25	5	20	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8	
4	3.63	1	26	1	3	-1.3	0.0	0.0	0.0	25	10	4	3.1	3.1	3	0.0	1.9	0.0	14.5	14.1	1.4	0.0	13	5	0.0	5	25	8	
3	3.63	/	30	3	6	-0.7	0.0	0.0	0.0	25	6	2	3.1	3.1	3	0.0	1.6	0.0	13.7	11.1	2.4	0.0	11	14	0.0	17	111	8	
2.5	1.00	4	25	5	21	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8	
7	3.63	1	33	1	12	-6.6	0.0	0.0	0.0	44	18	22	15.4	7.7	12	0.0	8.8	0.0	18.3	15.9	1.6	0.0	55	21	0.0	3	18	8	
8	3.63	/	50	3	12	-5.1	0.0	0.0	0.0	43	19	21	11.2	3.1	12	0.0	8.7	0.0	37.2	11.6	4.2	0.0	55	75	0.0	11	69	8	
2.5	1.00	2	18	5	12	1.0	0.0	0.0	0.0	24	12	5	3.1	3.1	0	0.0	0.0	0.0	37.2	11.6	4.2	0.0	0	0	0.0	11	0	8	
5	3.63	1	33	1	6	-6.6	0.0	0.0	0.0	44	18	22	15.3	7.7	6	0.0	8.8	0.0	18.3	15.9	1.6	0.0	56	21	0.0	3	18	8	
4	3.63	/	50	3	6	-5.0	0.0	0.0	0.0	43	19	21	11.1	3.1	6	0.0	8.7	0.0	37.2	11.6	4.2	0.0	55	75	0.0	11	69	8	
2.5	1.00	2	18	5	6	1.0	0.0	0.0	0.0	24	11	5	3.1	3.1	0	0.0	0.0	0.0	37.2	11.6	4.2	0.0	0	0	0.0	11	0	8	
5	3.63		38	1	31	3.8	0.0	0.0	0.0	16	66	15	9.6	5.0	43	0.0	2.9	0.0	25.4	23.5	2.6	0.0	12	8	0.0	5	25	8	
6	3.63		50	3	43	-1.7	0.0	0.0	0.0	23	11	4	4.0	4.0	43	0.0	2.8	0.0	31.5	14.6	5.8	0.0	12	19	0.0	13	463	8	
2.5	1.00		25	5	31	-5.3	0.0	0.0	0.0	30	18	10	7.4	6.5	31	0.0	-2.6	0.0	25.4	23.5	2.6	0.0	11	7	0.0	5	25	8	
6	3.63		38	1	43	-5.6	0.0	0.0	0.0	31	18	10	7.7	6.2	43	0.0	2.7	0.0	25.4	23.5	2.6	0.0	11	7	0.0	5	25	8	
7	3.63		50	3	43	1.7	0.0	0.0	0.0	23	11	4	4.0	4.0	31	0.0	-2.7	0.0	31.5	14.6	5.8	0.0	12	19	0.0	13	463	8	
2.5	1.00		25	5	31	-6.2	0.0	0.0	0.0	24	40	15	8.3	6.3	31	0.0	-2.8	0.0	25.4	23.5	2.6	0.0	12	7	0.0	5	25	8	
70	3.63		48	1	24	-18.5	0.0	0.0	0.0	41	16	13	10.5	5.9	24	0.0	16.0	0.0	26.1	27.2	2.6	0.0	59	44	0.0	10	45	8	
6	3.63		30	3	20	7.9	0.0	0.0	0.0	21	18	5	3.6	5.5	20	0.0	-15.6	0.0	14.6	22.8	4.7	0.0	57	68	0.0	16	339	8	
2.5	1.00		45	5	20	-23.3	0.0	0.0	0.0	44	17	16	13.2	6.6	3	0.0	-18.3	0.0	26.1	27.2	2.6	0.0	67	50	0.0	10	45	8	
6	3.63		48	1	24	-25.4	0.0	0.0	0.0	45	18	17	14.4	7.2	9	0.0	23.4	0.0	26.1	27.2	2.6	0.0	86	64	0.0	10	79	8	
1	3.63		30	3	9	11.3	0.0	0.0	0.0	25	17	6	4.1	8.3	9	0.0	17.2	0.0	11.1	17.4	3.6	0.0	63	99	0.0	21	379	8	
2.5	1.00		45	5	20	-12.8	0.0	0.0	0.0	37	13	9	7.8	6.2	3	0.0	-16.0	0.0	26.1	27.2	2.6	0.0	59	44	0.0	10	45	8	
62	3.63		26	1	9	-4.2	0.0	0.0	0.0	35	17	12	6.3	3.2	9	0.0	6.1	0.0	14.5	14.1	1.4	0.0	43	16	0.0	5	25	8	
70	3.63		30	3	9	2.2	0.0	0.0	0.0	26	18	8	3.1	3.1	3	0.0	-5.8	0.0	13.7	11.1	2.4	0.0	41	52	0.0	17	385	8	
2.5	1.00		25	5	3	-5.2	0.0	0.0	0.0	35	23	15	7.3	3.7	3	0.0	-6.5	0.0	14.5	14.1	1.4	0.0	46	17	0.0	5	25	8	
26	3.63		26	1	18	0.4	0.0	0.0	0.0	25	4	1	3.1	3.1	28	0.0	2.9	0.0	14.5	14.1	1.4	0.0	21	8	0.0	5	25	8	
25	3.63		30	3	18	-2.2	0.0	0.0	0.0	26	18	8	3.1	3.1	18	0.0	-3.9	0.0	13.7	11.1	2.4	0.0	28	35	0.0	17	107	8	
2.5	1.00		25	5	18	-3.7	0.0	0.0	0.0	34	17	11	5.8	3.1	16	0.0	-4.5	0.0	14.5	14.1	1.4	0.0	32	12	0.0	5	25	8	
21	3.63		26	1	24	2.1	0.0	0.0	0.0	26	17	8	3.1	3.1	36	0.0	-4.2	0.0	14.5	14.1	1.4	0.0	30	11	0.0	5	25	8	
73	3.63		30	3	20	-4.5	0.0	0.0	0.0	36	18	13	6.6	3.1	36	0.0	-5.2	0.0	13.7	11.1	2.4	0.0	37	46	0.0	17	54	8	
2.5	1.00		25	5	20	-5.4	0.0	0.0	0.0	32	30	18	7.5	3.7	36	0.0	-5.6	0.0	14.5	14.1	1.4	0.0	40	15	0.0	5	25	8	
25	3.63		26	1	40	-5.1	0.0	0.0	0.0	37	19	14	7.2	3.6	24	0.0	6.0	0.0	14.5	14.1	1.4	0.0	42	16	0.0	5	25	8	
21	3.63		30	3	40	-2.3	0.0	0.0	0.0	23	25	9	3.1	3.1	24	0.0	5.3	0.0	13.7	11.1	2.4	0.0	37	47	0.0	17	139	8	
2.5	1.00		25	5	24	1.9	0.0	0.0	0.0	26	15	7	3.1	3.1	20	0.0	-3.5	0.0	14.5	14.1	1.4	0.0	25	9	0.0	5	25	8	
74	3.63		26	1	37	0.3	0.0	0.0	0.0	25	3	1	3.1	3.1	41	0.0	3.1	0.0	14.5	14.1	1.4	0.0	22	8	0.0	5	25	8	
56	3.63		30	3	37	-2.6	0.0	0.0	0.0	29	16	8	4.1	3.1	37	0.0	-4.1	0.0	13.7	11.1	2.4	0.0	29	36	0.0	17	62	8	
2.5	1.00		25	5	37	-3.6	0.0	0.0	0.0	34	16	10	5.7	3.1	37	0.0	-4.6	0.0	14.5	14.1	1.4	0.0	33	12	0.0	5	25	8	
26	3.63		25	1	46	1.9	0.0	0.0	0.0	23	6	2	3.1	4.3	46	0.0	-6.1	0.0	26.1	27.2	3.0	0.0	22	17	0.0	10	45	8	
62	3.63		30	3	45	-6.5	0.0	0.0	0.0	17	44	10	4.3	4.3	46	0.0	-6.7	0.0	11.1	17.4	4.1	0.0	24	38	0.0	21	60	8	
2.5	1.00		45	5	46	-7.6	0.0	0.0	0.0	26	18	7	5.3	4.3	46	0.0	-7.2	0.0	26.1	27.2	3.0	0.0	26	20	0.0	10	45	8	
16	3.63		26	1	20	-2.5	0.0	0.0	0.0	29	16	8	4.1	3.1	20	0.0	2.8	0.0	14.5	14.1	1.4	0.0	20	7	0.0	5	25	8	
15	3.63		30	3	20	-1.9	0.0	0.0	0.0	26	16	7																	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T ra a t	Sez a n c	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																			
					Co mb	M Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ d	εf 100%	εc 100%	Area sup cmq	Co mb	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi										
2.5	1.00		25	5	15	1.1	0.0	0.0	0.0	27	9	4	3.1	3.1	15	0.0	2.2	0.0	11.8	11.8	1.1	0.0	18	6	0.0	5	25	8						
65	3.63		27	1	15	1.5	0.0	0.0	0.0	27	13	6	3.1	3.1	15	0.0	2.0	-0.3	11.8	11.8	1.1	0.3	17	5	2.1	5	25	8						
64	3.63		25	3	15	2.1	0.0	0.0	0.0	28	17	8	3.1	3.1	15	0.0	1.9	-0.3	11.8	11.8	1.1	0.3	16	9	2.1	9	5	8						
2.5	1.00		25	5	15	2.1	0.0	0.0	0.0	28	17	8	3.1	3.1	15	0.0	1.8	-0.3	11.8	11.8	1.1	0.3	16	5	2.1	5	25	8						
63	3.63		27	1	25	-1.3	0.0	0.0	0.0	27	11	5	3.1	3.1	27	0.0	3.2	-0.3	11.8	11.8	1.1	0.3	27	8	2.0	5	15	8						
64	3.63		25	3	25	-1.3	0.0	0.0	0.0	27	11	5	3.1	3.1	0	0.0	0.0	0.0	21.0	21.0	3.5	0.0	0	0	0.0	9	0	8						
2.5	1.00		25	5	25	-1.1	0.0	0.0	0.0	27	9	4	3.1	3.1	27	0.0	3.1	-0.3	11.8	11.8	1.1	0.3	27	8	2.0	5	15	8						
60	3.63		27	1	37	-2.7	0.0	0.0	0.0	31	17	10	4.1	3.1	37	0.0	9.0	0.3	12.5	12.5	1.2	0.4	99	31	2.5	0	15	8						
59	3.63		25	3	37	-2.7	0.0	0.0	0.0	31	17	10	4.1	3.1	0	0.0	0.0	0.0	19.3	19.3	3.2	0.0	0	0	0.0	0	0	8						
2.5	1.00		25	5	37	-2.0	0.0	0.0	0.0	28	17	8	3.1	3.1	37	0.0	9.0	0.3	12.5	12.5	1.2	0.4	99	31	2.5	0	15	8						
59	3.63		27	1	37	-2.9	0.0	0.0	0.0	31	18	10	4.1	3.1	46	0.0	6.7	-0.1	11.8	11.8	1.1	0.3	57	18	1.8	5	23	8						
58	3.63		25	3	37	-2.9	0.0	0.0	0.0	31	18	10	4.1	3.1	0	0.0	0.0	0.0	21.0	21.0	3.5	0.0	0	0	0.0	9	0	8						
2.5	1.00		25	5	25	0.4	0.0	0.0	0.0	27	3	1	3.1	3.1	46	0.0	6.6	-0.1	11.8	11.8	1.1	0.3	56	17	1.8	5	23	8						
64	3.63		27	1	15	1.8	0.0	0.0	0.0	28	15	7	3.1	3.1	41	0.0	1.8	0.0	11.8	11.8	1.1	0.0	15	5	0.0	5	25	8						
59	3.63		25	3	46	-1.7	0.0	0.0	0.0	28	14	6	3.1	3.1	37	0.0	-2.3	0.0	11.1	11.1	1.9	0.0	19	20	0.0	17	128	8						
2.5	1.00		25	5	37	-2.5	0.0	0.0	0.0	31	16	9	4.1	3.1	37	0.0	-2.4	0.0	11.8	11.8	1.1	0.0	20	6	0.0	5	25	8						
56	3.63		26	1	25	-3.0	0.0	0.0	0.0	29	21	10	4.1	3.1	9	0.0	4.3	0.0	14.5	14.1	1.4	0.0	30	11	0.0	5	25	8						
67	3.63		30	3	9	1.3	0.0	0.0	0.0	25	11	4	3.1	3.1	9	0.0	3.7	0.0	13.7	11.1	2.4	0.0	26	33	0.0	17	227	8						
2.5	1.00		25	5	21	-1.7	0.0	0.0	0.0	26	14	6	3.1	3.1	3	0.0	-3.0	0.0	14.5	14.1	1.4	0.0	22	8	0.0	5	25	8						
67	3.63		26	1	21	-2.3	0.0	0.0	0.0	19	43	12	3.1	3.1	21	0.0	-3.1	-0.4	14.5	14.1	1.4	0.4	22	8	2.8	5	25	8						
69	3.63		30	3	21	-3.3	0.0	0.0	0.0	19	64	19	4.4	3.1	21	0.0	-3.1	-0.4	14.5	14.1	1.4	0.4	23	17	2.8	10	2	8						
2.5	1.00		25	5	21	-3.3	0.0	0.0	0.0	19	64	19	4.4	3.1	21	0.0	-3.5	-0.4	14.5	14.1	1.4	0.4	25	9	2.8	5	25	8						
60	3.63		34	1	40	-2.5	0.0	0.0	0.0	23	5	2	4.8	4.8	40	0.0	3.1	0.0	28.2	30.9	3.2	0.0	10	7	0.0	11	60	8						
63	3.63		25	3	36	-2.4	0.0	0.0	0.0	23	5	1	4.8	4.8	36	0.0	-3.0	0.0	9.0	23.7	4.4	0.0	10	12	0.0	21	58	8						
2.5	1.00		60	5	36	-2.7	0.0	0.0	0.0	23	5	2	4.8	4.8	36	0.0	-3.2	0.0	28.2	30.9	3.2	0.0	10	7	0.0	11	60	8						
30	3.63		42	1	20	-9.8	0.0	0.0	0.0	0	0	0	3.1	3.1	20	0.0	28.5	-0.5	23.3	23.5	2.4	0.0	142	0	0.0	0	0	8						
29	3.63		28	3	20	-7.7	0.0	0.0	0.0	0	0	0	3.1	3.1	20	0.0	28.4	-0.5	23.3	23.5	2.4	0.0	142	0	0.0	0	0	8						
2.5	1.00		30	5	20	0.7	0.0	0.0	0.0	0	0	0	3.1	3.1	20	0.0	28.4	-0.5	23.3	23.5	2.4	0.0	142	0	0.0	0	0	8						
15	3.63		26	1	24	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	30	0.0	-1.3	0.2	14.5	14.1	1.4	0.3	10	4	2.0	5	17	8						
14	3.63		30	3	24	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	23.3	18.9	4.0	0.0	0	0	0.0	10	0	8						
2.5	1.00		25	5	20	0.2	0.0	0.0	0.0	25	2	1	3.1	3.1	30	0.0	-1.4	0.2	14.5	14.1	1.4	0.3	10	4	2.0	5	17	8						
74	3.63		25	1	41	2.7	0.0	0.0	0.0	23	8	3	4.3	4.3	46	0.0	-3.4	0.0	26.1	27.2	3.0	0.0	13	9	0.0	10	45	8						
45	3.63		30	3	46	-6.5	0.0	0.0	0.0	18	38	9	4.3	4.3	46	0.0	-3.8	0.0	11.1	17.4	4.1	0.0	14	22	0.0	21	97	8						
2.5	1.00		45	5	46	-7.5	0.0	0.0	0.0	26	18	7	5.3	4.3	46	0.0	-3.9	0.0	26.1	27.2	3.0	0.0	14	11	0.0	10	45	8						
66	3.63		25	1	31	-8.2	0.0	0.0	0.0	27	18	8	5.7	4.1	31	0.0	-16.5	-0.6	26.1	27.2	3.0	0.9	61	45	3.9	10	45	8						
69	3.63		30	3	31	-15.7	0.0	0.0	0.0	33	19	10	10.9	9.0	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8						
2.5	1.00		45	5	31	-15.7	0.0	0.0	0.0	33	19	10	10.9	9.0	31	0.0	-17.0	-0.6	26.1	27.2	3.0	0.9	63	47	3.9	10	45	8						
16	3.63		25	1	40	-15.5	0.0	0.0	0.0	33	19	10	10.8	9.4	36	0.0	4.2	-2.2	15.9	24.8	5.8	2.4	13	17	10.5	10	14	8						
17	3.63		30	3	40	-15.5	0.0	0.0	0.0	33	19	10	10.8	9.4	0	0.0	0.0	0.0	10.6	16.6	3.9	0.0	0	0	0.0	15	0	8						
1.7	1.00		45	5	40	-15.5	0.0	0.0	0.0	33	19	10	10.8	9.4	36	0.0	4.1	-2.2	15.9	24.8	5.8	2.4	12	17	10.5	10	14	8						
30																																		

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T ra a t	Sez a n c	C o n c	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE														
					Co	M Exd	M Eyd	N Ed	x/ d	εf%	εc%	Area sup inf	cmq	Co	V Exd	V Eyd	T Sdu	V Rxd	V Ryd	TRd	TRLd	Coe	Coe	ALon	Staffe		
					mb	(t*m)	(t*m)	(t)						mb	(t)	(t)	(t*m)	(t)	(t)	(t*m)	(t*m)	Cls	Sta	cmq	Pas	Lun	Fi
2.5	1.00		25	5	37	-0.5	0.0	0.0	25	4	2	3.1	3.1	12	0.0	-1.8	0.0	14.5	14.1	1.4	0.0	12	5	0.0	5	25	8
35	6.88		25	1	20	6.1	0.0	0.0	23	18	6	4.3	4.3	20	0.0	-7.7	0.0	26.1	27.2	3.0	0.0	28	21	0.0	10	45	8
34	6.88		30	3	20	5.7	0.0	0.0	23	17	6	4.3	4.3	20	0.0	-8.2	0.0	11.1	17.4	4.1	0.0	30	47	0.0	21	44	8
2.5	1.00		45	5	20	-4.6	0.0	0.0	23	13	5	4.3	4.3	20	0.0	-8.7	0.0	26.1	27.2	3.0	0.0	32	24	0.0	10	45	8
52	6.88		25	1	15	5.5	0.0	0.0	23	16	5	4.3	4.3	15	0.0	-7.4	0.0	26.1	27.2	3.0	0.0	27	20	0.0	10	45	8
51	6.88		30	3	15	5.2	0.0	0.0	23	15	5	4.3	4.3	15	0.0	-7.9	0.0	11.1	17.4	4.1	0.0	29	45	0.0	21	44	8
2.5	1.00		45	5	15	-4.8	0.0	0.0	23	14	5	4.3	4.3	15	0.0	-8.4	0.0	26.1	27.2	3.0	0.0	31	23	0.0	10	45	8
33	6.88		25	1	24	-16.2	0.0	0.0	32	19	10	11.2	11.0	24	0.0	14.0	0.0	26.1	27.2	3.0	0.0	52	38	0.0	10	45	8
31	6.88		30	3	20	10.1	0.0	0.0	18	53	13	5.9	6.8	20	0.0	-14.3	0.0	11.1	17.4	4.1	0.0	52	82	0.0	21	167	8
2.5	1.00		45	5	20	-16.1	0.0	0.0	32	21	11	11.1	9.1	20	0.0	-15.4	0.0	26.1	27.2	3.0	0.0	56	42	0.0	10	45	8
34	6.88		25	1	24	-14.1	0.0	0.0	32	18	10	10.0	9.1	24	0.0	14.6	0.0	26.1	27.2	3.0	0.0	54	40	0.0	10	45	8
33	6.88		30	3	20	-9.8	0.0	0.0	19	42	11	6.6	6.4	20	0.0	-13.9	0.0	11.1	17.4	4.1	0.0	51	80	0.0	21	148	8
2.5	1.00		45	5	20	-16.7	0.0	0.0	31	23	11	11.5	10.1	20	0.0	-15.0	0.0	26.1	27.2	3.0	0.0	55	41	0.0	10	45	8
50	6.88		25	1	27	-14.3	0.0	0.0	32	18	10	10.1	8.9	27	0.0	12.8	0.0	26.1	27.2	3.0	0.0	47	35	0.0	10	45	8
48	6.88		30	3	15	7.8	0.0	0.0	28	18	8	3.1	5.5	15	0.0	-11.8	0.0	11.1	17.4	4.1	0.0	43	68	0.0	21	177	8
2.5	1.00		45	5	15	-14.2	0.0	0.0	32	18	10	10.0	8.7	15	0.0	-12.9	0.0	26.1	27.2	3.0	0.0	47	35	0.0	10	45	8
51	6.88		25	1	21	10.0	0.0	0.0	18	40	10	9.2	6.7	25	0.0	12.4	0.0	26.1	27.2	3.0	0.0	45	34	0.0	10	45	8
50	6.88		30	3	25	7.0	0.0	0.0	25	17	6	5.3	5.3	25	0.0	11.3	0.0	11.1	17.4	4.1	0.0	41	65	0.0	21	158	8
2.5	1.00		45	5	21	-12.8	0.0	0.0	31	18	9	9.3	8.3	21	0.0	-12.0	0.0	26.1	27.2	3.0	0.0	44	33	0.0	10	45	8
31	6.88		25	1	36	17.5	0.0	0.0	29	27	13	10.3	11.9	36	0.0	-18.2	0.0	26.1	27.2	3.0	0.0	67	50	0.0	10	45	8
29	6.88		30	3	36	15.5	0.0	0.0	33	19	10	9.3	10.8	36	0.0	-18.5	0.0	12.3	19.2	4.5	0.0	68	96	0.0	19	47	8
2.5	1.00		45	5	24	9.7	0.0	0.0	20	32	9	8.4	6.5	36	0.0	-19.2	0.0	26.1	27.2	3.0	0.0	71	53	0.0	10	45	8
29	6.88		25	1	20	-10.7	0.0	0.0	17	70	15	7.1	6.3	30	0.0	-15.9	0.0	26.1	27.2	3.0	0.0	58	44	0.0	10	45	8
27	6.88		30	3	34	10.5	0.0	0.0	17	52	12	9.5	6.9	30	0.0	-16.2	0.0	11.1	17.4	4.1	0.0	59	93	0.0	21	28	8
2.5	1.00		45	5	34	10.5	0.0	0.0	17	52	12	9.5	6.9	30	0.0	-16.7	0.0	26.1	27.2	3.0	0.0	61	46	0.0	10	45	8
27	6.88		25	1	34	-10.5	0.0	0.0	17	69	16	7.0	5.3	34	0.0	6.4	0.0	26.1	27.2	3.0	0.0	24	18	0.0	10	45	8
26	6.88		30	3	46	6.4	0.0	0.0	19	28	7	5.9	4.3	34	0.0	5.9	0.0	11.1	17.4	4.1	0.0	22	34	0.0	21	105	8
2.5	1.00		45	5	46	3.8	0.0	0.0	23	11	4	4.3	4.3	34	0.0	4.8	0.0	26.1	27.2	3.0	0.0	18	13	0.0	10	45	8
62	6.88		25	1	37	6.4	0.0	0.0	20	25	7	5.6	4.3	41	0.0	6.9	0.0	26.1	27.2	3.0	0.0	25	19	0.0	10	45	8
74	6.88		30	3	41	-6.8	0.0	0.0	26	16	6	5.3	4.3	41	0.0	6.4	0.0	11.1	17.4	4.1	0.0	23	37	0.0	21	78	8
2.5	1.00		45	5	41	2.0	0.0	0.0	23	6	2	4.3	4.3	41	0.0	5.6	0.0	26.1	27.2	3.0	0.0	20	15	0.0	10	45	8
45	6.88		25	1	34	-3.0	0.0	0.0	23	9	3	4.3	4.3	34	0.0	4.4	0.0	26.1	27.2	3.0	0.0	16	12	0.0	10	45	8
46	6.88		30	3	34	3.9	0.0	0.0	23	11	4	4.3	4.3	34	0.0	4.3	0.0	11.1	17.4	4.1	0.0	16	25	0.0	21	105	8
2.5	1.00		45	5	34	5.0	0.0	0.0	23	15	5	4.3	4.3	34	0.0	3.9	0.0	26.1	27.2	3.0	0.0	14	11	0.0	10	45	8
46	6.88		25	1	46	-4.8	0.0	0.0	23	14	5	4.3	4.3	43	0.0	-3.6	0.0	26.1	27.2	3.0	0.0	13	10	0.0	10	36	8
48	6.88		30	3	46	-5.8	0.0	0.0	23	17	6	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
2.5	1.00		45	5	46	-5.8	0.0	0.0	23	17	6	4.3	4.3	43	0.0	-4.0	0.0	26.1	27.2	3.0	0.0	15	11	0.0	10	36	8
62	6.88		25	1	20	-10.4	0.0	0.0	17	64	15	6.9	5.4	20	0.0	12.2	0.0	26.1	27.2	3.0	0.0	45	33	0.0	10	45	8
39	6.88		30	3	24	-7.7	0.0	0.0	26	18	7	5.4	5.3	24	0.0	-11.8	0.0	11.1	17.4	4.1	0.0	43	68	0.0	21	177	8
2.5	1.00		45	5	24	-15.0	0.0	0.0	34	19	11	10.5	5.8	24	0.0	-13.6	0.0	26.1	27.2	3.0	0.0	50	37	0.0	10	45	8
39	6.88		25	1	20	-13.2	0.0	0.0	33	18	10	9.5	5.9	20	0.0	13.2	0.0	26.1	27.2	3.0	0.0	48	36	0.0	10	45	8
40	6.88		30	3	20	-6.6	0.0	0.0	17	40	9	4.3	4.3	20	0.0	11.3	0.0	11.1	17.4	4.1	0.0	41	65	0.0	21	158	8
2.5	1.00		45	5	24	-10.6	0.0	0.0	17	70	16	7.0	5.3	24	0.0	-12.5	0.0	26.1	27.2	3.0	0.0	46	34	0.0	10	45	8
40	6.88		25	1	20	-4.8	0.0	0.0	23	14	5	4.3	4.3	20	0.0	8.8	0.0	26.1	27.2	3.0	0.0	32	24	0.0	10	45	8
41	6.88		30	3	24	-5.8	0.0	0.0	23	17	6	4.3	4.3	19	0.0	8.2	0.0	11.1	17.4	4.1	0.0	30	47	0.0	21	44	8
2.5	1.00		45	5	24	-6.2	0.0	0.0	2																		

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a n c	C o n c	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE												Staffe Pas Lun Fi		
					Co mb	M Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area sup inf	Co mb	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRLd (t*m)	Coe Cls	Coe Sta	ALon cmq				
2.5	1.00		25	5	24	-5.6	0.0	0.0	32	24	14	7.7	3.8	24	0.0	-6.8	0.0	20.0	18.8	2.0	0.0	36	18	0.0	5	25	8
45	6.88		39	1	21	-4.9	0.0	0.0	33	18	11	7.0	4.2	21	0.0	6.0	0.0	20.0	18.8	2.0	0.0	32	16	0.0	5	25	8
44	6.88		40	3	25	2.3	0.0	0.0	24	18	7	3.1	3.2	25	0.0	-5.9	0.0	20.1	11.8	3.6	0.0	31	50	0.0	16	227	8
2.5	1.00		25	5	25	-5.3	0.0	0.0	34	19	12	7.4	3.7	9	0.0	-6.6	0.0	20.0	18.8	2.0	0.0	35	17	0.0	5	25	8
37	6.88		39	1	6	-4.8	0.0	0.0	33	18	11	6.9	3.4	3	0.0	3.5	0.0	20.0	18.8	2.0	0.0	19	9	0.0	5	25	8
36	6.88		40	3	6	-3.6	0.0	0.0	17	74	19	4.6	3.1	3	0.0	3.4	0.0	20.1	11.8	3.6	0.0	18	29	0.0	16	99	8
2.5	1.00		25	5	6	0.1	0.0	0.0	23	1	0	3.1	3.2	3	0.0	3.1	0.0	20.0	18.8	2.0	0.0	17	8	0.0	5	25	8
38	6.88		39	1	20	-4.6	0.0	0.0	33	18	11	6.7	3.4	20	0.0	6.2	0.0	20.0	18.8	2.0	0.0	33	16	0.0	5	25	8
37	6.88		40	3	20	2.1	0.0	0.0	23	16	6	3.1	3.2	20	0.0	5.5	0.0	20.1	11.8	3.6	0.0	29	46	0.0	16	208	8
2.5	1.00		25	5	24	-5.3	0.0	0.0	34	19	12	7.4	3.7	24	0.0	-6.2	0.0	20.0	18.8	2.0	0.0	33	16	0.0	5	25	8
43	6.88		39	1	3	-4.8	0.0	0.0	33	18	11	6.9	3.5	3	0.0	3.6	0.0	20.0	18.8	2.0	0.0	19	9	0.0	5	25	8
42	6.88		40	3	3	-3.6	0.0	0.0	17	87	21	4.7	3.1	3	0.0	3.5	0.0	20.1	11.8	3.6	0.0	19	29	0.0	16	99	8
2.5	1.00		25	5	12	0.1	0.0	0.0	23	1	0	3.1	3.2	3	0.0	3.2	0.0	20.0	18.8	2.0	0.0	17	8	0.0	5	25	8
44	6.88		39	1	21	-4.5	0.0	0.0	32	18	11	6.6	3.3	21	0.0	6.0	0.0	20.0	18.8	2.0	0.0	32	16	0.0	5	25	8
43	6.88		40	3	21	1.9	0.0	0.0	23	15	6	3.1	3.2	25	0.0	-5.4	0.0	20.1	11.8	3.6	0.0	29	45	0.0	16	208	8
2.5	1.00		25	5	25	-5.2	0.0	0.0	34	18	12	7.3	3.6	25	0.0	-6.1	0.0	20.0	18.8	2.0	0.0	32	16	0.0	5	25	8
36	6.88		26	1	30	0.6	0.0	0.0	25	5	2	3.1	3.1	6	0.0	1.7	0.0	14.5	14.1	1.4	0.0	12	5	0.0	5	25	8
41	6.88		30	3	6	1.0	0.0	0.0	25	8	3	3.1	3.1	12	0.0	-2.9	0.0	13.7	11.1	2.4	0.0	21	26	0.0	17	320	8
2.5	1.00		25	5	12	-3.2	0.0	0.0	22	40	14	4.2	3.1	12	0.0	-3.3	0.0	14.5	14.1	1.4	0.0	24	9	0.0	5	25	8
42	6.88		26	1	41	0.5	0.0	0.0	25	4	2	3.1	3.1	6	0.0	1.4	0.0	14.5	14.1	1.4	0.0	10	4	0.0	5	25	8
52	6.88		30	3	34	0.8	0.0	0.0	25	7	3	3.1	3.1	12	0.0	-2.3	0.0	13.7	11.1	2.4	0.0	17	21	0.0	17	251	8
2.5	1.00		25	5	12	-2.1	0.0	0.0	26	17	7	3.1	3.1	12	0.0	-2.7	0.0	14.5	14.1	1.4	0.0	19	7	0.0	5	25	8
17	6.88	1	25	1	24	-22.8	0.0	0.0	34	29	17	15.9	8.3	24	0.0	18.9	0.5	26.1	27.2	3.0	0.6	86	57	2.5	10	45	8
7	6.88	/	30	3	24	-22.8	0.0	0.0	41	18	15	16.9	8.3	24	0.0	17.3	0.5	26.1	27.2	3.0	0.6	80	80	2.5	15	57	8
2.5	1.00	4	45	5	24	-12.7	0.0	0.0	32	18	10	9.2	6.3	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8
54	6.88	1	25	1	25	-20.6	0.0	0.0	39	19	14	14.7	7.3	25	0.0	17.5	-0.4	26.1	27.2	3.0	0.5	78	52	2.4	10	45	8
5	6.88	/	30	3	25	-20.6	0.0	0.0	40	19	14	14.7	6.4	25	0.0	15.9	-0.4	15.6	24.4	5.7	0.5	72	72	2.4	15	57	8
2.5	1.00	4	45	5	25	-11.3	0.0	0.0	31	17	9	8.4	5.7	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8
2	6.88		25	1	43	-21.6	0.0	0.0	38	19	13	15.3	10.2	43	0.0	10.3	0.0	26.1	27.2	3.0	0.0	38	28	0.0	10	45	8
1	6.88		30	3	43	7.5	0.0	0.0	27	18	7	3.8	5.3	43	0.0	9.8	0.0	11.1	17.4	4.1	0.0	36	56	0.0	21	413	8
2.5	1.00		45	5	31	-19.2	0.0	0.0	35	18	11	13.9	11.4	31	0.0	-9.4	0.0	26.1	27.2	3.0	0.0	34	26	0.0	10	45	8
9	6.88	1	25	1	9	-9.6	0.0	0.0	20	44	13	6.4	3.2	3	0.0	7.3	0.6	26.1	27.2	3.0	0.6	48	27	2.8	10	45	8
10	6.88	/	30	3	9	-9.6	0.0	0.0	20	45	13	6.4	3.1	3	0.0	7.1	0.6	26.1	27.2	3.0	0.6	47	40	2.8	15	42	8
2.5	1.00	2	45	5	12	-6.7	0.0	0.0	27	16	7	5.3	3.1	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8
2	6.88	1	25	1	9	-9.5	0.0	0.0	21	40	12	6.4	3.2	3	0.0	7.3	-0.6	26.1	27.2	3.0	0.6	48	27	2.8	10	45	8
3	6.88	/	30	3	9	-9.5	0.0	0.0	21	40	12	6.4	3.1	3	0.0	7.1	-0.6	26.1	27.2	3.0	0.6	47	40	2.8	15	42	8
2.5	1.00	2	45	5	6	-6.6	0.0	0.0	27	16	7	5.3	3.1	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8
7	6.88	1	25	1	24	-20.1	0.0	0.0	39	18	14	14.4	7.2	9	0.0	16.0	0.7	26.1	27.2	3.0	0.7	81	52	3.0	10	45	8
9	6.88	/	30	3	24	-20.1	0.0	0.0	41	20	16	14.4	4.3	9	0.0	13.4	0.7	26.1	27.2	3.0	0.7	72	67	3.0	15	76	8
2.5	1.00	4	45	5	24	-9.3	0.0	0.0	23	31	10	6.3	4.3	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8
5	6.88	1	25	1	27	-18.8	0.0	0.0	38	18	13	13.7	6.8	9	0.0	15.9	-0.7	26.1	27.2	3.0	0.7	81	51	3.0	10	45	8
2	6.88	/	30	3	27	-18.8	0.0	0.0	41	18	14	13.7	4.3	9	0.0	13.3	-0.7	26.1	27.2	3.0	0.7	71	66	3.0	15	76	8
2.5	1.00	4	45	5	27	-8.6	0.0	0.0	28	19	8	5.9	4.3	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8
1	6.88		25	1	43	-19.7	0.0	0.0	36	18	12	14.2	11.0	43	0.0	9.6	0.0	26.1	27.2	3.0	0.0	35	26	0.0	10	45	8
9	6.88		30	3	31	7.3	0.0	0.0	27	17	7	3.7	5.3	31	0.0	-9.5	0.0	11.1	17.4	4.1	0.0	35	55	0.0	21	413	8
2.5	1.00		45	5	31	-21.0	0.0	0.0	37	18	13	14.9	10.5	31	0.0	-10.0	0.0	26.1	27.2	3.0	0.0	37					

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a Bas n	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																			
					Co	M	Exd	M	Eyd	N	Ed	x/ d	εf% 100	εc% 100	Area sup	cmq inf	Co mb	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi	
2.5	1.00		45	5	31	-12.2	0.0	0.0	0.0	31	18	9	8.9	8.2	40	0.0	-9.6	0.0	26.1	27.2	3.0	0.0	35	26	0.0	10	45	8						
17	6.88	1	25	1	6	-8.7	0.0	0.0	0.0	29	19	8	5.9	3.1	9	0.0	6.6	-0.6	26.1	27.2	3.0	0.6	44	25	2.8	10	45	8						
11	6.88	/	30	3	6	-8.7	0.0	0.0	0.0	29	19	8	5.9	3.1	9	0.0	6.4	-0.6	26.1	27.2	3.0	0.6	44	37	2.8	15	42	8						
2.5	1.00	2	45	5	6	-6.1	0.0	0.0	0.0	24	18	6	4.3	3.1	0	0.0	0.0	0.0	15.6	24.4	5.7	0.0	0	0	0.0	15	0	8						
11	6.88	1	26	1	20	0.2	0.0	0.0	0.0	25	2	1	3.1	3.1	3	0.0	1.1	0.0	14.5	14.1	1.4	0.0	8	3	0.0	5	25	8						
8	6.88	/	30	3	20	0.7	0.0	0.0	0.0	25	5	2	3.1	3.1	3	0.0	0.8	0.0	13.7	11.1	2.4	0.0	6	7	0.0	17	92	8						
2.5	1.00	4	25	5	20	0.8	0.0	0.0	0.0	25	6	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8						
53	6.88	1	26	1	21	0.2	0.0	0.0	0.0	25	2	1	3.1	3.1	3	0.0	1.1	0.0	14.5	14.1	1.4	0.0	8	3	0.0	5	25	8						
4	6.88	/	30	3	21	0.6	0.0	0.0	0.0	25	5	2	3.1	3.1	3	0.0	0.8	0.0	13.7	11.1	2.4	0.0	6	8	0.0	17	92	8						
2.5	1.00	4	25	5	21	0.7	0.0	0.0	0.0	25	6	2	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8						
8	6.88	1	26	1	3	-1.1	0.0	0.0	0.0	25	9	4	3.1	3.1	3	0.0	1.8	0.0	14.5	14.1	1.4	0.0	13	5	0.0	5	25	8						
10	6.88	/	30	3	6	-0.6	0.0	0.0	0.0	25	4	2	3.1	3.1	3	0.0	1.5	0.0	13.7	11.1	2.4	0.0	11	14	0.0	17	111	8						
2.5	1.00	4	25	5	3	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8						
4	6.88	1	26	1	12	-1.1	0.0	0.0	0.0	25	9	4	3.1	3.1	3	0.0	1.8	0.0	14.5	14.1	1.4	0.0	13	5	0.0	5	25	8						
3	6.88	/	30	3	12	-0.6	0.0	0.0	0.0	25	5	2	3.1	3.1	3	0.0	1.5	0.0	13.7	11.1	2.4	0.0	11	14	0.0	17	111	8						
2.5	1.00	4	25	5	3	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8						
7	6.88	1	33	1	12	-6.4	0.0	0.0	0.0	44	18	21	15.1	7.5	1	0.0	8.5	0.0	18.3	15.9	1.6	0.0	54	20	0.0	3	18	8						
8	6.88	/	50	3	12	-4.9	0.0	0.0	0.0	42	18	20	11.0	3.1	12	0.0	8.5	0.0	37.2	11.6	4.2	0.0	53	73	0.0	11	69	8						
2.5	1.00	2	18	5	3	0.9	0.0	0.0	0.0	24	11	5	3.1	3.1	0	0.0	0.0	0.0	37.2	11.6	4.2	0.0	0	0	0.0	11	0	8						
5	6.88	1	33	1	6	-6.4	0.0	0.0	0.0	44	18	21	15.1	7.5	1	0.0	8.6	0.0	18.3	15.9	1.6	0.0	54	20	0.0	3	18	8						
4	6.88	/	50	3	6	-4.9	0.0	0.0	0.0	42	18	20	11.0	3.1	6	0.0	8.5	0.0	37.2	11.6	4.2	0.0	54	73	0.0	11	69	8						
2.5	1.00	2	18	5	3	0.9	0.0	0.0	0.0	24	11	5	3.1	3.1	0	0.0	0.0	0.0	37.2	11.6	4.2	0.0	0	0	0.0	11	0	8						
5	6.88	38	1	43	-5.7	0.0	0.0	0.0	0.0	31	21	12	7.8	4.0	43	0.0	2.6	0.0	25.4	23.5	2.6	0.0	11	7	0.0	5	25	8						
6	6.88	50	3	43	-1.5	0.0	0.0	0.0	0.0	23	9	3	4.0	4.0	43	0.0	2.6	0.0	31.5	14.6	5.8	0.0	11	18	0.0	13	463	8						
2.5	1.00	25	5	43	3.7	0.0	0.0	0.0	0.0	23	24	9	6.7	5.0	31	0.0	-2.3	0.0	25.4	23.5	2.6	0.0	10	6	0.0	5	25	8						
6	6.88	38	1	43	-4.7	0.0	0.0	0.0	0.0	30	17	9	6.8	5.0	43	0.0	2.3	0.0	25.4	23.5	2.6	0.0	10	6	0.0	5	25	8						
7	6.88	50	3	31	-1.4	0.0	0.0	0.0	0.0	23	9	3	4.0	4.0	31	0.0	-2.5	0.0	31.5	14.6	5.8	0.0	11	17	0.0	13	463	8						
2.5	1.00	25	5	43	3.1	0.0	0.0	0.0	0.0	17	47	11	7.7	4.0	31	0.0	-2.6	0.0	25.4	23.5	2.6	0.0	11	7	0.0	5	25	8						
70	6.88	48	1	24	-18.2	0.0	0.0	0.0	0.0	42	16	13	10.3	5.3	9	0.0	16.4	0.0	26.1	27.2	2.6	0.0	60	45	0.0	10	45	8						
6	6.88	30	3	20	7.3	0.0	0.0	0.0	0.0	21	17	5	3.6	5.3	20	0.0	-14.5	0.0	13.7	21.5	4.4	0.0	53	67	0.0	17	339	8						
2.5	1.00	45	5	20	-20.5	0.0	0.0	0.0	0.0	43	17	15	11.6	5.8	3	0.0	-17.5	0.0	26.1	27.2	2.6	0.0	64	48	0.0	10	45	8						
6	6.88	48	1	24	-22.5	0.0	0.0	0.0	0.0	44	17	16	12.8	6.4	9	0.0	22.1	0.0	26.1	27.2	2.6	0.0	81	60	0.0	10	64	8						
1	6.88	30	3	9	9.6	0.0	0.0	0.0	0.0	17	40	9	3.6	6.4	9	0.0	17.1	0.0	12.3	19.2	4.0	0.0	63	89	0.0	19	394	8						
2.5	1.00	45	5	20	-14.7	0.0	0.0	0.0	0.0	40	15	11	8.3	4.4	3	0.0	-17.2	0.0	26.1	27.2	2.6	0.0	63	47	0.0	10	45	8						
62	6.88	26	1	9	-4.1	0.0	0.0	0.0	0.0	35	17	12	6.2	3.1	9	0.0	6.0	0.0	14.5	14.1	1.4	0.0	43	16	0.0	5	25	8						
70	6.88	30	3	12	2.2	0.0	0.0	0.0	0.0	26	18	8	3.1	3.1	3	0.0	-5.8	0.0	13.7	11.1	2.4	0.0	41	52	0.0	17	385	8						
2.5	1.00	25	5	3	-5.3	0.0	0.0	0.0	0.0	34	26	16	7.4	3.7	3	0.0	-6.6	0.0	14.5	14.1	1.4	0.0	47	17	0.0	5	25	8						
26	6.88	26	1	18	0.5	0.0	0.0	0.0	0.0	25	4	2	3.1	3.1	30	0.0	2.7	0.0	14.5	14.1	1.4	0.0	19	7	0.0	5	25	8						
25	6.88	30	3	18	-2.3	0.0	0.0	0.0	0.0	26	19	8	3.1	3.1	18	0.0	-4.0	0.0	13.7	11.1	2.4	0.0	29	36	0.0	17	107	8						
2.5	1.00	25	5	18	-3.8	0.0	0.0	0.0	0.0	34	17	11	5.9	3.1	18	0.0	-4.7	0.0	14.5	14.1	1.4	0.0	33	12</										

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a n	C o n	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE														Staffe Pas Lun Fi		
					Co m b	M Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area sup inf cmq	Co m b	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq						
2.5	1.00		25	5	36	-0.3	0.0	0.0	0.0	27	2	1	3.1	3.1	43	0.0	-0.4	0.0	11.8	11.8	1.1	0.0	4	1	0.0	5	25	8	
56	6.88		26	1	34	-4.7	0.0	0.0	0.0	34	18	12	6.8	5.6	34	0.0	5.8	0.1	14.5	14.1	1.4	0.2	41	15	1.3	5	25	8	
58	6.88		30	3	34	-3.4	0.0	0.0	0.0	32	16	9	5.4	4.1	34	0.0	5.6	0.1	14.5	14.1	1.4	0.2	40	29	1.3	10	70	8	
2.5	1.00		25	5	37	-2.1	0.0	0.0	0.0	26	17	7	3.1	3.1	46	0.0	-5.1	-0.2	14.5	14.1	1.4	0.2	36	14	1.3	5	25	8	
58	6.88		26	1	37	-2.0	0.0	0.0	0.0	26	16	7	3.1	3.1	37	0.0	2.3	0.0	14.5	14.1	1.4	0.0	16	6	0.0	5	25	8	
46	6.88		30	3	41	1.5	0.0	0.0	0.0	26	12	5	3.1	3.1	41	0.0	-2.4	0.0	13.7	11.1	2.4	0.0	17	21	0.0	17	207	8	
2.5	1.00		25	5	41	-1.5	0.0	0.0	0.0	26	12	5	3.1	3.1	41	0.0	-2.7	0.0	14.5	14.1	1.4	0.0	19	7	0.0	5	25	8	
66	6.88		27	1	15	-1.6	0.0	0.0	0.0	28	13	6	3.1	3.1	15	0.0	2.7	0.0	11.8	11.8	1.1	0.0	23	7	0.0	5	25	8	
65	6.88		25	3	15	-1.0	0.0	0.0	0.0	27	8	4	3.1	3.1	15	0.0	2.6	0.0	11.1	11.1	1.9	0.0	22	23	0.0	17	69	8	
2.5	1.00		25	5	15	1.2	0.0	0.0	0.0	27	10	5	3.1	3.1	27	0.0	-2.3	0.0	11.8	11.8	1.1	0.0	19	6	0.0	5	25	8	
65	6.88		27	1	15	1.7	0.0	0.0	0.0	28	14	7	3.1	3.1	15	0.0	2.1	-0.3	11.8	11.8	1.1	0.3	18	6	2.3	5	25	8	
64	6.88		25	3	27	-2.3	0.0	0.0	0.0	28	18	9	3.1	3.1	15	0.0	1.9	-0.3	11.8	11.8	1.1	0.3	17	9	2.3	9	5	8	
2.5	1.00		25	5	27	-2.3	0.0	0.0	0.0	28	18	9	3.1	3.1	15	0.0	1.9	-0.3	11.8	11.8	1.1	0.3	16	5	2.3	5	25	8	
63	6.88		27	1	25	-1.4	0.0	0.0	0.0	27	12	6	3.1	3.1	27	0.0	3.4	-0.3	11.8	11.8	1.1	0.3	29	9	2.1	5	15	8	
64	6.88		25	3	25	-1.4	0.0	0.0	0.0	27	12	6	3.1	3.1	0	0.0	0.0	0.0	21.0	21.0	3.5	0.0	0	0	0.0	9	0	8	
2.5	1.00		25	5	25	-1.2	0.0	0.0	0.0	27	10	4	3.1	3.1	27	0.0	3.4	-0.3	11.8	11.8	1.1	0.3	29	9	2.1	5	15	8	
60	6.88		27	1	37	-3.0	0.0	0.0	0.0	28	26	13	4.1	3.1	37	0.0	10.1	0.4	14.1	14.1	1.3	0.4	98	42	2.3	0	15	8	
59	6.88		25	3	37	-3.0	0.0	0.0	0.0	28	26	13	4.1	3.1	0	0.0	0.0	0.0	16.0	16.0	2.7	0.0	0	0	0.0	0	0	8	
2.5	1.00		25	5	37	-2.0	0.0	0.0	0.0	28	16	8	3.1	3.1	37	0.0	10.0	0.4	14.1	14.1	1.3	0.4	98	42	2.3	0	15	8	
59	6.88		27	1	37	-3.2	0.0	0.0	0.0	35	16	11	5.3	3.1	37	0.0	7.5	-0.1	11.8	11.8	1.1	0.3	64	20	1.9	5	23	8	
58	6.88		25	3	37	-3.2	0.0	0.0	0.0	35	16	11	5.3	3.1	0	0.0	0.0	0.0	21.0	21.0	3.5	0.0	0	0	0.0	9	0	8	
2.5	1.00		25	5	15	-0.4	0.0	0.0	0.0	27	3	2	3.1	3.1	37	0.0	7.4	-0.1	11.8	11.8	1.1	0.3	63	20	1.9	5	23	8	
64	6.88		27	1	15	2.0	0.0	0.0	0.0	28	16	8	3.1	3.1	41	0.0	1.9	0.0	11.8	11.8	1.1	0.0	16	5	0.0	5	25	8	
59	6.88		25	3	37	-1.9	0.0	0.0	0.0	28	16	7	3.1	3.1	37	0.0	-2.5	0.0	11.1	11.1	1.9	0.0	21	22	0.0	17	128	8	
2.5	1.00		25	5	37	-2.8	0.0	0.0	0.0	31	18	10	4.1	3.1	37	0.0	-2.6	0.0	11.8	11.8	1.1	0.0	22	7	0.0	5	25	8	
56	6.88		26	1	25	-3.0	0.0	0.0	0.0	30	18	10	4.1	3.1	9	0.0	4.3	0.0	14.5	14.1	1.4	0.0	30	11	0.0	5	25	8	
67	6.88		30	3	3	1.3	0.0	0.0	0.0	25	10	4	3.1	3.1	9	0.0	3.6	0.0	13.7	11.1	2.4	0.0	26	33	0.0	17	227	8	
2.5	1.00		25	5	21	-1.4	0.0	0.0	0.0	26	12	5	3.1	3.1	3	0.0	-3.0	0.0	14.5	14.1	1.4	0.0	21	8	0.0	5	25	8	
67	6.88		26	1	21	-2.0	0.0	0.0	0.0	26	16	7	3.1	3.1	21	0.0	-3.0	-0.4	14.5	14.1	1.4	0.4	21	8	2.4	5	25	8	
69	6.88		30	3	21	-2.9	0.0	0.0	0.0	30	18	10	4.1	3.1	21	0.0	-3.0	-0.4	14.5	14.1	1.4	0.4	22	16	2.4	10	2	8	
2.5	1.00		25	5	21	-2.9	0.0	0.0	0.0	30	18	10	4.1	3.1	21	0.0	-3.4	-0.4	14.5	14.1	1.4	0.4	24	9	2.4	5	25	8	
60	6.88		34	1	40	-2.5	0.0	0.0	0.0	23	5	2	4.8	4.8	40	0.0	3.2	0.0	28.2	30.9	3.2	0.0	10	7	0.0	11	60	8	
63	6.88		25	3	36	-2.4	0.0	0.0	0.0	23	5	1	4.8	4.8	36	0.0	-3.0	0.0	9.0	23.7	4.4	0.0	10	13	0.0	21	58	8	
2.5	1.00		60	5	36	-2.7	0.0	0.0	0.0	23	5	2	4.8	4.8	36	0.0	-3.2	0.0	28.2	30.9	3.2	0.0	10	7	0.0	11	60	8	
30	6.88		42	1	20	-10.4	0.0	0.0	0.0	0	0	0	3.1	3.1	20	0.0	29.9	-0.4	23.3	23.5	2.4	0.0	143	0	0.0	0	0	8	
29	6.88		28	3	20	-8.2	0.0	0.0	0.0	0	0	0	3.1	3.1	20	0.0	29.9	-0.4	23.3	23.5	2.4	0.0	143	0	0.0	0	0	8	
2.5	1.00		30	5	20	0.7	0.0	0.0	0.0	0	0	0	3.1	3.1	20	0.0	29.8	-0.4	23.3	23.5	2.4	0.0	143	0	0.0	0	0	8	
15	6.88		26	1	24	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	30	0.0	-1.4	0.3	14.5	14.1	1.4	0.3	10	4	1.9	5	17	8	
14	6.88		30	3	24	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	23.3	18.9	4.0	0.0	0	0	0.0	10	0	8	
2.5	1.00		25	5	6	0.3	0.0	0.0	0.0	25	2	1	3.1	3.1	30	0.0	-1.4	0.3	14.5	14.1	1.4	0.3	10	4	1.9	5	17	8	
74	6.88		25	1	41	2.8	0.0	0.0	0.0	23	8	3	4.3	4.3	46	0.0	-3.3	0.0	26.1	27.2	3.0	0.0	12	9	0.0	10	45	8	
45	6.88		30	3	46	-6.4	0.0	0.0	0.0	18	33	8	4.3	4.3	46	0.0	-3.7	0.0	11.1	17.4	4.1	0.0	13	21	0.0	21	97	8	
2.5	1.00		45	5	46	-7.5	0.0	0.0	0.0	26	18	7	5.3	4.3	46	0.0	-3.8	0.0	26.1	27.2	3.0	0.0	14	10	0.0	10	45	8	
66	6.88		25	1	31	-7.6	0.0	0.0	0.0	26	18	7	5.3	4.1	31	0.0	-16.4	-0.6	26.1	27.2	3.0	0.8	61	45	3.6	10	45	8	
69	6.88		30	3	31	-15.1	0.0	0.0	0.0	33	19	10	10.6	8.3	0	0.0	0.0	0.0	15.6	24.4	5.7								

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a s t	Sez a Bas n	C o n	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE														
					Co mb	M Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area sup inf	cmq inf	Co mb	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRLd (t*m)	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi		
2.5	1.00	2	25	5	43	-0.1	0.0	0.0	29	1	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8
47	10.13	1	27	1	25	-0.1	0.0	0.0	29	1	0	4.0	4.0	25	0.0	0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	0	8
61	10.13	/	25	3	25	-0.1	0.0	0.0	29	0	0	4.0	4.0	21	0.0	-0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	89	8
2.5	1.00	2	25	5	21	-0.1	0.0	0.0	29	1	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8
35	10.13		26	1	34	-2.1	0.0	0.0	26	17	7	3.1	3.1	3	0.0	2.6	0.0	14.5	14.1	1.4	0.0	19	7	0.0	5	25	8
36	10.13		30	3	46	1.0	0.0	0.0	25	8	3	3.1	3.1	6	0.0	2.3	0.0	13.7	11.1	2.4	0.0	16	21	0.0	17	251	8
2.5	1.00		25	5	46	0.5	0.0	0.0	25	4	2	3.1	3.1	1	0.0	-1.3	0.0	14.5	14.1	1.4	0.0	9	4	0.0	5	25	8
41	10.13		26	1	6	-3.0	0.0	0.0	29	19	10	4.1	3.1	6	0.0	3.3	0.0	14.5	14.1	1.4	0.0	23	9	0.0	5	25	8
42	10.13		30	3	12	1.0	0.0	0.0	25	8	3	3.1	3.1	6	0.0	2.9	0.0	13.7	11.1	2.4	0.0	20	26	0.0	17	320	8
2.5	1.00		25	5	41	0.4	0.0	0.0	25	3	1	3.1	3.1	12	0.0	-1.7	0.0	14.5	14.1	1.4	0.0	12	5	0.0	5	25	8
35	10.13		25	1	20	5.4	0.0	0.0	23	16	5	4.3	4.3	20	0.0	-4.7	0.0	26.1	27.2	3.0	0.0	17	13	0.0	10	45	8
34	10.13		30	3	20	5.1	0.0	0.0	23	15	5	4.3	4.3	20	0.0	-5.0	0.0	11.1	17.4	4.1	0.0	18	29	0.0	21	44	8
2.5	1.00		45	5	37	-1.8	0.0	0.0	23	5	2	4.3	4.3	20	0.0	-5.3	0.0	26.1	27.2	3.0	0.0	20	15	0.0	10	45	8
52	10.13		25	1	15	5.0	0.0	0.0	23	15	5	4.3	4.3	15	0.0	-4.1	0.0	26.1	27.2	3.0	0.0	15	11	0.0	10	45	8
51	10.13		30	3	15	4.8	0.0	0.0	23	14	5	4.3	4.3	15	0.0	-4.4	0.0	11.1	17.4	4.1	0.0	16	25	0.0	21	44	8
2.5	1.00		45	5	27	-1.8	0.0	0.0	23	5	2	4.3	4.3	15	0.0	-4.7	0.0	26.1	27.2	3.0	0.0	17	13	0.0	10	45	8
33	10.13		25	1	24	-11.6	0.0	0.0	30	17	8	8.6	8.3	24	0.0	9.6	0.0	26.1	27.2	3.0	0.0	35	26	0.0	10	45	8
31	10.13		30	3	20	7.5	0.0	0.0	26	18	7	4.3	5.3	20	0.0	-9.6	0.0	11.1	17.4	4.1	0.0	35	55	0.0	21	177	8
2.5	1.00		45	5	20	-10.5	0.0	0.0	17	67	15	7.0	5.3	20	0.0	-10.6	0.0	26.1	27.2	3.0	0.0	39	29	0.0	10	45	8
34	10.13		25	1	24	-10.4	0.0	0.0	17	63	15	6.9	5.5	24	0.0	10.8	0.0	26.1	27.2	3.0	0.0	39	29	0.0	10	45	8
33	10.13		30	3	20	-6.4	0.0	0.0	21	22	7	4.3	5.3	24	0.0	9.8	0.0	11.1	17.4	4.1	0.0	36	56	0.0	21	158	8
2.5	1.00		45	5	24	10.5	0.0	0.0	17	57	13	8.6	7.0	20	0.0	-10.3	0.0	26.1	27.2	3.0	0.0	38	28	0.0	10	45	8
50	10.13		25	1	15	10.4	0.0	0.0	17	53	12	8.8	6.9	27	0.0	9.8	0.0	26.1	27.2	3.0	0.0	36	27	0.0	10	45	8
48	10.13		30	3	15	7.2	0.0	0.0	26	17	7	4.3	5.3	15	0.0	-9.1	0.0	11.1	17.4	4.1	0.0	34	52	0.0	21	177	8
2.5	1.00		45	5	15	-9.7	0.0	0.0	20	42	11	6.5	5.3	15	0.0	-10.1	0.0	26.1	27.2	3.0	0.0	37	28	0.0	10	45	8
51	10.13		25	1	25	-10.5	0.0	0.0	17	68	15	7.0	5.3	25	0.0	10.9	0.0	26.1	27.2	3.0	0.0	40	30	0.0	10	45	8
50	10.13		30	3	25	7.1	0.0	0.0	26	17	7	4.3	5.3	25	0.0	10.0	0.0	11.1	17.4	4.1	0.0	37	57	0.0	21	158	8
2.5	1.00		45	5	25	10.7	0.0	0.0	16	64	14	8.5	7.1	21	0.0	-10.0	0.0	26.1	27.2	3.0	0.0	37	27	0.0	10	45	8
31	10.13		25	1	40	-9.7	0.0	0.0	20	32	9	6.5	9.1	20	0.0	-14.2	0.0	26.1	27.2	3.0	0.0	52	39	0.0	10	45	8
29	10.13		30	3	36	11.0	0.0	0.0	31	17	9	5.9	8.3	20	0.0	-14.6	0.0	11.1	17.4	4.1	0.0	53	84	0.0	21	47	8
2.5	1.00		45	5	20	-10.4	0.0	0.0	17	61	14	6.9	5.8	20	0.0	-14.9	0.0	26.1	27.2	3.0	0.0	55	41	0.0	10	45	8
29	10.13		25	1	20	-9.9	0.0	0.0	19	46	12	6.6	5.6	18	0.0	14.1	0.0	26.1	27.2	3.0	0.0	52	38	0.0	10	45	8
27	10.13		30	3	20	-9.9	0.0	0.0	19	46	12	6.6	5.6	30	0.0	-13.7	0.0	11.1	17.4	4.1	0.0	50	79	0.0	21	28	8
2.5	1.00		45	5	43	-9.8	0.0	0.0	19	43	11	6.6	5.5	30	0.0	-14.1	0.0	26.1	27.2	3.0	0.0	52	39	0.0	10	45	8
27	10.13		25	1	34	-8.7	0.0	0.0	28	19	8	5.9	4.3	34	0.0	5.4	0.0	26.1	27.2	3.0	0.0	20	15	0.0	10	45	8
26	10.13		30	3	34	-7.1	0.0	0.0	26	17	7	5.3	4.3	34	0.0	4.9	0.0	11.1	17.4	4.1	0.0	18	28	0.0	21	105	8
2.5	1.00		45	5	43	3.3	0.0	0.0	23	10	3	4.3	4.3	34	0.0	3.8	0.0	26.1	27.2	3.0	0.0	14	10	0.0	10	45	8
62	10.13		25	1	41	-6.5	0.0	0.0	17	38	9	4.3	4.3	41	0.0	5.8	0.0	26.1	27.2	3.0	0.0	21	16	0.0	10	45	8
74	10.13		30	3	41	-5.4	0.0	0.0	23	16	5	4.3	4.3	41	0.0	5.3	0.0	11.1	17.4	4.1	0.0	19	30	0.0	21	78	8
2.5	1.00		45	5	41	1.8	0.0	0.0	23	5	2	4.3	4.3	37	0.0	-4.5	0.0	26.1	27.2	3.0	0.0	17	12	0.0	10	45	8
45	10.13		25	1	31	-2.5	0.0	0.0	23	7	2	4.3	4.3	31	0.0	3.7	0.0	26.1	27.2	3.0	0.0	13	10	0.0	10	45	8
46	10.13		30	3	34	3.4	0.0	0.0	23	10	3	4.3	4.3	31	0.0	3.5	0.0	11.1	17.4	4.1	0.0	13	20	0.0	21	105	8
2.5	1.00		45	5	34	4.3	0.0	0.0	23	13	4	4.3	4.3	31	0.0	3.2	0.0	26.1	27.2	3.0	0.0	12	9	0.0	10	45	8
46	10.13		25	1	46	-3.6	0.0	0.0	23	10	3	4.3	4.3	43	0.0	-3.0	0.0	26.1	27.2	3.0	0.0	11	8	0.0	10	36	8
48	10.13		30	3	46	-4.3	0.0	0.0	23	13	4	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
2.5	1.00		45	5	46	-4.3	0.0	0.0	23	13	4	4.3	4.3	43	0.0	-3.3											

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz. Fin. Ctg0	Quota Iniz. Final AmpC	T r a Bas n t Alt	Sez o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE														Staffe Pas Lun Fi		
				Co M mb	Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area sup inf	Co mb	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRLd (t*m)	Coe CIs	Coe Sta	ALon cmq								
2.5	1.00	45	5	46	-11.8	0.0	0.0	32	18	9	8.7	5.3	46	0.0	-8.9	0.0	26.1	27.2	3.0	0.0	33	24	0.0	10	45	8				
40	10.13	25	1	34	-11.0	0.0	0.0	31	17	9	8.2	5.4	34	0.0	8.5	0.0	26.1	27.2	3.0	0.0	31	23	0.0	10	45	8				
43	10.13	30	3	34	5.2	0.0	0.0	23	15	5	4.3	4.3	34	0.0	7.9	0.0	11.1	17.4	4.1	0.0	29	45	0.0	21	235	8				
2.5	1.00	45	5	46	-11.2	0.0	0.0	31	17	9	8.4	6.0	46	0.0	-8.2	0.0	26.1	27.2	3.0	0.0	30	23	0.0	10	45	8				
43	10.13	25	1	41	-9.5	0.0	0.0	21	37	11	6.4	4.3	41	0.0	9.1	0.0	26.1	27.2	3.0	0.0	33	25	0.0	10	45	8				
51	10.13	30	3	41	6.1	0.0	0.0	23	18	6	4.3	4.3	41	0.0	8.5	0.0	11.1	17.4	4.1	0.0	31	49	0.0	21	166	8				
2.5	1.00	45	5	41	9.6	0.0	0.0	21	37	11	5.4	6.4	37	0.0	-6.7	0.0	26.1	27.2	3.0	0.0	24	18	0.0	10	45	8				
27	10.13	39	1	20	-5.3	0.0	0.0	34	19	12	7.4	3.7	3	0.0	6.4	0.0	20.0	18.8	2.0	0.0	34	17	0.0	5	25	8				
38	10.13	40	3	24	2.0	0.0	0.0	23	16	6	3.1	3.2	20	0.0	5.6	0.0	20.1	11.8	3.6	0.0	29	47	0.0	16	227	8				
2.5	1.00	25	5	24	-4.6	0.0	0.0	33	18	11	6.7	3.4	24	0.0	-6.1	0.0	20.0	18.8	2.0	0.0	32	16	0.0	5	25	8				
45	10.13	39	1	21	-4.1	0.0	0.0	32	17	10	6.2	3.2	3	0.0	5.9	0.0	20.0	18.8	2.0	0.0	31	16	0.0	5	25	8				
44	10.13	40	3	25	1.9	0.0	0.0	23	15	6	3.1	3.2	9	0.0	-5.4	0.0	20.1	11.8	3.6	0.0	28	45	0.0	16	227	8				
2.5	1.00	25	5	25	-4.4	0.0	0.0	32	17	10	6.5	3.3	9	0.0	-6.5	0.0	20.0	18.8	2.0	0.0	34	17	0.0	5	25	8				
37	10.13	39	1	6	-4.7	0.0	0.0	33	18	11	6.8	3.4	6	0.0	3.5	0.0	20.0	18.8	2.0	0.0	19	9	0.0	5	25	8				
36	10.13	40	3	6	-3.5	0.0	0.0	18	66	17	4.6	3.1	6	0.0	3.4	0.0	20.1	11.8	3.6	0.0	18	29	0.0	16	99	8				
2.5	1.00	25	5	6	0.1	0.0	0.0	23	1	0	3.1	3.2	6	0.0	3.1	0.0	20.0	18.8	2.0	0.0	16	8	0.0	5	25	8				
38	10.13	39	1	20	-3.7	0.0	0.0	31	16	9	5.7	3.2	3	0.0	5.7	0.0	20.0	18.8	2.0	0.0	30	15	0.0	5	25	8				
37	10.13	40	3	20	1.6	0.0	0.0	23	13	5	3.1	3.2	20	0.0	4.7	0.0	20.1	11.8	3.6	0.0	25	40	0.0	16	208	8				
2.5	1.00	25	5	24	-4.2	0.0	0.0	32	17	10	6.3	3.2	9	0.0	-5.8	0.0	20.0	18.8	2.0	0.0	31	15	0.0	5	25	8				
43	10.13	39	1	12	-4.7	0.0	0.0	33	18	11	6.8	3.4	3	0.0	3.5	0.0	20.0	18.8	2.0	0.0	19	9	0.0	5	25	8				
42	10.13	40	3	12	-3.5	0.0	0.0	18	70	18	4.6	3.1	12	0.0	3.4	0.0	20.1	11.8	3.6	0.0	18	29	0.0	16	99	8				
2.5	1.00	25	5	12	0.1	0.0	0.0	23	1	0	3.1	3.2	12	0.0	3.1	0.0	20.0	18.8	2.0	0.0	17	8	0.0	5	25	8				
44	10.13	39	1	21	-3.7	0.0	0.0	31	16	9	5.7	3.2	3	0.0	5.7	0.0	20.0	18.8	2.0	0.0	30	15	0.0	5	25	8				
43	10.13	40	3	21	1.5	0.0	0.0	23	12	4	3.1	3.2	9	0.0	-4.7	0.0	20.1	11.8	3.6	0.0	25	40	0.0	16	208	8				
2.5	1.00	25	5	25	-4.2	0.0	0.0	32	17	10	6.3	3.2	9	0.0	-5.8	0.0	20.0	18.8	2.0	0.0	31	15	0.0	5	25	8				
36	10.13	26	1	46	0.5	0.0	0.0	25	4	2	3.1	3.1	6	0.0	1.7	0.0	14.5	14.1	1.4	0.0	12	4	0.0	5	25	8				
41	10.13	30	3	6	1.0	0.0	0.0	25	8	4	3.1	3.1	12	0.0	-2.9	0.0	13.7	11.1	2.4	0.0	21	26	0.0	17	320	8				
2.5	1.00	25	5	12	-3.1	0.0	0.0	24	34	13	4.2	3.1	12	0.0	-3.3	0.0	14.5	14.1	1.4	0.0	24	9	0.0	5	25	8				
42	10.13	26	1	41	0.4	0.0	0.0	25	3	1	3.1	3.1	6	0.0	1.4	0.0	14.5	14.1	1.4	0.0	10	4	0.0	5	25	8				
52	10.13	30	3	34	0.9	0.0	0.0	25	8	3	3.1	3.1	12	0.0	-2.4	0.0	13.7	11.1	2.4	0.0	17	21	0.0	17	251	8				
2.5	1.00	25	5	46	-2.2	0.0	0.0	26	18	8	3.1	3.1	12	0.0	-2.7	0.0	14.5	14.1	1.4	0.0	19	7	0.0	5	25	8				
17	10.24	1	25	1	24	-14.5	-0.3	-17.7	39	18	13	8.3	5.1	24	-0.4	11.4	0.0	26.6	27.8	3.0	0.0	43	31	0.0	10	45	8			
7	11.87	/	30	3	24	-14.5	-0.2	-17.3	39	19	13	8.3	5.1	24	-0.4	10.4	0.0	11.1	17.4	4.1	0.0	39	60	0.0	21	65	8			
2.5	1.00	4	45	5	24	-7.5	0.2	-16.7	34	14	8	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8			
54	10.24	1	25	1	25	-13.4	0.3	-21.1	39	18	13	7.3	4.6	24	0.9	11.1	0.0	26.4	27.6	3.0	0.0	44	32	0.0	10	45	8			
5	11.87	/	30	3	25	-13.4	0.2	-20.7	39	18	13	7.3	4.6	25	0.4	10.2	0.0	11.1	17.4	4.1	0.0	39	59	0.0	21	65	8			
2.5	1.00	4	45	5	21	6.0	0.4	-5.0	27	15	6	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8			
2	10.18	25	1	43	-9.3	0.0	0.0	23	28	9	6.3	5.3	43	0.0	5.0	0.0	26.1	27.2	3.0	0.0	18	14	0.0	10	45	8				
1	10.18	30	3	43	6.1	0.0	0.0	23	18	6	4.3	4.3	43	0.0	4.9	0.0	11.1	17.4	4.1	0.0	18	28	0.0	21	413	8				
2.5	1.00	45	5	31	-12.2	0.0	0.0	30	18	9	8.9	8.6	31	0.0	-4.7	0.0	26.1	27.2	3.0	0.0	17	13	0.0	10	45	8				
9	10.18	1	25	1	43	-9.0	0.0	0.0	27	20	8	6.1	4.3	43	0.0	9.6	0.0	26.1	27.2	3.0	0.0	35	26	0.0	10	45	8			
10	10.18	/	30	3	43	-9.0	0.0	0.0	27	20	8	6.1	4.3	43	0.0	9.4	0.0	11.1	17.4	4.1	0.0	35	54	0.0	21	42	8			
2.5	1.00	2	45	5	43	-5.3	0.0	0.0	23	15	5	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8			
2	10.18	1	25	1	40	-8.6	0.0	0.0	28	19	8	5.9	4.3	40	0.0	10.3	0.0	26.1	27.2	3.0	0.0	38	28	0.0	10	45	8			
3	10.18	/	30	3	40	-8.6	0.0	0.0	28	19	8	5.9	4.3	40	0.0	10.2	0.0	11.1	17.4	4.1	0.0	37	58	0.0	21	42	8			
2.5	1.00	2	45	5	31	-4.6	0.0	0.0	23	13	4	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8			
78	12.01	1	25	1	40	-3.4	-0.8	0.0	23	10	3	4.3	4.3	40	-1.0	4.8	0.0	26.1	27.2	3.0	0.0	21	13	0.0	10	45</				

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a n	C o m b	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE													
					CoM n	Mo Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area sup inf	cmq inf	CoM b	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRLd (t*m)	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi	
2.5	1.00		45 5	18	2.5	0.0	0.0	23	7	2	4.3	4.3	31	0.0	-6.1	0.6	26.1	27.2	3.0	0.8	23	17	3.7	10	45	8
69	10.24		25 1	43	-15.4	0.0	0.0	33	19	10	10.8	9.2	43	0.0	11.5	0.0	26.1	27.2	3.0	0.0	42	31	0.0	10	45	8
70	10.24		30 3	43	-8.1	0.0	0.0	26	18	7	5.6	5.3	43	0.0	11.3	0.0	11.1	17.4	4.1	0.0	41	65	0.0	21	181	8
2.5	1.00		45 5	43	14.4	0.0	0.0	32	18	10	9.3	10.2	43	0.0	10.7	0.0	26.1	27.2	3.0	0.0	39	29	0.0	10	45	8
70	10.24		25 1	40	7.9	0.0	0.0	27	18	7	4.3	5.5	31	0.0	-13.8	0.0	26.1	27.2	3.0	0.0	51	38	0.0	10	45	8
73	10.24		30 3	31	-9.5	0.0	0.0	21	36	11	6.4	4.3	31	0.0	-13.9	0.0	13.0	20.3	4.7	0.0	51	69	0.0	18	39	8
2.5	1.00		45 5	31	-10.2	0.0	0.0	18	56	14	6.8	5.3	31	0.0	-14.1	0.0	26.1	27.2	3.0	0.0	52	39	0.0	10	45	8
73	10.24		25 1	36	-10.9	0.0	0.0	31	17	9	8.2	5.3	36	0.0	6.5	0.0	26.1	27.2	3.0	0.0	24	18	0.0	10	45	8
16	10.24		30 3	36	-6.1	0.0	0.0	23	18	6	4.3	4.3	36	0.0	6.4	0.0	11.1	17.4	4.1	0.0	23	37	0.0	21	207	8
2.5	1.00		45 5	36	7.0	0.0	0.0	26	17	7	4.3	5.3	36	0.0	5.7	0.0	26.1	27.2	3.0	0.0	21	16	0.0	10	45	8
17	10.24	1	25 1	36	-3.4	0.0	0.0	23	10	3	4.3	4.3	36	0.0	3.2	0.0	26.1	27.2	3.0	0.0	12	9	0.0	10	45	8
11	10.24	/	30 3	36	-3.4	0.0	0.0	23	10	3	4.3	4.3	36	0.0	3.0	0.0	11.1	17.4	4.1	0.0	11	17	0.0	21	42	8
2.5	1.00	2	45 5	36	-2.1	0.0	0.0	23	6	2	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
11	10.24	1	26 1	6	-0.8	-0.2	3.3	18	9	2	3.1	3.1	1	-0.5	2.2	0.0	14.5	14.1	1.4	0.0	19	6	0.0	5	25	8
8	11.87	/	30 3	3	0.8	0.3	3.2	18	9	2	3.1	3.1	9	-0.6	1.8	0.0	13.7	11.1	2.4	0.0	16	16	0.0	17	99	8
2.5	1.00	4	25 5	3	1.0	0.4	3.4	19	11	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
53	10.24	1	26 1	12	-0.8	0.1	4.1	17	10	2	3.1	3.1	1	0.4	2.3	0.0	14.5	14.1	1.4	0.0	19	6	0.0	5	25	8
4	11.87	/	30 3	3	0.8	-0.3	3.9	17	10	2	3.1	3.1	3	0.4	1.9	0.0	13.7	11.1	2.4	0.0	16	17	0.0	17	99	8
2.5	1.00	4	25 5	3	1.0	-0.4	4.2	18	12	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
79	12.01	1	26 1	34	-1.1	-0.2	0.0	25	9	4	3.1	3.1	34	-0.2	1.2	0.0	14.5	14.1	1.4	0.0	10	3	0.0	5	25	8
10	10.18	/	30 3	34	-0.8	-0.1	-0.1	25	6	3	3.1	3.1	34	-0.2	1.1	0.0	13.7	11.1	2.4	0.0	9	10	0.0	17	109	8
2.5	1.00	4	25 5	46	-0.1	0.0	-0.3	31	1	0	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
80	12.01	1	26 1	46	-1.1	0.2	0.0	25	9	4	3.1	3.1	46	0.2	1.2	0.0	14.5	14.1	1.4	0.0	10	3	0.0	5	25	8
3	10.18	/	30 3	46	-0.8	0.1	-0.1	25	6	3	3.1	3.1	46	0.2	1.1	0.0	13.7	11.1	2.4	0.0	9	10	0.0	17	109	8
2.5	1.00	4	25 5	34	-0.1	0.0	-0.3	33	0	0	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
7	11.87	1	33 1	12	-1.1	0.0	0.0	24	14	6	3.1	3.1	12	0.0	2.3	0.0	18.3	15.9	1.6	0.0	15	5	0.0	3	18	8
8	11.87	/	50 3	12	-0.7	0.0	0.0	24	9	4	3.1	3.1	12	0.0	2.3	0.0	37.2	11.6	4.2	0.0	14	19	0.0	11	69	8
2.5	1.00	2	18 5	12	0.8	0.0	0.0	24	9	4	3.1	3.1	0	0.0	0.0	0.0	37.2	11.6	4.2	0.0	0	0	0.0	11	0	8
5	11.87	1	33 1	6	-1.1	0.0	0.0	24	13	6	3.1	3.1	6	0.0	2.3	0.0	18.3	15.9	1.6	0.0	14	5	0.0	3	18	8
4	11.87	/	50 3	6	-0.7	0.0	0.0	24	8	4	3.1	3.1	6	0.0	2.2	0.0	37.2	11.6	4.2	0.0	14	19	0.0	11	69	8
2.5	1.00	2	18 5	6	0.7	0.0	0.0	24	9	4	3.1	3.1	0	0.0	0.0	0.0	37.2	11.6	4.2	0.0	0	0	0.0	11	0	8
5	11.87		38 1	43	-0.9	0.0	0.0	23	6	2	4.0	4.0	43	0.0	0.9	0.0	25.4	23.5	2.6	0.0	4	2	0.0	5	25	8
6	11.87		50 3	3	0.5	0.0	0.0	23	3	1	3.1	4.0	3	0.0	-1.2	0.0	31.5	14.6	5.8	0.0	5	8	0.0	13	463	8
2.5	1.00		25 5	31	-1.5	0.0	0.0	23	10	4	4.0	3.1	1	0.0	-1.2	0.0	25.4	23.5	2.6	0.0	5	3	0.0	5	25	8
6	11.87		38 1	36	-1.6	0.0	0.0	23	10	4	4.0	3.1	1	0.0	1.2	0.0	25.4	23.5	2.6	0.0	5	3	0.0	5	25	8
7	11.87		50 3	36	0.5	0.0	0.0	23	3	1	3.1	4.0	12	0.0	1.1	0.0	31.5	14.6	5.8	0.0	5	8	0.0	13	463	8
2.5	1.00		25 5	40	-1.1	0.0	0.0	23	7	2	4.0	4.0	40	0.0	-1.0	0.0	25.4	23.5	2.6	0.0	4	3	0.0	5	25	8
70	10.24		25 1	24	-11.3	0.3	5.3	22	37	11	8.3	5.1	9	0.0	12.0	0.0	26.1	27.2	3.0	0.0	44	33	0.0	10	45	8
6	11.87		30 3	20	4.9	-0.2	2.1	24	13	4	3.6	5.3	3	0.0	-10.8	0.0	11.1	17.4	4.1	0.0	40	62	0.0	21	369	8
2.5	1.00		45 5	20	-12.2	0.4	5.7	31	17	9	10.3	6.1	3	0.0	-13.3	0.0	26.1	27.2	3.0	0.0	49	36	0.0	10	45	8
77	12.01		25 1	9	-13.2	0.0	0.0	34	18	10	9.5	4.8	9	0.0	15.5	0.0	26.1	27.2	3.0	0.0	57	42	0.0	10	45	8
1	10.18		30 3	9	8.6	0.0	-4.2	23	33	11	3.6	5.3	9	0.0	12.8	0.0	11.1	17.4	4.1	0.0	47	74	0.0	21	431	8
2.5	1.00		45 5	20	-8.8	-0.1	-6.7	30	18	9	5.3	4.3	3	0.0	-13.0	0.0	26.1	27.2	3.0	0.0	48	36	0.0	10	45	8
62	10.13		26 1	9	-4.0	0.0	-0.3	34	17	11	6.1	4.1	9	0.0	6.0	0.0	14.5	14.1	1.4	0.0	43	16	0.0	5	25	8
70	10.24		30 3	3	2.2	0.0	-0.1	26	18	8	3.1	3.1	3	0.0	-5.8	0.0	13.7	11.1	2.4	0.0	41	52	0.0	17	386	8
2.5	1.00		25 5	3	-5.3	0.0	0.0	33	26	17	7.4	3.7	3	0.0	-6.6	0.0	14.5	14.1	1.4	0.0	47	17	0.0	5	25	8
26	10.13		26 1	15	0.5	0.0	0.0	25	4	2	3.1	3.1	27	0.0	3.0	0.0	14.5	14.1	1.4	0.0	21	8	0.0	5	25	8

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T ra a t	Sez Bas n	C o n	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE																				
					Co	M	Exd	M	Eyd	N	Ed	x/	εf%	εc%	Area	cmq	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRLd	Coe	Coe	ALon	Staffe
					mb	(t°m)	(t°m)	(t)	(t)	/d	100	100	sup	inf	mb	(t)	(t)	(t)	(t°m)	(t°m)	(t)	(t)	(t)	(t)	(t)	(t)	(t°m)	Cls	Sta	cmq	Pas	Lun	Fi
2.5	1.00		45	5	30	-5.4	0.0	0.0	0.0	23	16	5	4.3	4.3	43	0.0	-5.8	0.0	26.1	27.2	3.0	0.0	21	16	0.0	10	45	8					
16	10.24		26	1	20	-2.2	0.2	0.0	0.0	26	18	8	3.1	3.1	20	0.4	2.5	0.0	14.5	14.1	1.4	0.0	21	7	0.0	5	25	8					
15	10.13		30	3	20	-1.6	0.2	-0.1	0.0	26	13	6	3.1	3.1	20	0.4	2.2	0.0	13.7	11.1	2.4	0.0	18	19	0.0	17	70	8					
2.5	1.00		25	5	24	0.7	0.5	-0.1	0.0	26	5	2	3.1	3.1	24	-0.6	-1.5	0.0	14.5	14.1	1.4	0.0	15	4	0.0	5	25	8					
14	10.13		26	1	40	-0.4	0.0	0.0	0.0	25	4	1	3.1	3.1	24	0.0	-1.8	0.2	14.5	14.1	1.4	0.2	13	5	1.5	5	25	8					
12	10.13		30	3	40	-1.9	0.0	0.0	0.0	26	16	7	3.1	3.1	24	0.0	-2.0	0.2	14.5	14.1	1.4	0.2	14	11	1.5	10	87	8					
2.5	1.00		25	5	40	-2.6	0.0	0.0	0.0	29	16	8	4.1	3.1	24	0.0	-2.1	0.2	14.5	14.1	1.4	0.2	15	5	1.5	5	25	8					
15	10.13		27	1	43	0.3	0.0	0.0	0.0	27	2	1	3.1	3.1	40	0.0	0.3	0.0	11.8	11.8	1.1	0.0	3	1	0.0	5	25	8					
21	10.13		25	3	27	0.3	0.0	0.0	0.0	27	2	1	3.1	3.1	36	0.0	-0.3	0.0	11.1	11.1	1.9	0.0	3	3	0.0	17	272	8					
2.5	1.00		25	5	36	-0.2	0.0	0.0	0.0	27	2	1	3.1	3.1	12	0.0	-0.4	0.0	11.8	11.8	1.1	0.0	3	1	0.0	5	25	8					
56	10.13		26	1	34	-3.4	0.0	0.0	0.0	32	16	9	5.4	4.1	41	0.0	4.7	0.0	14.5	14.1	1.4	0.0	33	12	0.0	5	25	8					
58	10.13		30	3	34	-2.3	0.0	0.0	0.0	22	28	10	3.1	3.1	41	0.0	4.4	0.0	13.7	11.1	2.4	0.0	31	40	0.0	17	70	8					
2.5	1.00		25	5	37	-2.1	0.0	0.0	0.0	26	17	8	3.1	3.1	37	0.0	-4.4	0.0	14.5	14.1	1.4	0.0	31	12	0.0	5	25	8					
58	10.13		26	1	37	-2.1	0.0	0.0	0.0	26	17	7	3.1	3.1	37	0.0	2.4	0.0	14.5	14.1	1.4	0.0	17	6	0.0	5	25	8					
46	10.13		30	3	41	1.4	0.0	0.0	0.0	26	12	5	3.1	3.1	41	0.0	-2.4	0.0	13.7	11.1	2.4	0.0	17	21	0.0	17	207	8					
2.5	1.00		25	5	41	-1.5	0.0	0.0	0.0	26	12	5	3.1	3.1	41	0.0	-2.7	0.0	14.5	14.1	1.4	0.0	19	7	0.0	5	25	8					
66	10.24		27	1	15	-1.5	-0.1	0.0	0.0	27	12	6	3.1	3.1	15	-0.3	2.6	0.0	11.8	11.8	1.1	0.0	25	7	0.0	5	25	8					
65	10.13		25	3	15	-0.9	0.1	0.0	0.0	27	8	3	3.1	3.1	15	-0.3	2.5	0.0	11.8	11.8	1.1	0.0	24	22	0.0	17	69	8					
2.5	1.00		25	5	21	1.2	0.5	-0.1	0.0	27	10	5	3.1	3.1	15	-0.3	2.1	0.0	11.8	11.8	1.1	0.0	21	6	0.0	5	25	8					
65	10.13		27	1	15	1.6	0.0	0.0	0.0	28	13	6	3.1	3.1	15	0.0	2.0	-0.3	11.8	11.8	1.1	0.3	17	5	2.1	5	25	8					
64	10.13		25	3	27	-2.2	0.0	0.0	0.0	28	18	9	3.1	3.1	15	0.0	1.8	-0.3	11.8	11.8	1.1	0.3	16	9	2.1	9	5	8					
2.5	1.00		25	5	27	-2.2	0.0	0.0	0.0	28	18	9	3.1	3.1	27	0.0	-2.5	0.2	11.8	11.8	1.1	0.3	21	7	2.1	5	25	8					
63	10.13		27	1	25	-1.4	0.0	0.0	0.0	27	11	5	3.1	3.1	27	0.0	3.3	-0.3	11.8	11.8	1.1	0.3	29	9	2.2	5	15	8					
64	10.13		25	3	25	-1.4	0.0	0.0	0.0	27	11	5	3.1	3.1	0	0.0	0.0	0.0	21.0	21.0	3.5	0.0	0	0	0.0	9	0	8					
2.5	1.00		25	5	25	-1.2	0.0	0.0	0.0	27	9	4	3.1	3.1	27	0.0	3.3	-0.3	11.8	11.8	1.1	0.3	28	9	2.2	5	15	8					
60	10.13		27	1	37	-2.8	0.0	0.0	0.0	31	18	10	4.1	3.1	37	0.0	9.4	0.3	12.8	12.8	1.2	0.4	100	34	2.4	0	15	8					
59	10.13		25	3	37	-2.8	0.0	0.0	0.0	31	18	10	4.1	3.1	0	0.0	0.0	0.0	18.5	18.5	3.1	0.0	0	0	0.0	0	0	8					
2.5	1.00		25	5	37	-2.0	0.0	0.0	0.0	28	16	8	3.1	3.1	37	0.0	9.4	0.3	12.8	12.8	1.2	0.4	99	34	2.4	0	15	8					
59	10.13		27	1	37	-3.0	0.0	0.0	0.0	29	24	12	4.1	3.1	37	0.0	6.9	-0.1	11.8	11.8	1.1	0.3	59	18	1.8	5	23	8					
58	10.13		25	3	37	-3.0	0.0	0.0	0.0	29	24	12	4.1	3.1	0	0.0	0.0	0.0	21.0	21.0	3.5	0.0	0	0	0.0	9	0	8					
2.5	1.00		25	5	21	-1.0	0.0	0.0	0.0	27	8	4	3.1	3.1	37	0.0	6.8	-0.1	11.8	11.8	1.1	0.3	58	18	1.8	5	23	8					
64	10.13		27	1	25	-1.9	0.0	0.0	0.0	28	16	8	3.1	3.1	25	0.0	1.8	0.0	11.8	11.8	1.1	0.0	15	5	0.0	5	25	8					
59	10.13		25	3	37	-1.5	0.0	0.0	0.0	27	12	6	3.1	3.1	21	0.0	-2.4	0.0	11.1	11.1	1.9	0.0	21	22	0.0	17	128	8					
2.5	1.00		25	5	37	-2.7	0.0	0.0	0.0	31	17	9	4.1	3.1	21	0.0	-2.6	0.0	11.8	11.8	1.1	0.0	22	7	0.0	5	25	8					
56	10.13		26	1	25	-2.5	0.0	0.0	0.0	29	16	8	4.1	3.1	9	0.0	4.4	0.0	14.5	14.1	1.4	0.0	31	12	0.0	5	25	8					
67	10.13		30	3	9	1.3	0.0	0.0	0.0	25	11	5	3.1	3.1	9	0.0	3.7	0.0	13.7	11.1	2.4	0.0	26	33	0.0	17	227	8					
2.5	1.00		25	5	21	-1.3	0.0	0.0	0.0	25	10	4	3.1	3.1	3	0.0	-2.9	0.0	14.5	14.1	1.4	0.0	21	8	0.0	5	25	8					
67	10.13		26	1	21	-1.8	0.9	-0.2	0.0	26	15	6	3.1	3.1	43	-5.7	-1.8	-0.1	14.5	14.1	1.4	0.2	52	12	1.3	5	25	8					
69	10.24		30	3	21	-2.7	0.9	-0.1	0.0	30	17	9	4.1	3.1	43	-5.7	-1.9	-0.1	14.5	14.1	1.4	0.2	53	24	1.3	10	3	8					
2.5	1.00		25	5	21	-2.7	0.5	0.0	0.0	29	17	9	4.1	3.1	43	-5.7	-2.3	-0.1	14.5	14.1	1.4	0.2	55	12	1.3	5	25	8					
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STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a n c	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE													
					Co mb	M (t*m)	Exd (t*m)	N Ed (t)	x/ /d	εf% 100	εc% 100	Area sup	cmq inf	Co mb	V (t)	Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRLd (t*m)	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi		
2.5.	1.00		45	5	43	-10.6	-3.4	0.0	0	0	0	3.1	3.1	43	-27.3	12.4	0.3	37.9	39.6	4.3	0.0	111	0	0.0	0	0	8	
7	11.87		25	1	31	-7.8	4.2	-0.3	0	0	0	3.1	3.1	31	28.7	25.2	-0.1	37.9	39.6	4.3	0.0	143	0	0.0	0	0	8	
78	12.01		30	3	31	-7.8	4.2	-0.2	0	0	0	3.1	3.1	31	28.7	25.0	-0.1	37.9	39.6	4.3	0.0	142	0	0.0	0	0	8	
2.5.	1.00		45	5	31	-7.3	-1.7	0.0	0	0	0	3.1	3.1	31	28.7	24.9	-0.1	37.9	39.6	4.3	0.0	142	0	0.0	0	0	8	
8	11.87		26	1	37	-3.0	-0.7	-0.1	29	18	10	4.1	3.6	37	-2.2	8.9	0.0	14.5	14.1	1.4	0.0	78	24	0.0	5	21	8	
79	12.01		30	3	37	-3.0	-0.7	0.0	30	18	10	4.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8	
2.5	1.00		25	5	3	-1.9	-0.1	0.0	26	15	7	3.1	3.1	37	-2.2	8.8	0.0	14.5	14.1	1.4	0.0	77	23	0.0	5	21	8	
5	11.87		25	1	43	-9.6	-4.3	-0.4	0	0	0	3.1	3.1	43	-29.7	27.9	0.1	38.0	39.6	4.3	0.0	152	0	0.0	0	0	8	
76	12.01		30	3	43	-9.6	-4.3	-0.2	0	0	0	3.1	3.1	43	-29.7	27.7	0.1	38.0	39.6	4.3	0.0	151	0	0.0	0	0	8	
2.5.	1.00		45	5	43	-9.0	1.7	0.0	0	0	0	3.1	3.1	43	-29.7	27.5	0.1	38.0	39.6	4.3	0.0	151	0	0.0	0	0	8	
4	11.87		26	1	3	-3.1	-0.5	-0.2	23	36	13	4.1	3.6	34	2.7	8.6	0.0	14.5	14.1	1.4	0.0	79	23	0.0	5	21	8	
80	12.01		30	3	3	-3.0	-0.5	-0.1	30	18	10	4.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8	
2.5	1.00		25	5	12	-2.0	0.1	0.0	26	17	7	3.1	3.1	34	2.7	8.4	0.0	14.5	14.1	1.4	0.0	78	22	0.0	5	21	8	
30	13.88	1	42	1	18	-0.4	0.0	0.0	26	2	1	4.0	4.0	18	0.0	1.0	0.0	10.3	11.1	2.2	0.0	6	9	0.0	21	0	8	
12	13.88	/	28	3	18	-0.4	0.0	0.0	26	2	1	4.0	4.0	18	0.0	1.0	0.0	10.3	11.1	2.2	0.0	6	9	0.0	21	77	8	
2.5	1.00	4	30	5	18	0.3	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8	
25	13.88	1	42	1	12	0.4	0.0	0.0	26	2	1	4.0	4.0	12	0.0	-0.6	0.0	10.3	11.1	2.2	0.0	4	5	0.0	21	0	8	
23	13.88	/	28	3	12	-0.3	0.0	0.0	26	2	1	4.0	4.0	12	0.0	-0.9	0.0	10.3	11.1	2.2	0.0	6	8	0.0	21	119	8	
2.5	1.00	2	30	5	12	-0.5	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8	
60	12.38		27	1	43	-0.1	0.0	0.0	29	1	0	4.0	4.0	43	0.0	0.3	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	0	8	
13	12.38		25	3	43	0.1	0.0	0.0	29	0	0	4.0	4.0	43	0.0	0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	113	8	
2.5	1.00		25	5	31	-0.1	0.0	0.0	29	1	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8	
13	12.38		27	1	43	-0.1	0.0	0.0	29	1	0	4.0	4.0	43	0.0	0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	0	8	
47	12.38		25	3	43	-0.1	0.0	0.0	29	0	0	4.0	4.0	43	0.0	0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	113	8	
2.5	1.00		25	5	31	-0.1	0.0	0.0	29	0	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8	
63	12.38		27	1	31	-0.1	0.0	0.0	29	0	0	4.0	4.0	31	0.0	0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	0	8	
19	12.38		25	3	31	0.0	0.0	0.0	29	0	0	4.0	4.0	31	0.0	0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	113	8	
2.5	1.00		25	5	43	-0.1	0.0	0.0	29	1	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8	
19	12.38		27	1	31	-0.1	0.0	0.0	29	1	0	4.0	4.0	15	0.0	0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	0	8	
61	12.38		25	3	31	-0.1	0.0	0.0	29	0	0	4.0	4.0	27	0.0	-0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	113	8	
2.5	1.00		25	5	25	-0.1	0.0	0.0	29	1	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8	
47	12.38		27	1	43	0.0	0.0	0.0	29	0	0	4.0	4.0	25	0.0	0.1	0.0	11.1	11.1	1.9	0.0	1	1	0.0	17	0	8	
20	12.38		25	3	43	0.0	0.0	0.0	29	0	0	4.0	4.0	25	0.0	0.1	0.0	11.1	11.1	1.9	0.0	1	1	0.0	17	89	8	
2.5	1.00		25	5	37	0.0	0.0	0.0	29	0	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8	
20	12.38		27	1	25	0.0	0.0	0.0	29	0	0	4.0	4.0	27	0.0	0.1	0.0	11.1	11.1	1.9	0.0	1	1	0.0	17	0	8	
61	12.38		25	3	31	0.0	0.0	0.0	29	0	0	4.0	4.0	15	0.0	-0.1	0.0	11.1	11.1	1.9	0.0	1	1	0.0	17	89	8	
2.5	1.00		25	5	31	-0.1	0.0	0.0	29	0	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8	
60	12.38		27	1	40	-0.1	0.0	0.0	29	0	0	4.0	4.0	40	0.0	0.1	0.0	11.1	11.1	1.9	0.0	1	1	0.0	17	0	8	
24	12.38		25	3	40	0.0	0.0	0.0	29	0	0	4.0	4.0	36	0.0	-0.1	0.0	11.1	11.1	1.9	0.0	1	1	0.0	17	89	8	
2.5	1.00		25	5	36	0.0	0.0	0.0	29	0	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8	
24	12.38		27	1	40	0.0	0.0	0.0	29	0	0	4.0	4.0	40	0.0	0.1	0.0	11.1	11.1	1.9	0.0	1	1	0.0	17	0	8	
63	12.38		25	3	36	0.0	0.0	0.0	29	0	0	4.0	4.0	36	0.0	-0.1	0.0	11.1	11.1	1.9	0.0	1	1	0.0	17	89	8	
2.5	1.00		25	5	36	-0.1	0.0	0.0	29	0	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8	
40	13.88		25	1	46	-4.5	0.0	0.0	23	13	4	4.3	4.3	30	-0.5	3.7	0.0	26.1	27.2	3.0	0.0	16	11	0.0	10	45	8	
37	12.56		30	3	46	3.8	0.0	-0.6	24	11	4	4.3	4.3	46	0.0	3.7	0.0	11.1	17.4	4.1	0.0	14	21	0.0	21	270	8	
2.5	1.00		45	5	34	-6.2	0.3	-0.9	24	18	6	4.3	4.3	34	-0.1	-3.5	0.0	26.1	27.2	3.0	0.0	13	10	0.0	10	45	8	
62	13.88		25	1	15	2																						

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T ra a t	Sez a n c	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																		
					Co	M	Exd	M	Eyd	N	Ed	x/	εf%	εc%	Area sup	cmq inf	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRLd	Coe	Coe	ALon	Staffe Pas Lun Fi
2.5	1.00		45	5	14	2.5	0.6	-1.1	26	7	3	3.1	4.3	30	-1.0	1.4	0.0	26.1	27.2	3.0	0.0	9	5	0.0	10	45	8						
40	13.88		25	1	41	-4.3	0.8	0.0	23	12	4	4.3	4.3	34	0.2	3.9	0.0	26.1	27.2	3.0	0.0	15	11	0.0	10	45	8						
43	12.56		30	3	34	3.7	-0.1	-0.6	24	11	4	4.3	4.3	34	0.2	3.6	0.0	11.1	17.4	4.1	0.0	14	21	0.0	21	261	8						
2.5	1.00		45	5	46	-6.2	0.0	-0.9	24	18	6	4.3	4.3	46	0.0	-3.5	0.0	26.1	27.2	3.0	0.0	13	9	0.0	10	45	8						
51	11.48		26	1	11	-1.4	0.0	0.0	26	11	5	3.1	3.1	25	0.0	2.5	0.0	14.5	14.1	1.4	0.0	18	7	0.0	5	25	8						
50	11.48		30	3	25	1.6	0.0	0.0	26	13	5	3.1	3.1	25	0.0	2.2	0.0	13.7	11.1	2.4	0.0	16	20	0.0	17	198	8						
2.5	1.00		25	5	21	-2.5	0.0	0.0	29	16	8	4.1	3.1	21	0.0	-2.2	0.0	14.5	14.1	1.4	0.0	16	6	0.0	5	25	8						
39	13.88		25	1	9	-3.4	0.0	0.0	24	10	3	4.3	3.1	9	0.0	5.9	0.0	26.1	27.2	3.0	0.0	22	16	0.0	10	45	8						
40	13.88		30	3	18	1.5	0.0	0.0	23	4	1	4.3	4.3	9	0.0	4.0	0.0	11.1	17.4	4.1	0.0	15	23	0.0	21	158	8						
2.5	1.00		45	5	15	1.2	0.0	0.0	23	4	1	4.3	4.3	4	0.0	-3.6	0.0	26.1	27.2	3.0	0.0	13	10	0.0	10	45	8						
50	11.48		26	1	25	-2.1	0.0	0.0	26	17	7	3.1	3.1	10	0.0	2.4	0.0	14.5	14.1	1.4	0.0	17	6	0.0	5	25	8						
48	11.48		30	3	21	1.3	0.0	0.0	25	10	4	3.1	3.1	4	0.0	-1.9	0.0	13.7	11.1	2.4	0.0	13	17	0.0	17	217	8						
2.5	1.00		25	5	5	-1.2	0.0	0.0	25	10	4	3.1	3.1	4	0.0	-2.4	0.0	14.5	14.1	1.4	0.0	17	6	0.0	5	25	8						
34	11.48		26	1	30	-1.3	0.0	0.0	25	11	5	3.1	3.1	24	0.0	2.5	0.0	14.5	14.1	1.4	0.0	18	7	0.0	5	25	8						
33	11.48		30	3	24	1.6	0.0	0.0	26	13	6	3.1	3.1	24	0.0	2.2	0.0	13.7	11.1	2.4	0.0	16	20	0.0	17	198	8						
2.5	1.00		25	5	20	-2.6	0.0	0.0	29	16	8	4.1	3.1	20	0.0	-2.3	0.0	14.5	14.1	1.4	0.0	16	6	0.0	5	25	8						
33	11.48		26	1	24	-2.3	0.0	0.0	19	45	13	3.1	3.1	10	0.0	2.2	0.0	14.5	14.1	1.4	0.0	16	6	0.0	5	25	8						
31	11.48		30	3	20	1.5	0.0	0.0	26	12	5	3.1	3.1	4	0.0	-2.0	0.0	13.7	11.1	2.4	0.0	14	18	0.0	17	217	8						
2.5	1.00		25	5	5	-1.3	0.0	0.0	26	11	5	3.1	3.1	4	0.0	-2.5	0.0	14.5	14.1	1.4	0.0	17	6	0.0	5	25	8						
26	13.32		25	1	31	-2.2	-0.2	0.0	23	7	2	4.3	4.3	18	0.4	-2.5	0.0	26.1	27.2	3.0	0.0	11	7	0.0	10	45	8						
27	12.56		30	3	31	-5.4	0.4	-0.2	23	16	5	4.3	4.3	15	0.3	-2.9	0.0	11.1	17.4	4.1	0.0	12	17	0.0	21	120	8						
2.5	1.00		45	5	31	-6.4	0.5	-0.3	21	24	7	4.3	4.3	18	0.4	-3.0	0.0	26.1	27.2	3.0	0.0	13	8	0.0	10	45	8						
25	13.88		38	1	13	-1.7	0.0	0.0	23	11	4	4.0	3.1	13	0.0	2.8	-2.1	25.4	23.5	2.6	2.1	13	8	10.8	5	25	8						
75	13.88		50	3	37	-1.2	0.0	0.0	23	7	3	4.0	3.1	13	0.0	2.1	-1.3	31.5	14.6	5.8	1.3	10	15	6.6	13	73	8						
2.5	1.00		25	5	37	-0.2	0.0	0.0	23	1	0	4.0	4.0	8	0.0	-0.1	1.4	25.4	23.5	2.6	1.4	1	0	6.8	5	25	8						
27	12.56		25	1	36	-3.4	1.0	0.0	23	10	3	4.3	4.3	20	1.7	1.7	0.0	26.1	27.2	3.0	0.0	13	11	0.0	10	45	8						
29	12.07		30	3	36	-3.3	0.8	-0.1	23	10	3	4.3	4.3	24	-2.5	0.0	0.0	11.1	17.4	4.1	0.0	12	23	0.0	21	38	8						
2.5	1.00		45	5	36	-2.0	-0.5	-0.2	23	6	2	4.3	4.3	20	1.7	1.4	0.0	26.1	27.2	3.0	0.0	12	11	0.0	10	45	8						
25	13.88		38	1	13	-4.2	0.0	0.0	30	17	9	6.3	3.2	7	0.0	4.5	-2.5	29.5	27.3	3.1	2.5	17	15	10.2	5	25	8						
22	13.88		50	3	13	-2.5	0.0	0.0	24	16	6	4.0	3.1	7	0.0	3.9	-1.8	25.2	11.6	4.7	1.8	15	34	7.3	13	105	8						
2	1.00		25	5	25	-0.2	0.0	0.0	23	1	0	4.0	4.0	14	0.0	1.0	1.8	29.5	27.3	3.1	1.8	4	3	7.4	5	25	8						
29	12.07		25	1	40	1.7	0.3	0.0	23	5	2	4.3	4.3	36	-1.5	1.3	0.0	26.1	27.2	3.0	0.0	10	6	0.0	10	45	8						
31	11.48		30	3	40	1.6	0.2	-0.1	23	5	2	4.3	4.3	36	-1.5	1.1	0.0	11.1	17.4	4.1	0.0	10	13	0.0	21	60	8						
2.5	1.00		45	5	14	1.6	0.8	-0.3	23	5	2	4.3	4.3	36	-1.5	1.0	0.0	26.1	27.2	3.0	0.0	9	6	0.0	10	45	8						
37	12.56		26	1	30	-2.0	0.0	0.0	26	16	7	3.1	3.1	13	0.0	4.2	0.0	14.5	14.1	1.4	0.0	30	11	0.0	5	25	8						
38	12.56		30	3	10	0.9	0.0	0.0	25	7	3	3.1	3.1	7	0.0	-3.4	0.0	13.7	11.1	2.4	0.0	24	31	0.0	17	208	8						
2.5	1.00		25	5	7	-1.8	0.0	0.0	26	15	6	3.1	3.1	7	0.0	-4.2	0.0	14.5	14.1	1.4	0.0	30	11	0.0	5	25	8						
43	12.56		26	1	25	-2.0	0.0	0.0	26	16	7	3.1	3.1	7	0.0	4.3	0.0	14.5	14.1	1.4	0.0	30	11	0.0	5	25	8						
44	12.53		30	3	10	0.9	0.0	0.0	25	7	3	3.1	3.1	7	0.0	3.4	0.0	13.7	11.1	2.4	0.0	24	31	0.0	17	208	8						
2.5	1.00		25	5	21	-1.9	0.0	-0.1	26	15	7	3.1	3.1	13	0.0	-4.2	0.0	14.5	14.1	1.4	0.0	30	11	0.0	5	25	8						
22	13.88		26	1	14	-1.9	0.0	0.0	26	16	7	3.1	3.1	43	0.0	1.0	0.0	14.5	14.1	1.4	0.0	7	3	0.0	5	25	8						
12	13.88		30	3	15	-0.7	0.0	0.0	25	6	2	3.1	3.1	43	0.0	0.																	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz. Fin. Ctg0	Quota Iniz. Final AmpC	T ra Bas t	Sez a n	C o n	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE																			
					Co	M	Exd	M	Eyd	N	Ed	x/	εf%	εc%	Area	cmq	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe	Coe	ALon
					mb	(t°m)	(t°m)	(t)	/d	100	100	sup	inf	mb	(t)	(t)	(t°m)	(t°m)	(t°m)	(t°m)	(t°m)	(t°m)	(t°m)	(t°m)	(t°m)	(t°m)	Cls	Sta	cmq	Pas	Lun	Fi
2.5	1.00		25	5	24	-0.4	-1.0	-0.8	29	3	1	3.1	3.1	10	0.4	-1.2	0.0	14.5	14.1	1.4	0.0	11	3	0.0	5	25	8					
51	11.48		26	1	25	-1.1	0.0	0.0	25	9	4	3.1	3.1	15	0.0	1.1	0.0	14.5	14.1	1.4	0.0	8	3	0.0	5	25	8					
52	11.48		30	3	15	1.7	0.0	0.0	26	14	6	3.1	3.1	15	0.0	1.0	0.0	13.7	11.1	2.4	0.0	7	9	0.0	17	84	8					
2.5	1.00		25	5	15	1.9	0.0	0.0	26	15	7	3.1	3.1	27	0.0	-1.0	0.0	14.5	14.1	1.4	0.0	7	3	0.0	5	25	8					
40	13.88		26	1	24	-1.2	0.0	0.0	25	10	4	3.1	3.1	23	0.0	1.8	0.0	14.5	14.1	1.4	0.0	12	5	0.0	5	25	8					
41	13.88		30	3	24	-0.8	0.0	0.0	25	6	3	3.1	3.1	24	0.0	1.7	0.0	13.7	11.1	2.4	0.0	12	15	0.0	17	84	8					
2.5	1.00		25	5	24	1.0	0.0	0.0	25	8	3	3.1	3.1	23	0.0	1.5	0.0	14.5	14.1	1.4	0.0	11	4	0.0	5	25	8					
37	12.56		26	1	10	-3.2	0.0	0.0	21	52	16	4.3	3.1	10	0.0	2.9	0.0	14.5	14.1	1.4	0.0	21	8	0.0	5	25	8					
36	12.56		30	3	10	-2.2	0.0	0.0	26	18	8	3.1	3.1	10	0.0	2.9	0.0	13.7	11.1	2.4	0.0	20	26	0.0	17	99	8					
2.5	1.00		25	5	24	1.0	0.0	0.0	25	8	3	3.1	3.1	10	0.0	2.6	0.0	14.5	14.1	1.4	0.0	19	7	0.0	5	25	8					
43	12.56		26	1	10	-3.2	0.0	0.0	21	48	16	4.3	3.1	10	0.0	2.9	0.0	14.5	14.1	1.4	0.0	21	8	0.0	5	25	8					
42	12.56		30	3	10	-2.2	0.0	0.0	26	18	8	3.1	3.1	10	0.0	2.8	0.0	13.7	11.1	2.4	0.0	20	25	0.0	17	99	8					
2.5	1.00		25	5	25	0.9	0.0	0.0	25	8	3	3.1	3.1	10	0.0	2.6	0.0	14.5	14.1	1.4	0.0	18	7	0.0	5	25	8					
36	12.56		26	1	24	-0.4	-1.8	0.0	25	3	1	3.1	3.1	30	-1.0	1.2	0.0	14.5	14.1	1.4	0.0	15	3	0.0	5	25	8					
35	11.48		30	3	46	1.0	-0.4	-0.2	26	8	4	3.1	3.1	7	-0.6	-1.5	0.0	14.5	14.1	1.4	0.0	15	14	0.0	17	269	8					
2.5	1.00		25	5	34	-2.3	0.6	-0.6	27	18	8	3.1	3.1	7	-0.6	-1.8	0.0	14.5	14.1	1.4	0.0	17	5	0.0	5	25	8					
75	13.88		26	1	41	1.4	0.0	0.0	26	11	5	3.1	3.1	41	0.0	-0.5	0.0	14.5	14.1	1.4	0.0	4	1	0.0	5	25	8					
30	13.88		30	3	37	1.1	0.0	0.0	25	9	4	3.1	3.1	41	0.0	-1.1	0.0	13.7	11.1	2.4	0.0	8	10	0.0	17	325	8					
2.5	1.00		25	5	41	-1.7	0.0	0.0	26	14	6	3.1	3.1	41	0.0	-1.2	0.0	14.5	14.1	1.4	0.0	8	3	0.0	5	25	8					
42	12.56		26	1	25	-0.4	1.7	0.0	25	4	1	3.1	3.1	25	1.1	1.1	0.0	14.5	14.1	1.4	0.0	15	3	0.0	5	25	8					
52	11.48		30	3	37	-1.0	0.3	-0.4	26	7	3	3.1	3.1	10	0.6	-1.5	0.0	14.5	14.1	1.4	0.0	15	14	0.0	17	270	8					
2.5	1.00		25	5	37	-2.4	0.4	-0.6	19	44	13	3.1	3.1	10	0.6	-1.8	0.0	14.5	14.1	1.4	0.0	17	5	0.0	5	25	8					
30	3.63	2	42	1	20	-1.1	0.0	0.0	27	5	2	4.0	4.0	20	0.0	2.6	0.0	10.3	11.1	2.2	0.0	16	23	0.0	21	0	8					
12	3.63	/	28	3	20	-1.1	0.0	0.0	27	5	2	4.0	4.0	20	0.0	2.5	0.0	10.3	11.1	2.2	0.0	16	23	0.0	21	77	8					
2.5	1.00	4	30	5	20	0.8	0.0	0.0	26	4	2	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8					
30	3.63	3	42	1	20	-0.6	0.0	0.0	26	3	1	4.0	4.0	20	0.0	1.4	0.0	10.3	11.1	2.2	0.0	9	13	0.0	21	0	8					
12	3.63	/	28	3	20	-0.6	0.0	0.0	26	3	1	4.0	4.0	20	0.0	1.4	0.0	10.3	11.1	2.2	0.0	9	13	0.0	21	77	8					
2.5	1.00	4	30	5	20	0.4	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8					
30	3.63	4	42	1	20	-0.5	0.0	0.0	26	3	1	4.0	4.0	18	0.0	1.0	0.0	10.3	11.1	2.2	0.0	6	9	0.0	21	0	8					
12	3.63	/	28	3	20	-0.5	0.0	0.0	26	3	1	4.0	4.0	18	0.0	1.0	0.0	10.3	11.1	2.2	0.0	6	9	0.0	21	77	8					
2.5	1.00	4	30	5	34	0.2	0.0	0.0	26	1	0	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8					
25	3.63	2	42	1	43	0.3	0.0	0.0	26	2	1	4.0	4.0	43	0.0	-0.2	0.0	10.3	11.1	2.2	0.0	2	2	0.0	21	0	8					
23	3.63	/	28	3	43	0.3	0.0	0.0	26	1	1	4.0	4.0	12	0.0	-0.5	0.0	10.3	11.1	2.2	0.0	3	5	0.0	21	119	8					
2.5	1.00	2	30	5	6	-0.2	0.0	0.0	26	1	0	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8					
60	3.63	2	27	1	25	-0.7	0.0	0.0	29	4	2	4.0	4.0	25	0.0	1.3	0.0	11.1	11.1	1.9	0.0	11	11	0.0	17	0	8					
47	3.63	/	25	3	25	0.4	0.0	0.0	29	3	1	4.0	4.0	25	0.0	1.3	0.0	11.1	11.1	1.9	0.0	11	11	0.0	17	113	8					
2.5	1.00	2	25	5	25	0.7	0.0	0.0	29	4	2	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8					
63	3.63	2	27	1	15	-0.9	0.0	0.0	29	6	3	4.0	4.0	15	0.0	1.8	0.0	11.1	11.1	1.9	0.0	15	16	0.0	17	0	8					
61	3.63	/	25	3	15	0.6	0.0	0.0	29	4	2	4.0	4.0	15	0.0	1.8	0.0	11.1	11.1	1.9	0.0	15	16	0.0	17	113	8					
2.5	1.00	2	25	5	15	1.0	0.0	0.0	29	6	3	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8					
47	3.63	2	27	1	15	0.3	0.0	0.0	29	2	1	4.0	4.0	27	0.0	0.8	0.0	11.1	11.1	1.9	0.0	7	7	0.0	17	0	8					
61	3.63	/	25	3	15	-0.3	0.0	0.0	29	2	1	4.0	4.0	15	0.0	-0.8	0.0	11.														

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	Tr a Bas t	Sez a Alt c	Co n mb	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE														
					CoM mb	M Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area cmq sup inf	Co mb	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRLd (t*m)	Coe CIs	Coe Sta	ALon cmq	Staffe Pas Lun Fi			
2.5	1.00	4	45	5	21	-22.3	0.0	0.0	36	24	15	15.7	8.6	21	0.0	-17.8	0.5	26.1	27.2	3.0	0.6	81	54	2.8	10	45	8
9	3.63	2	25	1	6	-3.6	0.0	0.0	24	11	4	4.3	3.1	6	0.0	4.4	0.0	11.1	17.4	4.1	0.0	16	25	0.0	21	0	8
10	3.63	/	30	3	6	-3.6	0.0	0.0	24	11	4	4.3	3.1	6	0.0	4.4	0.0	11.1	17.4	4.1	0.0	16	25	0.0	21	42	8
2.5	1.00	2	45	5	18	-1.0	0.0	0.0	23	3	1	4.3	4.3	6	0.0	4.2	0.0	26.1	27.2	3.0	0.0	15	12	0.0	10	45	8
2	3.63	2	25	1	12	-3.6	0.0	0.0	24	10	4	4.3	3.1	12	0.0	4.4	0.0	11.1	17.4	4.1	0.0	16	25	0.0	21	0	8
3	3.63	/	30	3	12	-3.6	0.0	0.0	24	10	4	4.3	3.1	12	0.0	4.4	0.0	11.1	17.4	4.1	0.0	16	25	0.0	21	42	8
2.5	1.00	2	45	5	21	-1.0	0.0	0.0	23	3	1	4.3	4.3	1	0.0	4.2	0.0	26.1	27.2	3.0	0.0	15	11	0.0	10	45	8
7	3.63	2	25	1	24	-5.5	0.0	0.0	23	16	5	4.3	4.3	24	0.0	10.4	0.0	11.1	17.4	4.1	0.0	38	60	0.0	21	0	8
9	3.63	/	30	3	9	6.9	0.0	0.0	26	16	6	4.3	5.3	24	0.0	10.2	0.0	11.1	17.4	4.1	0.0	38	59	0.0	21	121	8
2.5	1.00	4	45	5	9	6.9	0.0	0.0	27	16	7	3.1	5.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
7	3.63	3	25	1	9	7.4	0.0	0.0	27	18	7	3.1	5.3	24	0.0	6.5	0.0	11.1	17.4	4.1	0.0	24	37	0.0	21	0	8
9	3.63	/	30	3	24	10.0	0.0	0.0	19	61	15	3.1	6.7	20	0.0	-7.7	0.0	11.1	17.4	4.1	0.0	28	44	0.0	21	121	8
2.5	1.00	4	45	5	24	10.0	0.0	0.0	19	54	14	4.3	6.7	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
7	3.63	4	25	1	24	10.5	0.0	0.0	17	66	15	5.4	6.9	20	0.0	-11.4	-0.4	26.1	27.2	3.0	0.5	55	54	2.2	15	0	8
9	3.63	/	30	3	20	-18.1	0.0	0.0	36	18	12	13.3	8.7	20	0.0	-13.8	-0.4	26.1	27.2	3.0	0.5	64	63	2.2	15	76	8
2.5	1.00	4	45	5	20	-18.1	0.0	0.0	25	41	16	12.3	8.7	20	0.0	-15.4	-0.4	26.1	27.2	3.0	0.5	70	47	2.2	10	45	8
5	3.63	2	25	1	25	-4.9	0.0	0.0	23	14	5	4.3	4.3	25	0.0	9.8	0.0	11.1	17.4	4.1	0.0	36	57	0.0	21	0	8
2	3.63	/	30	3	9	6.9	0.0	0.0	26	16	6	4.3	5.3	25	0.0	9.7	0.0	11.1	17.4	4.1	0.0	36	56	0.0	21	121	8
2.5	1.00	4	45	5	9	6.9	0.0	0.0	27	16	7	3.1	5.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
5	3.63	3	25	1	9	7.4	0.0	0.0	27	18	7	3.1	5.3	25	0.0	5.9	0.0	11.1	17.4	4.1	0.0	22	34	0.0	21	0	8
2	3.63	/	30	3	25	9.2	0.0	0.0	23	32	11	3.1	6.2	21	0.0	-7.0	0.0	11.1	17.4	4.1	0.0	26	40	0.0	21	121	8
2.5	1.00	4	45	5	25	9.2	0.0	0.0	24	28	10	4.3	6.2	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
5	3.63	4	25	1	25	9.4	0.0	0.0	22	34	11	4.3	6.3	21	0.0	-10.3	0.4	26.1	27.2	3.0	0.5	50	48	2.2	15	0	8
2	3.63	/	30	3	25	10.1	0.0	0.0	18	40	10	11.1	6.7	21	0.0	-12.7	0.4	26.1	27.2	3.0	0.5	59	58	2.2	15	76	8
2.5	1.00	4	45	5	25	10.1	0.0	0.0	18	39	10	11.1	6.7	21	0.0	-14.3	0.4	26.1	27.2	3.0	0.5	65	43	2.2	10	45	8
53	3.63	2	25	1	12	-5.9	0.0	0.0	24	17	6	4.3	3.1	9	0.0	-6.1	0.5	26.1	27.2	3.0	0.6	40	34	2.6	15	0	8
54	3.63	/	30	3	12	-8.4	0.0	0.0	29	19	8	5.8	3.1	9	0.0	-6.3	0.5	26.1	27.2	3.0	0.6	41	35	2.6	15	42	8
2.5	1.00	2	45	5	12	-8.4	0.0	0.0	29	19	8	5.8	3.1	9	0.0	-6.5	0.5	26.1	27.2	3.0	0.6	42	24	2.6	10	45	8
17	3.63	2	25	1	6	-3.3	0.0	0.0	24	10	3	4.3	3.1	6	0.0	4.0	0.0	11.1	17.4	4.1	0.0	15	23	0.0	21	0	8
11	3.63	/	30	3	6	-3.3	0.0	0.0	24	10	3	4.3	3.1	6	0.0	4.0	0.0	11.1	17.4	4.1	0.0	15	23	0.0	21	42	8
2.5	1.00	2	45	5	40	-1.1	0.0	0.0	23	3	1	4.3	4.3	6	0.0	3.8	0.0	26.1	27.2	3.0	0.0	14	10	0.0	10	45	8
11	3.63	2	26	1	3	1.1	0.0	0.0	25	9	4	3.1	3.1	9	0.0	0.6	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8
8	3.63	/	30	3	3	1.1	0.0	0.0	25	9	4	3.1	3.1	3	0.0	-0.7	0.0	13.7	11.1	2.4	0.0	5	7	0.0	17	117	8
2.5	1.00	4	25	5	3	1.0	0.0	0.0	25	8	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
11	3.63	3	26	1	3	1.2	0.0	0.0	25	9	4	3.1	3.1	20	0.0	-0.7	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	0	8
8	3.63	/	30	3	6	1.0	0.0	0.0	25	8	4	3.1	3.1	3	0.0	-1.6	0.0	13.7	11.1	2.4	0.0	12	15	0.0	17	117	8
2.5	1.00	4	25	5	24	0.4	0.0	0.0	25	4	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
11	3.63	4	26	1	24	0.5	0.0	0.0	25	4	2	3.1	3.1	9	0.0	-0.6	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8
8	3.63	/	30	3	3	-0.8	0.0	0.0	25	7	3	3.1	3.1	9	0.0	-1.5	0.0	13.7	11.1	2.4	0.0	11	13	0.0	17	92	8
2.5	1.00	4	25	5	3	-1.2	0.0	0.0	25	10	4	3.1	3.1	9	0.0	-1.8	0.0	14.5	14.1	1.4	0.0	13	5	0.0	5	25	8
53	3.63	2	26	1	3	1.1	0.0	0.0	25	9	4	3.1	3.1	9	0.0	0.5	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8
4	3.63	/	30	3	3	1.1	0.0	0.0	25	9	4	3.1	3.1	3	0.0	-0.7	0.0	13.7	11.1	2.4	0.0	5	7	0.0	17	117	8
2.5	1.00	4	25	5	3	1.0	0.0	0.0	25	8	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
53	3.63	3	26	1	3	1.2	0.0	0.0	25	9	4	3.1	3.1	21	0.0	-0.6	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	0	8
4	3.63	/	30	3	12	1.0	0.0	0.0	25	8	3	3.1	3.1	3	0.0	-1.7	0.0	13.7	11.1	2.4	0.0	12	15	0.0	17	117	8
2.5	1.00	4	25	5	25	0.4	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
53	3.63	4	26	1	25	0.4																					

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a Bas n	C o n	VERIFICA A PRESSO-FLESSIONE								VERIFICA A TAGLIO E TORSIONE														
					Co mb	M Exd (t*m)	M Eyd (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area cmq sup inf	Co mb	V Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRLd (t*m)	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi			
2.5	1.00	4	25	5	9	1.6	0.0	0.0	26	13	6	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
4	3.63	3	26	1	9	1.5	0.0	0.0	26	12	5	3.1	3.1	9	0.0	0.8	0.0	13.7	11.1	2.4	0.0	5	7	0.0	17	0	8
3	3.63	/	30	3	9	1.6	0.0	0.0	26	13	6	3.1	3.1	9	0.0	0.7	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	136	8
2.5	1.00	4	25	5	9	1.5	0.0	0.0	26	13	5	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8
4	3.63	4	26	1	9	1.1	0.0	0.0	25	9	4	3.1	3.1	25	0.0	-0.4	0.0	13.7	11.1	2.4	0.0	3	4	0.0	17	0	8
3	3.63	/	30	3	9	1.0	0.0	0.0	25	8	3	3.1	3.1	9	0.0	-1.2	0.0	13.7	11.1	2.4	0.0	9	11	0.0	17	111	8
2.5	1.00	4	25	5	25	0.3	0.0	0.0	25	2	1	3.1	3.1	9	0.0	-1.5	0.0	14.5	14.1	1.4	0.0	11	4	0.0	5	25	8
7	3.63	2	33	1	12	-0.7	0.0	0.0	24	9	4	3.1	3.1	12	0.0	1.3	0.0	37.2	11.6	4.2	0.0	8	11	0.0	11	0	8
8	3.63	/	50	3	12	-0.5	0.0	0.0	24	6	3	3.1	3.1	12	0.0	1.3	0.0	37.2	11.6	4.2	0.0	8	11	0.0	11	69	8
2.5	1.00	2	18	5	3	0.3	0.0	0.0	23	3	1	3.1	3.1	12	0.0	1.1	0.0	18.3	15.9	1.6	0.0	7	3	0.0	3	18	8
5	3.63	2	33	1	6	-0.7	0.0	0.0	24	9	4	3.1	3.1	6	0.0	1.3	0.0	37.2	11.6	4.2	0.0	8	11	0.0	11	0	8
4	3.63	/	50	3	6	-0.5	0.0	0.0	24	6	3	3.1	3.1	6	0.0	1.3	0.0	37.2	11.6	4.2	0.0	8	11	0.0	11	69	8
2.5	1.00	2	18	5	3	0.3	0.0	0.0	23	3	1	3.1	3.1	1	0.0	1.1	0.0	18.3	15.9	1.6	0.0	7	3	0.0	3	18	8
30	6.88	2	42	1	20	-1.3	0.0	0.0	27	7	3	4.0	4.0	20	0.0	3.1	0.0	10.3	11.1	2.2	0.0	19	28	0.0	21	0	8
12	6.88	/	28	3	20	-1.3	0.0	0.0	27	7	3	4.0	4.0	20	0.0	3.1	0.0	10.3	11.1	2.2	0.0	19	28	0.0	21	77	8
2.5	1.00	4	30	5	20	1.0	0.0	0.0	26	5	2	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8
30	6.88	3	42	1	20	-0.8	0.0	0.0	26	4	2	4.0	4.0	20	0.0	1.8	0.0	10.3	11.1	2.2	0.0	11	16	0.0	21	0	8
12	6.88	/	28	3	20	-0.8	0.0	0.0	26	4	2	4.0	4.0	20	0.0	1.8	0.0	10.3	11.1	2.2	0.0	11	16	0.0	21	77	8
2.5	1.00	4	30	5	20	0.5	0.0	0.0	26	3	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8
30	6.88	4	42	1	20	-0.5	0.0	0.0	26	3	1	4.0	4.0	18	0.0	1.2	0.0	10.3	11.1	2.2	0.0	7	11	0.0	21	0	8
12	6.88	/	28	3	20	-0.5	0.0	0.0	26	3	1	4.0	4.0	18	0.0	1.2	0.0	10.3	11.1	2.2	0.0	7	11	0.0	21	77	8
2.5	1.00	4	30	5	18	0.3	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8
25	6.88	2	42	1	12	0.2	0.0	0.0	26	1	1	4.0	4.0	12	0.0	-0.3	0.0	10.3	11.1	2.2	0.0	2	3	0.0	21	0	8
23	6.88	/	28	3	3	-0.2	0.0	0.0	26	1	0	4.0	4.0	1	0.0	-0.6	0.0	10.3	11.1	2.2	0.0	4	6	0.0	21	119	8
2.5	1.00	2	30	5	3	-0.3	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8
60	6.88	2	27	1	25	-0.5	0.0	0.0	29	3	2	4.0	4.0	25	0.0	0.9	0.0	11.1	11.1	1.9	0.0	8	8	0.0	17	0	8
47	6.88	/	25	3	25	-0.3	0.0	0.0	29	2	1	4.0	4.0	25	0.0	0.9	0.0	11.1	11.1	1.9	0.0	8	8	0.0	17	113	8
2.5	1.00	2	25	5	21	-0.5	0.0	0.0	29	3	1	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8
63	6.88	2	27	1	15	-0.6	0.0	0.0	29	4	2	4.0	4.0	15	0.0	1.2	0.0	11.1	11.1	1.9	0.0	10	11	0.0	17	0	8
61	6.88	/	25	3	15	0.4	0.0	0.0	29	2	1	4.0	4.0	15	0.0	1.2	0.0	11.1	11.1	1.9	0.0	10	11	0.0	17	113	8
2.5	1.00	2	25	5	15	0.6	0.0	0.0	29	4	2	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8
47	6.88	2	27	1	27	-0.2	0.0	0.0	29	1	1	4.0	4.0	27	0.0	0.6	0.0	11.1	11.1	1.9	0.0	5	5	0.0	17	0	8
61	6.88	/	25	3	21	-0.2	0.0	0.0	29	1	1	4.0	4.0	15	0.0	-0.6	0.0	11.1	11.1	1.9	0.0	5	6	0.0	17	89	8
2.5	1.00	2	25	5	21	-0.3	0.0	0.0	29	2	1	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8
17	6.88	2	25	1	20	8.4	0.0	0.0	27	18	7	5.3	5.7	24	0.0	10.5	0.0	11.1	17.4	4.1	0.0	39	60	0.0	21	0	8
7	6.88	/	30	3	20	8.4	0.0	0.0	27	18	7	5.3	5.7	24	0.0	10.3	0.0	11.1	17.4	4.1	0.0	38	59	0.0	21	102	8
2.5	1.00	4	45	5	20	5.9	0.0	0.0	24	17	6	3.1	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
17	6.88	3	25	1	24	4.3	0.0	0.0	24	13	4	3.1	4.3	24	0.0	6.6	0.0	11.1	17.4	4.1	0.0	24	38	0.0	21	0	8
7	6.88	/	30	3	24	6.7	0.0	0.0	26	16	6	4.3	5.3	20	0.0	-10.0	0.0	11.1	17.4	4.1	0.0	37	57	0.0	21	102	8
2.5	1.00	4	45	5	24	6.7	0.0	0.0	26	16	6	4.3	5.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
17	6.88	4	25	1	20	-10.8	0.0	0.0	16	76	16	7.1	5.7	20	0.0	-12.6	-0.5	26.1	27.2	3.0	0.6	62	60	2.8	15	0	8
7	6.88	/	30	3	24	10.3	0.0	0.0	17	42	9	13.9	6.9	20	0.0	-14.5	-0.5	26.1	27.2	3.0	0.6	69	68	2.8	15	57	8
2.5	1.00	4	45	5	20	-19.3	0.0	0.0	39	18	13	13.9	7.0	20	0.0	-16.0	-0.5	26.1	27.2	3.0	0.6	75	49	2.8	10	45	8
54	6.88	2	25	1	21	7.6	0.0	0.0	26	18	7	4.3	5.3	25	0.0	9.6	0.0	11.1	17.4	4.1	0.0	35	55	0.0	21	0	8
5	6.88	/	30	3	21	7.6	0.0	0.0	26	18	7	4.3	5.3	25	0.0	9.4	0.0	11.1	17.4	4.1	0.0	34	54	0.0	21	102	8
2.5	1.00	4	45	5	21	5.5	0.0	0.0	24	16	6	3.1	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8
54	6.88	3	25	1	3	4.0	0.0	0.0	24	12	4	3.1	4.3	21</													

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a Bas n	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																	
					Co	M	Exd	M	Eyd	N	Ed	x/	εf%	εc%	Area	cmq	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe	Coe	ALon
mb	(t*m)	(t*m)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	mb	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	Cls	Coe	ALon	Pas	Lun	Fi
2.5	1.00	4	45	5	9	6.6	0.0	0.0	0.0	27	16	6	3.1	5.3	0	0.0	0.0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8		
7	6.88	3	25	1	24	7.0	0.0	0.0	0.0	27	17	7	3.1	5.3	24	0.0	5.2	0.0	11.1	17.4	4.1	0.0	19	30	0.0	21	0	8				
9	6.88	/	30	3	24	8.7	0.0	0.0	0.0	28	19	8	4.3	6.0	20	0.0	-7.7	0.0	11.1	17.4	4.1	0.0	28	44	0.0	21	121	8				
2.5	1.00	4	45	5	24	8.7	0.0	0.0	0.0	28	19	8	4.3	6.0	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8				
7	6.88	4	25	1	24	8.6	0.0	0.0	0.0	27	18	8	5.7	5.9	20	0.0	-11.5	-0.4	26.1	27.2	3.0	0.5	56	55	2.4	15	0	8				
9	6.88	/	30	3	20	-18.7	0.0	0.0	0.0	39	18	13	13.6	6.0	20	0.0	-13.9	-0.4	26.1	27.2	3.0	0.5	65	64	2.4	15	76	8				
2.5	1.00	4	45	5	20	-18.7	0.0	0.0	0.0	38	18	13	13.6	6.8	3	0.0	-14.4	-0.5	26.1	27.2	3.0	0.5	71	47	2.4	10	45	8				
5	6.88	2	25	1	15	4.3	0.0	0.0	0.0	23	13	4	4.3	4.3	27	0.0	8.7	0.0	11.1	17.4	4.1	0.0	32	50	0.0	21	0	8				
2	6.88	/	30	3	9	6.5	0.0	0.0	0.0	16	51	11	3.1	4.3	27	0.0	8.5	0.0	11.1	17.4	4.1	0.0	31	49	0.0	21	121	8				
2.5	1.00	4	45	5	9	6.5	0.0	0.0	0.0	16	51	11	3.1	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8				
5	6.88	3	25	1	25	6.6	0.0	0.0	0.0	27	16	7	3.1	5.3	27	0.0	4.7	0.0	11.1	17.4	4.1	0.0	17	27	0.0	21	0	8				
2	6.88	/	30	3	25	8.0	0.0	0.0	0.0	27	18	8	4.3	5.5	15	0.0	-7.2	0.0	11.1	17.4	4.1	0.0	26	41	0.0	21	121	8				
2.5	1.00	4	45	5	25	8.0	0.0	0.0	0.0	27	18	8	4.3	5.5	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8				
5	6.88	4	25	1	25	7.6	0.0	0.0	0.0	26	18	7	5.3	5.3	15	0.0	-10.7	0.4	26.1	27.2	3.0	0.5	53	51	2.4	15	0	8				
2	6.88	/	30	3	21	-17.1	0.0	0.0	0.0	29	37	17	11.7	5.3	3	0.0	-11.9	0.5	26.1	27.2	3.0	0.5	62	61	2.4	15	76	8				
2.5	1.00	4	45	5	21	-17.1	0.0	0.0	0.0	29	35	16	11.7	5.9	3	0.0	-14.4	0.5	26.1	27.2	3.0	0.5	71	46	2.4	10	45	8				
53	6.88	2	25	1	12	-6.0	0.0	0.0	0.0	24	18	6	4.3	3.1	9	0.0	-6.2	0.6	26.1	27.2	3.0	0.6	42	35	2.6	15	0	8				
54	6.88	/	30	3	12	-8.5	0.0	0.0	0.0	29	19	8	5.8	3.1	9	0.0	-6.3	0.6	26.1	27.2	3.0	0.6	43	36	2.6	15	42	8				
2.5	1.00	2	45	5	12	-8.5	0.0	0.0	0.0	29	19	8	5.8	3.1	9	0.0	-6.5	0.6	26.1	27.2	3.0	0.6	43	25	2.6	10	45	8				
17	6.88	2	25	1	6	-3.4	0.0	0.0	0.0	24	10	3	4.3	3.1	6	0.0	4.1	0.0	11.1	17.4	4.1	0.0	15	24	0.0	21	0	8				
11	6.88	/	30	3	6	-3.4	0.0	0.0	0.0	24	10	3	4.3	3.1	1	0.0	4.1	0.0	11.1	17.4	4.1	0.0	15	23	0.0	21	42	8				
2.5	1.00	2	45	5	40	-1.1	0.0	0.0	0.0	23	3	1	4.3	4.3	6	0.0	3.9	0.0	26.1	27.2	3.0	0.0	14	11	0.0	10	45	8				
11	6.88	2	26	1	3	1.0	0.0	0.0	0.0	25	8	4	3.1	3.1	9	0.0	0.6	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8				
8	6.88	/	30	3	3	1.1	0.0	0.0	0.0	25	9	4	3.1	3.1	3	0.0	-0.7	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	117	8				
2.5	1.00	4	25	5	3	1.0	0.0	0.0	0.0	25	8	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8				
11	6.88	3	26	1	3	1.2	0.0	0.0	0.0	25	9	4	3.1	3.1	20	0.0	-0.5	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8				
8	6.88	/	30	3	3	1.0	0.0	0.0	0.0	25	8	4	3.1	3.1	3	0.0	-1.6	0.0	13.7	11.1	2.4	0.0	11	14	0.0	17	117	8				
2.5	1.00	4	25	5	9	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8				
11	6.88	4	26	1	24	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	9	0.0	-0.5	0.0	13.7	11.1	2.4	0.0	3	4	0.0	17	0	8				
8	6.88	/	30	3	3	-0.7	0.0	0.0	0.0	25	6	2	3.1	3.1	9	0.0	-1.4	0.0	13.7	11.1	2.4	0.0	10	13	0.0	17	92	8				
2.5	1.00	4	25	5	3	-1.1	0.0	0.0	0.0	25	9	4	3.1	3.1	9	0.0	-1.7	0.0	14.5	14.1	1.4	0.0	12	5	0.0	5	25	8				
53	6.88	2	26	1	3	1.0	0.0	0.0	0.0	25	8	4	3.1	3.1	9	0.0	0.6	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8				
4	6.88	/	30	3	3	1.1	0.0	0.0	0.0	25	9	4	3.1	3.1	3	0.0	-0.7	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	117	8				
2.5	1.00	4	25	5	3	1.0	0.0	0.0	0.0	25	8	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8				
53	6.88	3	26	1	3	1.1	0.0	0.0	0.0	25	9	4	3.1	3.1	21	0.0	-0.5	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8				
4	6.88	/	30	3	3	1.0	0.0	0.0	0.0	25	8	3	3.1	3.1	3	0.0	-1.6	0.0	13.7	11.1	2.4	0.0	11	14	0.0	17	117	8				
2.5	1.00	4	25	5	9	0.4	0.0	0.0	0.0	25	3	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8				
53	6.88	4	26	1	25	0.3	0.0	0.0	0.0	25	2	1	3.1	3.1	1	0.0	-0.5	0.0	13.7	11.1	2.4	0.0	4	4	0.0	17	0	8				
4	6.88	/	30	3	3	-0.8	0.0	0.0	0.0	25	6	3	3.1	3.1	9	0.0	-1.4	0.0	13.7	11.1	2.4	0.0	10	13	0.0	17	92	8				
2.5	1.00	4	25	5	12	-1.1	0.0	0.0	0.0	25	9	4	3.1	3.1	9	0.0	-1.7	0.0	14.5	14.1	1.4	0.0	12	5	0.0	5	25	8				
8	6.88	2	26	1	3	0.7	0.0	0.0	0.0	25	5	2	3.1	3.1	9	0.0	1.7	0.0	13.7	11.1	2.4	0.0	12	15	0.0	17	0	8				
10	6.88	/	30	3	9	1.5	0.0	0.0	0.0	26	12	5	3.1	3.1	9	0.0	1.6	0.0	13.7	11.1	2.4	0.0	11	14	0.0	17	136	8				
2.5	1.00	4	25	5	9	1.6	0.0	0.0	0.0	26	13	5	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8				
8	6.88	3	26	1	9	1.5	0.0	0.0	0.0	26	12	5	3.1	3.1	9	0.0	0.7	0.0	13.7	11.1	2.4	0.0	5	7	0.0	17	0	8				
10	6.88	/	30																													

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a Bas	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE														Staffe Pas Lun Fi			
					Co	M	Exd	M	Eyd	N	Ed	x/	εf%	εc%	Area sup	cmq inf	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd				TRLd
2.5	1.00	2	18	5	3	0.2	0.0	0.0	0.0	23	3	1	3.1	3.1	3	0.0	1.0	0.0	18.3	15.9	1.6	0.0	7	2	0.0	3	18	8				
5	6.88	2	33	1	6	-0.7	0.0	0.0	24	9	4	3.1	3.1	1	0.0	1.2	0.0	37.2	11.6	4.2	0.0	8	11	0.0	11	0	8					
4	6.88	/	50	3	6	-0.5	0.0	0.0	24	6	3	3.1	3.1	1	0.0	1.2	0.0	37.2	11.6	4.2	0.0	8	11	0.0	11	69	8					
2.5	1.00	2	18	5	3	0.3	0.0	0.0	23	3	1	3.1	3.1	6	0.0	1.0	0.0	18.3	15.9	1.6	0.0	7	2	0.0	3	18	8					
30	10.13	2	42	1	20	-1.1	0.0	0.0	27	6	2	4.0	4.0	20	0.0	2.6	0.0	10.3	11.1	2.2	0.0	16	23	0.0	21	0	8					
12	10.13	/	28	3	20	-1.1	0.0	0.0	27	6	2	4.0	4.0	20	0.0	2.6	0.0	10.3	11.1	2.2	0.0	16	23	0.0	21	77	8					
2.5	1.00	4	30	5	20	0.8	0.0	0.0	26	4	2	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8					
30	10.13	3	42	1	20	-0.6	0.0	0.0	26	3	1	4.0	4.0	20	0.0	1.5	0.0	10.3	11.1	2.2	0.0	9	14	0.0	21	0	8					
12	10.13	/	28	3	20	-0.6	0.0	0.0	26	3	1	4.0	4.0	20	0.0	1.5	0.0	10.3	11.1	2.2	0.0	9	14	0.0	21	77	8					
2.5	1.00	4	30	5	20	0.5	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8					
30	10.13	4	42	1	18	-0.4	0.0	0.0	26	2	1	4.0	4.0	18	0.0	1.1	0.0	10.3	11.1	2.2	0.0	7	10	0.0	21	0	8					
12	10.13	/	28	3	18	-0.4	0.0	0.0	26	2	1	4.0	4.0	18	0.0	1.1	0.0	10.3	11.1	2.2	0.0	7	10	0.0	21	77	8					
2.5	1.00	4	30	5	18	0.3	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8					
25	10.13	2	42	1	12	0.3	0.0	0.0	26	1	1	4.0	4.0	1	0.0	-0.4	0.0	10.3	11.1	2.2	0.0	2	3	0.0	21	0	8					
23	10.13	/	28	3	12	-0.2	0.0	0.0	26	1	0	4.0	4.0	1	0.0	-0.7	0.0	10.3	11.1	2.2	0.0	4	6	0.0	21	119	8					
2.5	1.00	2	30	5	12	-0.3	0.0	0.0	26	2	1	4.0	4.0	0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8					
60	10.13	2	27	1	27	-0.2	0.0	0.0	29	1	1	4.0	4.0	27	0.0	0.4	0.0	11.1	11.1	1.9	0.0	3	3	0.0	17	0	8					
47	10.13	/	25	3	43	-0.1	0.0	0.0	29	1	0	4.0	4.0	27	0.0	0.4	0.0	11.1	11.1	1.9	0.0	3	3	0.0	17	113	8					
2.5	1.00	2	25	5	15	-0.2	0.0	0.0	29	1	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8					
63	10.13	2	27	1	21	-0.2	0.0	0.0	29	1	1	4.0	4.0	21	0.0	0.4	0.0	11.1	11.1	1.9	0.0	3	4	0.0	17	0	8					
61	10.13	/	25	3	21	0.1	0.0	0.0	29	1	0	4.0	4.0	21	0.0	0.4	0.0	11.1	11.1	1.9	0.0	3	4	0.0	17	113	8					
2.5	1.00	2	25	5	25	-0.2	0.0	0.0	29	1	1	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8					
47	10.13	2	27	1	25	-0.1	0.0	0.0	29	1	0	4.0	4.0	25	0.0	0.2	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	0	8					
61	10.13	/	25	3	37	-0.1	0.0	0.0	29	0	0	4.0	4.0	21	0.0	-0.3	0.0	11.1	11.1	1.9	0.0	2	2	0.0	17	89	8					
2.5	1.00	2	25	5	37	-0.1	0.0	0.0	29	1	0	4.0	4.0	0	0.0	0.0	0.0	11.1	11.1	1.9	0.0	0	0	0.0	17	0	8					
17	10.24	2	25	1	20	6.2	0.0	-4.5	27	16	6	4.3	4.3	24	-0.4	6.1	0.0	11.1	17.4	4.1	0.0	23	35	0.0	21	0	8					
7	11.87	/	30	3	20	6.2	-0.1	-4.1	27	16	6	4.3	4.3	24	-0.4	6.0	0.0	11.1	17.4	4.1	0.0	23	34	0.0	21	110	8					
2.5	1.00	4	45	5	20	4.4	-0.1	-3.6	28	11	5	3.1	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8					
17	10.24	3	25	1	20	3.4	0.0	7.3	16	14	3	3.1	4.3	20	0.1	-4.2	0.0	11.1	17.4	4.1	0.0	16	24	0.0	21	0	8					
7	11.87	/	30	3	20	3.4	-0.1	7.7	16	14	3	3.1	4.3	20	0.1	-6.4	0.0	11.1	17.4	4.1	0.0	24	37	0.0	21	110	8					
2.5	1.00	4	45	5	18	-2.6	-0.2	5.1	16	10	2	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8					
17	10.24	4	25	1	19	0.1	0.9	26.2	5	12	10	6.3	5.4	20	1.4	-7.8	0.0	11.1	17.4	4.1	0.0	34	45	0.0	21	0	8					
7	11.87	/	30	3	18	-10.2	-0.6	21.7	23	17	6	10.3	6.1	20	1.4	-9.0	0.0	11.1	17.4	4.1	0.0	39	52	0.0	21	65	8					
2.5	1.00	4	45	5	18	-10.2	-0.9	22.0	22	17	6	10.3	6.1	3	1.8	-9.7	0.0	26.1	27.2	3.0	0.0	43	28	0.0	10	45	8					
54	10.24	2	25	1	21	6.1	0.1	-3.5	26	16	6	4.3	4.3	25	0.3	5.9	0.0	11.1	17.4	4.1	0.0	23	34	0.0	21	0	8					
5	11.87	/	30	3	21	6.1	0.1	-3.1	26	16	6	4.3	4.3	25	0.3	5.8	0.0	11.1	17.4	4.1	0.0	22	33	0.0	21	110	8					
2.5	1.00	4	45	5	21	4.5	0.1	-2.4	26	12	5	3.1	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8					
54	10.24	3	25	1	3	4.5	-0.1	-3.1	27	11	5	3.1	4.3	21	-0.2	-4.0	0.0	11.1	17.4	4.1	0.0	16	23	0.0	21	0	8					
5	11.87	/	30	3	3	4.4	0.1	-2.3	26	12	5	3.1	4.3	21	-0.2	-7.0	0.0	11.1	17.4	4.1	0.0	26	40	0.0	21	110	8					
2.5	1.00	4	45	5	41	2.8	-0.1	2.9	19	10	3	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8					
54	10.24	4	25	1	19	0.0	-1.0	29.3	0	11	11	6.4	6.4	21	-1.7	-8.2	0.0	11.1	17.4	4.1	0.0	37	47	0.0	21	0	8					
5	11.87	/	30	3	21	-10.7	0.6	29.8	20	18	5	11.4	6.6	3	-2.0	-9.8	0.0	11.1	17.4	4.1	0.0	44	56	0.0	21	65	8					
2.5	1.00	4	45	5	21																											

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a Bas t	Sez a n	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																	
					Co	M	Exd	M	Eyd	N	Ed	x/	εf%	εc%	Area	cmq	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe	Coe	ALon
					cm	(t*m)	(t*m)	(t)	(t)	d	100	100	sup	inf	mb	(t)	(t)	(t)	(t*m)	(t)	(t)	(t)	(t)	(t)	(t*m)	(t*m)	Cls	Sta	cmq	Pas	Lun	Fi
2.5	1.00	4	45	5	12	1.6	0.4	-2.0	29	4	2	3.1	4.3	0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8		
76	12.01	3	25	1	37	0.9	-0.3	0.0	23	3	1	4.3	4.3	9	-0.6	3.8	0.0	11.1	17.4	4.1	0.0	16	22	0.0	21	0	8					
2	10.18	/	30	3	43	1.5	-0.3	-0.5	25	4	2	3.1	4.3	9	-0.6	3.6	0.0	11.1	17.4	4.1	0.0	16	21	0.0	21	126	8					
2.5	1.00	4	45	5	43	1.6	0.2	-1.3	26	4	2	4.3	4.3	0	0.0	0.0	0.0	11.1	17.4	4.1	0.0	0	0	0.0	21	0	8					
76	12.01	4	25	1	21	2.4	0.4	0.0	23	7	2	4.3	4.3	25	0.3	11.5	0.0	11.1	17.4	4.1	0.0	43	66	0.0	21	0	8					
2	10.18	/	30	3	21	-11.5	0.4	-0.8	30	17	9	8.3	7.5	21	-0.1	-12.0	0.0	11.1	17.4	4.1	0.0	45	69	0.0	21	81	8					
2.5	1.00	4	45	5	21	-12.2	0.3	-1.3	31	18	9	8.6	7.6	21	-0.1	-13.2	0.0	26.1	27.2	3.0	0.0	49	36	0.0	10	45	8					
53	10.24	2	25	1	43	3.0	0.0	0.0	23	9	3	4.3	4.3	43	0.0	4.2	0.0	11.1	17.4	4.1	0.0	15	24	0.0	21	0	8					
54	10.24	/	30	3	43	4.5	0.0	0.0	23	13	4	4.3	4.3	43	0.0	4.1	0.0	11.1	17.4	4.1	0.0	15	24	0.0	21	42	8					
2.5	1.00	2	45	5	43	4.5	0.0	0.0	23	13	4	4.3	4.3	43	0.0	4.0	0.0	26.1	27.2	3.0	0.0	15	11	0.0	10	45	8					
17	10.24	2	25	1	43	-1.1	0.0	0.0	23	3	1	4.3	4.3	40	0.0	-1.3	0.0	11.1	17.4	4.1	0.0	5	8	0.0	21	0	8					
11	10.24	/	30	3	43	-1.1	0.0	0.0	23	3	1	4.3	4.3	40	0.0	-1.5	0.0	11.1	17.4	4.1	0.0	5	9	0.0	21	42	8					
2.5	1.00	2	45	5	43	-0.6	0.0	0.0	23	2	1	4.3	3.1	40	0.0	-1.6	0.0	26.1	27.2	3.0	0.0	6	4	0.0	10	45	8					
11	10.24	2	26	1	3	0.8	-0.3	-8.2	58	1	3	3.1	3.1	9	-0.5	1.4	0.0	14.5	14.2	1.4	0.0	13	12	0.0	17	0	8					
8	11.87	/	30	3	3	1.2	0.2	-7.8	44	4	4	3.1	3.1	9	-0.5	1.3	0.0	14.5	14.2	1.4	0.0	13	12	0.0	17	124	8					
2.5	1.00	4	25	5	3	1.2	0.3	-7.6	43	4	4	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8					
11	10.24	3	26	1	3	1.0	-0.1	-12.2	64	1	3	3.1	3.1	24	-0.1	0.6	0.0	13.7	11.1	2.4	0.0	5	5	0.0	17	0	8					
8	11.87	/	30	3	3	1.0	0.0	-11.9	63	1	4	3.1	3.1	3	-0.1	-1.2	0.0	13.7	11.1	2.4	0.0	9	10	0.0	17	124	8					
2.5	1.00	4	25	5	9	0.8	0.1	-11.6	77	0	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8					
11	10.24	4	26	1	12	0.6	0.1	-10.3	87	0	2	3.1	3.1	3	0.4	-0.5	0.0	14.5	14.1	1.4	0.0	7	5	0.0	17	0	8					
8	11.87	/	30	3	20	-0.6	-0.2	-4.7	47	2	2	3.1	3.1	3	0.4	-1.8	0.0	13.7	11.1	2.4	0.0	16	16	0.0	17	99	8					
2.5	1.00	4	25	5	3	-1.1	-0.4	-9.2	49	3	4	3.1	3.1	3	0.4	-2.2	0.0	14.5	14.1	1.4	0.0	18	6	0.0	5	25	8					
53	10.24	2	26	1	3	0.8	0.2	-7.9	55	2	3	3.1	3.1	6	0.5	1.4	0.0	14.5	14.1	1.4	0.0	13	12	0.0	17	0	8					
4	11.87	/	30	3	12	1.2	-0.2	-6.9	41	5	4	3.1	3.1	9	0.5	1.3	0.0	14.5	14.1	1.4	0.0	13	12	0.0	17	124	8					
2.5	1.00	4	25	5	12	1.2	-0.3	-6.7	40	5	4	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8					
53	10.24	3	26	1	3	1.0	0.1	-12.0	63	1	4	3.1	3.1	9	0.1	0.5	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8					
4	11.87	/	30	3	3	1.0	0.0	-11.7	61	1	4	3.1	3.1	3	0.1	-1.2	0.0	13.7	11.1	2.4	0.0	9	11	0.0	17	124	8					
2.5	1.00	4	25	5	6	0.8	-0.1	-11.7	77	0	3	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8					
53	10.24	4	26	1	6	0.6	-0.1	-9.9	84	0	2	3.1	3.1	3	-0.4	-0.6	0.0	14.5	14.1	1.4	0.0	7	6	0.0	17	0	8					
4	11.87	/	30	3	3	-0.7	0.3	-9.2	72	0	2	3.1	3.1	3	-0.4	-1.8	0.0	13.7	11.1	2.4	0.0	16	17	0.0	17	99	8					
2.5	1.00	4	25	5	3	-1.2	0.4	-9.0	46	4	4	3.1	3.1	3	-0.4	-2.2	0.0	14.5	14.1	1.4	0.0	19	6	0.0	5	25	8					
79	12.01	2	26	1	36	0.1	0.0	0.0	25	1	0	3.1	3.1	10	0.0	0.5	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8					
10	10.18	/	30	3	6	0.1	0.0	-0.2	28	1	0	3.1	3.1	4	0.0	-0.7	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	134	8					
2.5	1.00	4	25	5	4	-0.1	0.0	-0.4	32	1	0	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8					
79	12.01	3	26	1	4	-0.1	0.0	0.0	25	1	0	3.1	3.1	4	0.0	0.6	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8					
10	10.18	/	30	3	36	0.1	0.0	-0.1	28	1	0	3.1	3.1	7	0.0	-0.6	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	134	8					
2.5	1.00	4	25	5	40	-0.2	0.0	-0.3	29	1	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8					
79	12.01	4	26	1	10	-0.1	-0.1	0.0	25	1	0	3.1	3.1	10	-0.2	0.7	0.0	13.7	11.1	2.4	0.0	6	6	0.0	17	0	8					
10	10.18	/	30	3	13	0.1	0.1	-0.2	28	1	0	3.1	3.1	10	-0.2	0.6	0.0	14.5	14.1	1.4	0.0	6	6	0.0	17	109	8					
2.5	1.00	4	25	5	20	-0.1	-0.1	-0.3	37	0	0	3.1	3.1	7	-0.2	-0.5	0.0	14.5	14.1	1.4	0.0	5	1	0.0	5	25	8					
80	12.01	2	26	1	37	0.1	0.0	0.0	25	1	0	3.1	3.1	7	0.0	0.5	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8					
3	10.18	/	30	3	12	0.1	0.0	-0.2	28	1	0	3.1	3.1	1	0.0	-0.7	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	134	8					
2.5	1.00	4	25	5	4	-0.1	0.0	-0.4	32	1	0	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1	2.4	0.0	0	0	0.0	17	0	8					
80	12.01	3	26	1	4	-0.1	0.0	0.0	25	1	0	3.1	3.1	4	0.0	0.6	0.0	13.7	11.1	2.4	0.0	4	5	0.0	17	0	8					
3	10.18	/	30	3	15	0.1	0.0	-0.1	28	1	0	3.1	3.1	10	0.0	-0.6	0.0	13.7	11.1	2.4	0.0	5	6	0.0	17	134	8					
2.5	1.00	4	25	5	27	-0.2	0.0	-0.3	29	1	1	3.1	3.1	0	0.0	0.0	0.0	13.7	11.1</													

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - ELEVAZIONE

Filo Iniz Fin. Ctg0	Quota Iniz. Final AmpC	T r a t	Sez a Bas Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																			
					Co	M	Exd	M	Eyd	N	Ed	x/	εf%	εc%	Area	cmq	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe	Coe	ALon	Staffe	
					mb	(t*m)	(t*m)	(t)	(t)	/d	100	100	sup	inf	mb	(t)	(t)	(t)	(t*m)	(t)	(t)	(t)	(t)	(t)	(t)	(t*m)	(t*m)	Cls	Cls	Sta	cmq	Pas	Lun	Fi
2.5	1.00	4	30	5	18	0.3	0.0	0.0	0.0	26	1	1	4.0	4.0	0	0.0	0.0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0	0	0.0	21	0	8		
30	13.88	3	42	1	18	-0.3	0.0	0.0	0.0	26	1	1	4.0	4.0	18	0.0	0.7	0.0	0.0	10.3	11.1	2.2	0.0	4	6	0.0	21	0	8					
12	13.88	/	28	3	18	-0.3	0.0	0.0	0.0	26	1	1	4.0	4.0	18	0.0	0.7	0.0	0.0	10.3	11.1	2.2	0.0	4	6	0.0	21	77	8					
2.5	1.00	4	30	5	18	0.2	0.0	0.0	0.0	26	1	0	4.0	4.0	0	0.0	0.0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8				
30	13.88	4	42	1	18	-0.2	0.0	0.0	0.0	26	1	0	4.0	4.0	15	0.0	0.6	0.0	0.0	10.3	11.1	2.2	0.0	4	6	0.0	21	0	8					
12	13.88	/	28	3	18	-0.2	0.0	0.0	0.0	26	1	0	4.0	4.0	15	0.0	0.6	0.0	0.0	10.3	11.1	2.2	0.0	4	6	0.0	21	77	8					
2.5	1.00	4	30	5	15	0.2	0.0	0.0	0.0	26	1	0	4.0	4.0	0	0.0	0.0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8				
25	13.88	2	42	1	12	0.3	0.0	0.0	0.0	26	1	1	4.0	4.0	1	0.0	-0.3	0.0	0.0	10.3	11.1	2.2	0.0	2	3	0.0	21	0	8					
23	13.88	/	28	3	12	0.2	0.0	0.0	0.0	26	1	0	4.0	4.0	12	0.0	-0.6	0.0	0.0	10.3	11.1	2.2	0.0	4	6	0.0	21	119	8					
2.5	1.00	2	30	5	12	-0.3	0.0	0.0	0.0	26	1	1	4.0	4.0	0	0.0	0.0	0.0	0.0	0.0	10.3	11.1	2.2	0.0	0	0	0.0	21	0	8				

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - PILASTRI

Filo Iniz Fin. Ctg0	Quota Iniz. Final N/Nc	T r a t	Sez a Bas Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																		
					Co	M	Exd	M	Eyd	N	Ed	x/ /d	εf% 100	εc% 100	Area b h	cmq h	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe	Coe	ALon	Staffe
					mb	(t*m)	(t*m)	(t)						mb	(t)	(t)	(t)	(t*m)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	(t)	Cls	Cls	Sta	cmq	Pas	Lun	Fi
1	0.00		29	1	32	29.5	-3.2	-46.4		39	33	15.4	8.0	43	0.2	-17.3	0.0	19.3	34.0	7.8	0.0	49	51	0.0	8	61	8						
1	3.63		30	3	43	-11.7	-1.8	-47.6		10	13	5.9	6.7	43	0.2	-17.3	0.0	19.3	34.0	7.8	0.0	49	51	0.0	12	177	8						
2.5	0.27		50	5	37	31.7	-3.7	-52.3		34	33	14.0	6.9	43	0.2	-17.3	0.0	19.3	34.0	7.8	0.0	49	51	0.0	12	50	8						
2	0.00		28	1	27	-7.0	-21.5	-40.4		35	33	10.2	11.6	31	-2.9	7.8	0.0	19.4	11.0	4.5	0.0	32	71	0.0	9	63	8						
2	3.63		50	3	43	-4.3	-7.9	-52.3		8	13	6.1	6.5	31	-2.9	7.8	0.0	19.4	11.0	4.5	0.0	32	71	0.0	21	175	8						
2.5	0.27		30	5	31	-9.2	-4.9	-33.4		28	22	6.6	6.0	31	-2.9	7.8	0.0	29.1	16.5	6.7	0.0	32	47	0.0	21	50	8						
5	0.00		28	1	25	1.5	-24.7	-74.0		30	33	6.7	7.9	25	14.5	1.1	0.0	19.4	11.0	4.5	0.0	65	75	0.0	4	62	8						
5	3.63		50	3	12	-2.9	-2.9	-143.8		3	12	6.4	6.1	25	14.5	1.1	0.0	19.4	11.0	4.5	0.0	65	75	0.0	21	176	8						
2.5	0.50		30	5	25	-2.4	17.1	-72.9		14	20	6.5	6.0	25	14.5	1.1	0.0	24.1	22.8	3.0	0.0	65	50	0.0	21	50	8						
6	0.00		28	1	25	-1.6	-31.8	-80.5		27	33	6.9	13.2	27	8.0	-2.4	0.0	28.3	26.8	3.5	0.0	37	27	0.0	5	68	8						
6	3.63		50	3	12	-2.6	-2.6	-132.0		3	11	6.4	6.1	23	9.8	-0.3	0.0	25.5	14.5	5.9	0.0	36	39	0.0	16	200	8						
2.5	0.43		30	5	25	1.6	31.8	-79.3		28	33	6.6	11.8	27	8.0	-2.4	0.0	28.3	26.8	3.5	0.0	37	27	0.0	14	50	8						
7	0.00		28	1	24	-1.5	-28.0	-73.7		31	33	7.5	10.8	24	16.4	-1.4	0.0	19.4	11.0	4.5	0.0	67	84	0.0	5	61	8						
7	3.63		50	3	6	2.7	-2.7	-136.6		3	11	6.4	6.1	24	16.4	-1.4	0.0	19.4	11.0	4.5	0.0	67	84	0.0	21	177	8						
2.5	0.47		30	5	24	1.5	19.2	-72.6		16	21	6.6	6.0	24	16.4	-1.4	0.0	26.7	25.3	3.3	0.0	67	56	0.0	21	50	8						
9	0.00		28	1	39	9.1	-20.4	-46.5		32	33	9.9	11.5	43	-1.8	-8.3	0.0	19.4	11.0	4.5	0.0	31	75	0.0	9	63	8						
9	3.63		50	3	40	3.4	-9.8	-46.1		10	13	6.1	6.5	43	-1.8	-8.3	0.0	19.4	11.0	4.5	0.0	31	75	0.0	21	175	8						
2.5	0.25		30	5	43	9.8	-3.8	-28.3		52	30	6.8	5.9	43	-1.8	-8.3	0.0	29.1	16.5	6.7	0.0	31	50	0.0	21	50	8						
17	0.00		28	1	36	-11.2	16.1	-12.6		41	33	8.9	13.8	20	-11.8	-4.6	0.0	19.4	11.0	4.5	0.0	52	61	0.0	6	63	8						
17	3.63		50	3	20	-2.4	10.0	-13.6		17	12	6.4	6.2	24	14.2	2.4	0.0	19.4	11.0	4.5	0.0	52	73	0.0	21	175	8						
2.5	0.36		30	5	36	8.2	-6.4	-11.6		58	32	6.6	6.5	20	-11.8	-4.6	0.0	32.1	30.3	3.5	0.0	52	41	0.0	21	50	8						
27	0.00		29	1	35	-15.6	5.2	-38.2		38	32	6.5	6.3	46	-1.3	-8.1	0.0	29.5	31.1	3.5	0.0	30	28	0.0	8	58	8						
27	3.63		30	3	36	-3.5	2.0	-37.1		2	5	6.1	6.4	46	-1.3	-8.1	0.0	12.2	21.5	5.0	0.0	30	38	0.0	19	180	8						
2.5	0.29		50	5	36	15.6	-2.9	-36.5		24	20	6.0	6.5	46	-1.3	-8.1	0.0	29.5	31.1	3.5	0.0	30	28	0.0	14	50	8						
31	0.00		29	1	19	-11.8	10.8	0.4		48	33	9.9	10.6	36	-5.0	-9.7	0.0	28.8	30.4	3.5	0.0	49	33	0.0	14	57	8						
31	3.63		30	3	36	-5.6	1.6	6.3		14	7	6.5	6.1	36	-5.0	-9.7	0.0	28.8	30.4	3.5	0.0	49	40	0.0	17	181	8						
2.5	0.15		50	5	19	8.8	-10.8	1.5		52	31	8.7	10.5	36	-5.0	-9.7	0.0	28.8	30.4	3.5	0.0	49	33	0.0	14	50	8						
33	0.00		35	1	20	-1.4	40.3	-29.4		72	29	8.1	10.7	20	-20.4	-0.6	0.0	45.9	42.5	5.1	0.0	46	39	0.0	11	70	8						
33	3.63		70	3	36	-2.0	14.8	-21.4		11	8	8.1	7.4	20	-20.4	-0.6	0.0	41.7	16.5	9.9	0.0	46	49	0.0	14	148	8						
2.5	0.12		30	5	15	0.7	-26.0	-30.8		17	11	7.5	8.1	20	-20.4	-0.6	0.0	45.9	42.5	5.1	0.0	46	39	0.0	11	70	8						
34	0.00		4	1	21	-1.1	14.7	-18.1		64	29	11.6	12.9	30	3.4	-10.9	0.0	34.8	37.2	4.3	0.0	39	29	0.0	13	60	8						
34	3.63		30	3	30	-9.1	-1.2	-9.5		10	6	7.5	6.6	20	-5.7	2.0	0.0	15.4	33.0	7.8	0.0	22	37	0.0	15	168	8						
2.5	0.14		60	5	21	-0.3	-14.7	-16.8		95	33	8.2	11.4	30	3.4	-10.9	0.0	34.8	37.2	4.3	0.0	39	29	0.0	13	60	8						
35	0.00		1	1	20	1.4	5.3	10.1		56	21	5.4	6.9	20	-2.1	0.8	0.0	17.3	17.3	1.8	0.0	17	13	0.0	14	58	8						
35	3.63		30	3	20	0.6	0.9	10.3		11	2	5.1	5.1	20	-2.1	0.8	0.0	11.0	11.0	2.4	0.0	17	19	0.0	21	185	8						
2.5	0.18		30	5	20	-0.7	-5.3	10.7		73	20	5.3	7.0	20	-2.1	0.8	0.0	17.3	17.3	1.8	0.0	17	13	0.0	14	45	8						
37	0.00		29	1	37	-19.8	3.2	-39.2		45	33	7.5	6.3	46	-0.5	-10.5	0.0	16.5	29.1	6.7	0.0	32	36	0.0	7	57	8						
37	3.63		30	3	30	-5.0	-1.4	-60.4		0	6	6.1	6.4	46	-0.5	-10.5	0.0	15.4	27.2	6.3	0.0	32	39	0.0	15	181	8						
2.5	0.31		50	5	38	19.7	-1.8	-37.5		48	29	7.0	6.3	46	-0.5	-10.5	0.0	16.5	29.1	6.7	0.0	32	36	0.0	14	50	8						
38	0.00		1	1	30	-1.7	-5.5	-34.6		13	18	5.1	5.1	20	-2.1	0.1	0.0	16.5	16.5	3.6	0.0	10	13	0.0	10	70	8						
38	3.63		30	3	9	-1.1	1.1	-52.6		2	7	5.1	5.1	20	-2.1	0.1	0.0	11.0	11.0	2.4	0.0	10	19	0.0	21	219	8						
2.5	0.28		30	5	16	-0.6	-5.6	-32.3		12	15	5.1	5.1	20	-2.1	0.1	0.0	16.5	16.5	3.6	0.0	10	13	0.0	14	49	8						
39	0.00		28	1	30	-2.9	-15.2	-53.6		16	19	6.4	6.1	24	7.7	-0.3	0.0	29.1	16.5	6.7	0.0	21	26	0.0	9	70	8						

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - PILASTRI

Filo Iniz Fin. Ctg0	Quota Iniz. Final N/Nc	T ra t	Sez a Alt	C o n c	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																	
					Co	M	Exd	M	Eyd	N	Ed	x/d	εf%	εc%	Area	cmq	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe	Coe	ALon
					mb	(t'm)	(t'm)	(t)				b	h	mb	(t)	(t)	(t'm)	(t)	(t'm)	(t'm)	(t)	(t)	(t)	(t'm)	(t'm)	Cls	Cls	Sta	cmq	Pas	Lun	Fi
39	3.63	50	3	12	-1.6	1.6	-79.8	2	6	6.4	6.1	24	7.7	-0.3	0.0	21.5	12.2	5.0	0.0	21	36	0.0	19	198	8							
2.5	0.25	30	5	27	1.0	15.3	-52.4	13	15	6.4	6.1	24	7.7	-0.3	0.0	29.1	16.5	6.7	0.0	21	26	0.0	14	50	8							
40	0.00	29	1	15	7.9	10.2	-39.0	37	32	8.8	9.0	46	-0.4	-11.0	0.0	17.8	31.4	7.2	0.0	32	35	0.0	9	58	8							
40	3.63	30	3	46	-6.4	0.9	-44.4	2	6	6.1	6.4	46	-0.4	-11.0	0.0	17.8	31.4	7.2	0.0	32	35	0.0	13	180	8							
2.5	0.26	50	5	18	-8.2	-10.2	-38.0	38	32	7.0	7.6	46	-0.4	-11.0	0.0	17.8	31.4	7.2	0.0	32	35	0.0	13	50	8							
41	0.00	1	1	18	2.0	3.9	-2.8	22	15	5.1	5.1	18	-1.3	0.9	0.0	17.3	17.3	1.8	0.0	13	8	0.0	11	70	8							
41	3.63	30	3	24	-0.7	-0.7	-33.3	1	4	5.1	5.1	19	-1.6	0.1	0.0	11.0	11.0	2.4	0.0	10	15	0.0	21	200	8							
2.5	0.26	30	5	18	-0.9	-3.9	-2.1	17	10	5.1	5.1	18	-1.3	0.9	0.0	17.3	17.3	1.8	0.0	13	8	0.0	14	48	8							
43	0.00	29	1	40	19.9	-2.0	-46.5	47	33	6.4	6.3	41	1.3	9.5	0.0	16.5	29.1	6.7	0.0	31	33	0.0	8	60	8							
43	3.63	30	3	9	1.5	-1.5	-76.3	2	6	6.1	6.4	41	1.3	9.5	0.0	13.6	24.0	5.5	0.0	31	40	0.0	17	178	8							
2.5	0.30	50	5	40	-19.9	0.9	-45.4	44	27	6.3	6.3	41	1.3	9.5	0.0	16.5	29.1	6.7	0.0	31	33	0.0	14	50	8							
44	0.00	1	1	25	1.2	-5.6	-35.0	12	17	5.1	5.1	25	2.1	0.4	0.0	16.5	16.5	3.6	0.0	12	13	0.0	10	78	8							
44	3.63	30	3	12	1.1	1.1	-54.0	2	7	5.1	5.1	25	2.1	0.4	0.0	11.0	11.0	2.4	0.0	12	19	0.0	21	211	8							
2.5	0.28	30	5	21	0.7	-5.6	-33.7	11	15	5.1	5.1	25	2.1	0.4	0.0	16.5	16.5	3.6	0.0	12	13	0.0	14	49	8							
45	0.00	1	1	41	9.9	-2.4	-20.5	37	32	8.8	5.7	41	1.1	2.6	0.0	19.8	19.8	1.8	0.0	19	16	0.0	11	60	8							
45	3.63	30	3	3	0.8	-0.8	-40.1	1	5	5.1	5.1	41	1.1	2.6	0.0	11.0	11.0	2.4	0.0	19	24	0.0	21	183	8							
2.5	0.26	30	5	41	-9.9	0.9	-19.9	48	28	8.5	5.3	41	1.1	2.6	0.0	19.8	19.8	1.8	0.0	19	16	0.0	14	45	8							
48	0.00	29	1	27	-1.1	-9.0	5.4	77	23	6.7	8.9	15	-4.8	1.9	0.0	16.5	29.1	6.7	0.0	23	29	0.0	11	59	8							
48	3.63	30	3	27	-0.5	-1.8	5.8	8	3	6.3	6.2	15	-4.8	1.9	0.0	12.2	21.5	5.0	0.0	23	39	0.0	19	179	8							
2.5	0.21	50	5	27	0.2	9.0	6.5	84	22	6.1	9.6	15	-4.8	1.9	0.0	16.5	29.1	6.7	0.0	23	29	0.0	14	50	8							
50	0.00	28	1	16	1.3	21.6	-25.4	71	32	6.9	8.6	27	11.7	1.0	0.0	29.1	16.5	6.7	0.0	39	40	0.0	14	57	8							
50	3.63	50	3	27	1.0	-6.4	-25.0	5	6	6.6	6.0	27	11.7	1.0	0.0	24.0	13.6	5.5	0.0	39	49	0.0	17	181	8							
2.5	0.16	30	5	16	0.5	-21.6	-24.3	89	29	6.5	8.8	27	11.7	1.0	0.0	29.1	16.5	6.7	0.0	39	40	0.0	14	50	8							
51	0.00	4	1	18	5.2	11.1	-9.7	71	31	10.3	10.3	25	3.8	9.0	0.0	35.1	37.6	4.3	0.0	35	24	0.0	13	65	8							
51	3.63	30	3	25	7.5	-1.3	-24.1	5	6	7.4	6.6	15	-4.8	0.1	0.0	13.6	29.2	6.8	0.0	14	35	0.0	17	163	8							
2.5	0.15	60	5	16	-1.0	-11.2	-9.3	84	27	7.7	9.1	25	3.8	9.0	0.0	35.1	37.6	4.3	0.0	35	24	0.0	13	60	8							
52	0.00	1	1	15	-0.4	4.0	9.7	37	11	5.1	5.6	27	1.6	0.8	0.0	17.3	17.3	1.8	0.0	14	10	0.0	14	60	8							
52	3.63	30	3	34	1.2	0.3	1.6	6	3	5.1	5.1	15	-1.9	-0.3	0.0	11.0	11.0	2.4	0.0	13	17	0.0	21	183	8							
2.5	0.19	30	5	15	0.6	-4.0	10.3	70	17	5.2	5.6	27	1.6	0.8	0.0	17.3	17.3	1.8	0.0	14	10	0.0	14	45	8							
54	0.00	28	1	21	1.8	22.0	-20.1	63	30	7.2	9.2	41	9.1	3.8	0.0	19.4	11.0	4.5	0.0	43	47	0.0	6	63	8							
54	3.63	50	3	15	1.1	7.6	-4.0	13	8	6.3	6.3	25	12.2	0.4	0.0	19.4	11.0	4.5	0.0	41	63	0.0	21	175	8							
2.5	0.36	30	5	31	-7.2	3.2	-1.2	70	26	6.4	6.3	41	9.1	3.8	0.0	30.6	28.9	3.5	0.0	43	31	0.0	21	50	8							
56	0.00	1	1	41	3.7	-2.7	-25.1	12	15	5.1	5.1	41	1.4	1.6	0.0	18.6	18.6	1.8	0.0	16	10	0.0	13	68	8							
56	3.63	30	3	34	1.4	-0.5	-26.6	0	4	5.1	5.1	34	0.8	1.9	0.0	11.0	11.0	2.4	0.0	15	18	0.0	21	224	8							
2.5	0.21	30	5	41	-3.7	2.1	-24.3	10	13	5.1	5.1	41	1.4	1.6	0.0	18.6	18.6	1.8	0.0	16	10	0.0	14	45	8							
62	0.00	1	1	39	11.7	-3.2	-37.9	28	33	9.8	8.0	46	0.0	-4.5	0.0	16.5	16.5	3.6	0.0	22	27	0.0	8	51	8							
62	3.63	30	3	3	-1.3	1.3	-65.7	2	9	5.1	5.1	46	0.0	-4.5	0.0	12.9	12.9	2.8	0.0	22	35	0.0	18	192	8							
2.5	0.38	30	5	41	-11.8	2.8	-37.5	28	33	9.5	7.6	46	0.0	-4.5	0.0	16.5	16.5	3.6	0.0	22	27	0.0	14	45	8							
69	0.00	29	1	31	24.7	1.1	-20.3	87	32	11.5	6.6	31	-0.6	14.4	0.0	16.5	29.1	6.7	0.0	46	50	0.0	14	60	8							
69	3.63	30	3	15	5.5	2.7	-21.7	8	8	6.2	6.3	31	-0.6	14.4	0.0	13.6	24.0	5.5	0.0	46	60	0.0	17	178	8							
2.5	0.11	50	5	32	-24.7	-0.7	-19.2	90	30	11.0	6.8	31	-0.6	14.4	0.0	16.5	29.1	6.7	0.0	46	50	0.0	14	50	8							
70	0.00	29	1	25	-2.8	-18.2	-43.2	39	31	10.7	16.7	43	-0.2	-16.0																		

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - PILASTRI

Filo Iniz Fin. Ctg0	Quota Iniz. Final N/Nc	T ra t	Sez a Alt	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE																	
					Co	M	Exd	M	Eyd	N	Ed	x/d	εf%	εc%	Area	cmq	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe	Coe	ALon
					mb	(t*m)	(t*m)	(t)				b	h	mb	(t)	(t)	(t*m)	(t)	(t)	(t*m)	(t)	(t)	(t)	(t)	(t*m)	(t*m)	Cls	Coe	Alon	Pas	Lun	Fi
7 2.5	6.88 0.31		50 30	3 5	3 23	1.9 4.3	1.7 19.9	-87.4 -46.4		2 36	7 33	6.5 7.0	6.1 8.2	24 24	14.5 14.5	-2.8 -2.8	0.0 0.0	19.4 29.1	11.0 16.5	4.5 6.7	0.0 0.0	48 48	74 50	0.0 0.0	21 21	180 50	8 8					
9 9 2.5	3.63 6.88 0.15		28 50 30	1 3 5	36 43 36	-6.9 -1.7 6.7	9.9 1.8 -9.0	-21.9 -18.6 -20.9		39 2 31	28 4 23	6.2 6.1 6.2	6.4 6.5 6.3	36 43 36	-6.7 -4.8 -6.7	-4.9 -5.4 -4.9	0.0 0.0 0.0	19.4 19.4 32.9	11.0 11.0 31.1	4.5 4.5 3.5	0.0 0.0 0.0	36 32 36	44 49 29	0.0 0.0 0.0	14 21 21	50 180 50	8 8 8					
17 17 2.5	3.63 6.88 0.22		28 50 30	1 3 5	27 34 36	-5.0 0.9 7.1	-8.1 2.8 -4.1	-36.1 -46.0 -10.3		13 0 26	15 4 17	6.3 6.3 6.4	6.3 6.2 6.2	43 43 43	0.6 0.6 0.6	-5.5 -5.5 -5.5	0.0 0.0 0.0	19.4 19.4 29.1	11.0 11.0 16.5	4.5 4.5 6.7	0.0 0.0 0.0	20 20 20	50 50 33	0.0 0.0 0.0	14 21 21	50 180 50	8 8 8					
27 27 2.5	3.63 6.88 0.20		29 30 50	1 3 5	34 30 33	18.1 -1.7 -15.1	1.1 -0.8 -0.6	-9.7 -41.1 -9.0		86 1 88	27 3 24	8.1 6.1 6.5	6.8 6.4 6.7	34 34 34	-0.6 -0.6 -0.6	7.5 7.5 7.5	0.0 0.0 0.0	29.4 12.2 29.4	31.1 21.5 31.1	3.5 5.0 3.5	0.0 0.0 0.0	26 26 26	26 35 26	0.0 0.0 0.0	14 19 14	50 180 50	8 8 8					
31 31 2.5	3.63 6.88 0.10		29 30 50	1 3 5	20 36 20	-7.2 -1.9 7.6	12.7 1.7 -11.7	0.2 3.3 1.3		55 8 55	32 4 32	7.3 6.2 7.7	12.8 6.4 11.5	36 20 36	-5.5 -5.8 -5.5	-6.7 -5.3 -6.7	0.0 0.0 0.0	28.8 15.4 28.8	30.4 27.2 30.4	3.5 6.3 3.5	0.0 0.0 0.0	41 38 41	33 38 33	0.0 0.0 0.0	14 15 14	50 180 50	8 8 8					
33 33 2.5	3.63 6.88 0.08		35 70 30	1 3 5	29 20 20	0.9 0.4 0.4	-26.8 -6.5 -31.8	-14.2 -18.8 -18.2		41 2 94	17 3 24	8.8 8.0 7.7	6.8 7.5 8.5	20 20 20	-14.9 -14.9 -14.9	0.0 0.0 0.0	0.0 0.0 0.0	45.1 38.9 45.1	41.7 15.4 41.7	5.1 9.2 5.1	0.0 0.0 0.0	33 33 33	28 38 28	0.0 0.0 0.0	11 15 11	70 140 70	8 8 8					
34 34 2.5	3.63 6.88 0.10		4 30 60	1 3 5	23 36 20	-1.1 -0.7 5.8	-17.8 1.7 15.4	-13.9 -7.1 -6.4		81 3 66	32 2 32	8.5 7.0 8.3	14.9 7.1 13.5	20 20 20	-6.3 -6.3 -6.3	1.7 1.7 1.7	0.0 0.0 0.0	17.6 17.8 17.6	37.6 38.1 37.6	8.8 8.9 8.8	0.0 0.0 0.0	23 23 23	36 35 36	0.0 0.0 0.0	13 13 13	60 160 60	8 8 8					
35 35 2.5	3.63 6.88 0.13		1 30 30	1 3 5	20 20 20	0.3 0.1 -0.3	6.6 0.7 -6.5	5.6 5.9 6.3		74 6 60	21 1 19	5.3 5.1 5.3	7.7 5.1 7.7	24 20 24	2.0 -2.4 2.0	0.7 0.2 0.7	0.0 0.0 0.0	17.3 11.0 17.3	17.3 11.0 17.3	1.8 2.4 1.8	0.0 0.0 0.0	16 15 16	12 22 12	0.0 0.0 0.0	14 21 14	48 186 46	8 8 8					
37 37 2.5	3.63 6.88 0.21		29 30 50	1 3 5	37 9 37	-19.5 -1.1 18.5	1.3 1.1 -1.4	-28.3 -53.2 -27.3		63 1 71	30 4 32	7.5 6.1 6.9	6.4 6.4 6.4	46 46 46	-0.4 -0.4 -0.4	-8.6 -8.6 -8.6	0.0 0.0 0.0	16.5 12.9 16.5	29.1 22.6 29.1	6.7 5.2 6.7	0.0 0.0 0.0	27 27 27	29 38 29	0.0 0.0 0.0	14 18 14	50 180 50	8 8 8					
38 38 2.5	3.63 6.88 0.20		1 30 30	1 3 5	30 9 24	0.5 0.8 -0.5	-6.6 -0.8 6.0	-25.2 -38.0 -25.1		18 1 16	17 5 16	5.1 5.1 5.1	5.1 5.1 5.1	24 24 24	2.5 2.5 2.5	0.1 0.1 0.1	0.0 0.0 0.0	16.5 11.0 16.5	16.5 11.0 16.5	3.6 2.4 3.6	0.0 0.0 0.0	13 13 13	15 23 15	0.0 0.0 0.0	14 21 14	51 200 49	8 8 8					
39 39 2.5	3.63 6.88 0.19		28 50 30	1 3 5	24 9 20	0.8 -1.2 0.7	-17.9 -1.2 -15.5	-39.0 -58.3 -37.2		25 1 17	19 4 15	6.4 6.4 6.4	6.1 6.1 6.1	24 24 24	8.2 8.2 8.2	0.1 0.1 0.1	0.0 0.0 0.0	29.1 22.6 29.1	16.5 12.9 16.5	6.7 5.2 6.7	0.0 0.0 0.0	23 23 23	28 36 28	0.0 0.0 0.0	14 18 14	50 180 50	8 8 8					
40 40 2.5	3.63 6.88 0.18		29 30 50	1 3 5	23 9 15	-1.5 -1.0 -4.5	-13.6 -1.0 -10.7	-39.0 -49.9 -26.0		50 1 54	30 3 32	7.5 6.1 7.4	10.7 6.4 8.9	24 24 24	5.1 5.1 5.1	-2.3 -2.3 -2.3	0.0 0.0 0.0	16.5 13.6 16.5	29.1 24.0 29.1	6.7 5.5 6.7	0.0 0.0 0.0	23 23 23	31 38 31	0.0 0.0 0.0	14 17 14	50 180 50	8 8 8					
41 41 2.5	3.63 6.88 0.18		1 30 30	1 3 5	20 24 18	0.3 -0.4 -0.6	5.3 -0.7 -4.6	-2.5 -22.4 -3.8		38 0 19	16 3 11	5.1 5.1 5.1	5.5 5.1 5.1	24 19 24	2.3 -2.3 2.3	-0.3 0.0 -0.3	0.0 0.0 0.0	17.5 11.0 17.5	17.5 11.0 17.5	1.8 2.4 1.8	0.0 0.0 0.0	14 13 14	14 21 14	0.0 0.0 0.0	14 21 14	48 186 46	8 8 8					
43 43 2.5	3.63 6.88 0.20		29 30 50	1 3 5	45 9 37	-21.4 1.1 16.6	0.8 1.1 -1.6	-38.1 -53.2 -32.3		60 1 25	31 4 19	7.5 6.1 6.2	6.4 6.4 6.4	34 34 34	0.0 0.0 0.0	7.9 7.9 7.9	0.0 0.0 0.0	16.5 12.2 16.5	29.1 21.5 29.1	6.7 5.0 6.7	0.0 0.0 0.0	23 23 23	27 37 27	0.0 0.0 0.0	14 19 14	50 180 50	8 8 8					
44 44 2.5	3.63 6.88 0.20		1 30 30	1 3 5	30 12 27	-0.5 -0.8 -0.5	-6.5 -0.8 6.1	-25.7 -39.1 -24.9		17 1 16	17 5 16	5.1 5.1 5.1	5.1 5.1 5.1	25 25 25	2.4 2.4 2.4	-0.1 -0.1 -0.1	0.0 0.0 0.0	16.5 11.0 16.5	16.5 11.0 16.5	3.6 2.4 3.6	0.0 0.0 0.0	12 12 12	14 22 14	0.0 0.0 0.0	14 21 14	51 200 49	8 8 8					
45 45 2.5	3.63 6.88 0.19		1 30 30	1 3 5	34 3 34	12.0 0.6 -11.7	0.8 0.6 -0.6	-17.1 -28.7 -16.5		53 1 58	30 4 30	10.9 5.1 10.7	5.6 5.1 5.5	37 34 37	-1.3 -0.5 -1.3	-2.3 3.1 -2.3	0.0 0.0 0.0	19.0 11.0 19.0	19.0 11.0 19.0	1.8 2.4 1.8	0.0 0.0 0.0	19 19 19	14 28 14	0.0 0.0 0.0	14 21 14	47 186 47	8 8 8					
48 48 2.5	3.63 6.88 0.14		29 30 50	1 3 5	25 27 25	-0.6 -0.7 0.4	-9.4 -1.2 8.5	1.5 -1.0 2.6		89 4 75	25 2 21	6.3 6.1 6.0	9.1 6.4 8.6	15 15 15	-4.9 -4.9 -4.9	0.9 0.9 0.9	0.0 0.0 0.0	16.5 11.6 16.5	29.1 20.4 29.1	6.7 4.7 6.7	0.0 0.0 0.0	20 20 20	29 42 29	0.0 0.0 0.0	14 20 14	50 180 50	8 8 8					
50 50 2.5	3.63 6.88 0.11		28 50 30	1 3 5	18 27 25	-0.3 -0.3 0.3	20.7 3.0 20.7	-17.4 -16.7 -13.8		80 1 88	25 3 25	6.6 6.4 6.5	8.9 6.1 9.4	27 27 27	9.5 9.5 9.5	-0.5 -0.5 -0.5	0.0 0.0 0.0	29.1 24.0 29.1	16.5 13.6 16.5	6.7 5.5 6.7	0.0 0.0 0.0	32 32 32	33 40 33	0.0 0.0 0.0	14 17 14	50 180 50	8 8 8					
51 51 2.5	3.63 6.88 0.11		4 30 60	1 3 5	23 15 23	-0.9 1.4 -3.2	-15.1 1.6 13.6	-18.8 -8.3 -17.5		85 3 69	32 3 30	7.8 7.0 7.1	11.8 7.1 11.1	27 27 27	5.6 5.6 5.6	-1.3 -1.3 -1.3	0.0 0.0 0.0	17.6 14.5 17.6	37.6 31.0 37.6	8.8 7.3 8.8	0.0 0.0 0.0	19 19 19	32 39 32	0.0 0.0 0.0	13 16 13	60 160 60	8 8 8					
52 52 2.5	3.63 6.88 0.13		1 30 30	1 3 5	15 15 15	-0.2 -0.1 0.3	5.2 0.7 -5.1	5.4 5.6 6.0		82 6 59	20 1 16	5.1 5.1 5.1	6.2 5.1 6.2	27 15 27	2.0 -2.2 2.0	-0.9 -0.2 -0.9	0.0 0.0 0.0	17.3 11.0 17.3	17.3 11.0 17.3	1.8 2.4 1.8	0.0 0.0 0.0	17 14 17	12 20 12	0.0 0.0 0.0	14 20 14	48 186 46	8 8 8					
54	3.63		28	1	31	8.9	-3.8	-5.3		77	31	7.4	6.7	31	2.5	6.3	0.0	19.4	11.0	4.5	0.0											

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - PILASTRI

Filo Iniz Fin. Ctg0	Quota Iniz. Final N/Nc	T ra t	Sez a Alt	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE															
					Co	M	Exd	M	Eyd	N	Ed	x/ d	εf%	εc%	Area	cmq	Co	V	Exd	V	Eyd	T	Sdu	V	Rxd	V	Ryd	TRd	TRld	Coe
					mb	(t°m)	(t°m)	(t)						mb	(t)	(t)	(t°m)	(t)	(t)	(t°m)	(t°m)	Cls	Cls	Alon	Pas	Lun	Fi			
54 2.5	6.88 0.22		50 30	3 5	31 31	1.8 -8.7	-1.0 3.1	-4.9 -4.3					5 69	3 27	6.3 7.5	6.3 6.6	31 31	2.5 2.5	6.3 6.3	0.0 0.0	19.4 29.1	11.0 16.5	4.5 6.7	0.0 0.0	29 29	57 38	0.0 0.0	21 21	180 50	8 8
56 56 2.5	3.63 6.88 0.14		1 30 50	1 3 5	41 6 41	3.6 0.4 -3.3	-2.4 -0.4 2.3	-16.7 -21.5 -16.0					14 1 12	14 3 13	5.1 5.1 5.1	5.1 5.1 5.1	41 41 41	1.6 1.6 1.6	1.4 1.4 1.4	0.0 0.0 0.0	18.1 18.1 18.1	18.1 18.1 18.1	1.8 1.8 1.8	0.0 0.0 0.0	16 16 16	9 14 9	0.0 0.0 0.0	14 21 14	52 199 49	8 8 8
62 62 2.5	3.63 6.88 0.26		1 30 30	1 3 5	30 3 37	-3.8 -0.9 11.9	-10.0 0.9 -2.8	-24.7 -44.7 -27.7					32 1 32	33 6 33	10.2 5.1 10.0	8.3 5.1 8.0	37 46 37	-2.0 -0.1 -2.0	-3.6 -4.4 -3.6	0.0 0.0 0.0	20.5 12.2 20.5	20.5 12.2 20.5	1.8 2.6 1.8	0.0 0.0 0.0	27 22 27	22 36 22	0.0 0.0 0.0	14 19 14	47 187 47	8 8 8
69 69 2.5	3.63 6.88 0.09		29 30 50	1 3 5	37 31 37	-26.1 -3.6 26.5	0.8 -0.2 -1.2	-17.6 -11.0 -16.6					91 3 81	29 3 30	12.0 6.1 12.4	6.8 6.4 6.8	43 43 43	-0.5 -0.5 -0.5	-12.6 -12.6 -12.6	0.0 0.0 0.0	16.5 14.5 16.5	29.1 25.5 29.1	6.7 5.9 6.7	0.0 0.0 0.0	41 41 41	43 49 43	0.0 0.0 0.0	14 16 14	50 180 50	8 8 8
70 70 2.17	3.63 6.88 0.17		29 30 50	1 3 5	27 40 41	-11.4 3.5 -29.1	-18.5 -1.2 6.0	-30.5 -13.7 -14.7					36 4 43	33 4 33	8.0 6.1 10.2	18.4 6.4 17.7	31 31 31	2.0 2.0 2.0	14.6 14.6 14.6	0.0 0.0 0.0	18.3 18.3 18.3	32.2 32.2 32.2	7.4 7.4 7.4	0.0 0.0 0.0	44 44 44	45 45 45	0.0 0.0 0.0	11 11 11	50 180 50	8 8 8
73 73 2.47	3.63 6.88 0.18		29 30 50	1 3 5	43 43 43	-24.9 -3.9 26.5	1.5 0.3 -1.6	4.1 4.6 5.2					86 8 93	27 3 28	13.6 6.1 14.5	7.1 6.4 7.2	43 43 43	-1.1 -1.1 -1.1	-13.1 -13.1 -13.1	0.0 0.0 0.0	28.8 28.8 28.8	30.4 30.4 30.4	3.5 3.5 3.5	0.0 0.0 0.0	47 47 47	42 42 42	0.0 0.0 0.0	13 13 13	50 180 50	8 8 8
1 1 2.2	6.88 10.18 0.07		29 30 50	1 3 5	33 43 43	32.2 4.6 20.7	3.1 -1.2 -4.5	-13.0 -12.6 -12.2					54 6 53	33 5 33	15.7 5.7 9.8	11.3 6.8 7.8	43 43 43	-2.8 -2.8 -2.8	-14.1 -14.1 -14.1	0.0 0.0 0.0	30.1 30.1 30.1	31.8 31.8 31.8	3.5 3.5 3.5	0.0 0.0 0.0	54 54 54	47 47 47	0.0 0.0 0.0	12 12 12	50 185 50	8 8 8
2 2 2.5	6.88 10.18 0.06		28 50 30	1 3 5	31 36 31	12.1 4.2 -15.6	6.9 -3.5 -1.3	-12.0 -7.9 -11.0					49 13 66	31 9 29	10.0 6.3 13.8	8.4 6.3 7.5	31 31 31	-5.1 -5.1 -5.1	9.7 9.7 9.7	0.0 0.0 0.0	19.4 19.4 29.1	11.0 11.0 16.5	4.5 4.5 6.7	0.0 0.0 0.0	49 49 49	88 88 59	0.0 0.0 0.0	14 21 21	50 178 57	8 8 8
5 5 2.5	6.88 11.87 0.19		28 50 30	1 3 5	25 43 31	1.4 2.1 -4.9	-7.5 3.6 -4.9	-23.0 -35.2 -24.0					8 2 12	8 5 12	6.6 6.5 6.5	5.9 6.1 6.1	25 25 25	4.0 4.0 4.0	0.4 0.4 0.4	0.0 0.0 0.0	19.4 19.4 29.1	11.0 11.0 16.5	4.5 4.5 6.7	0.0 0.0 0.0	13 13 13	20 20 14	0.0 0.0 0.0	14 21 21	61 286 99	8 8 8
6 6 2.5	6.88 11.87 0.13		28 50 30	1 3 5	25 40 40	-0.6 -1.4 -3.4	-18.3 2.5 7.5	-25.6 -23.0 -22.4					77 1 12	27 4 12	6.1 6.3 6.0	7.0 6.3 6.5	23 23 23	3.7 3.7 3.7	-0.1 -0.1 -0.1	0.0 0.0 0.0	29.1 19.4 29.1	16.5 11.0 16.5	6.7 4.5 6.7	0.0 0.0 0.0	12 12 12	13 19 13	0.0 0.0 0.0	14 21 14	58 292 95	8 8 8
7 7 2.5	6.88 11.87 0.17		28 50 30	1 3 5	24 40 36	-1.7 -1.6 4.5	-8.5 3.1 -7.2	-22.4 -29.2 -22.0					10 2 14	9 4 13	6.6 6.5 6.5	6.0 6.0 6.1	24 24 24	4.5 4.5 4.5	-0.6 -0.6 -0.6	0.0 0.0 0.0	19.4 19.4 29.1	11.0 11.0 16.5	4.5 4.5 6.7	0.0 0.0 0.0	16 16 16	23 23 16	0.0 0.0 0.0	14 21 21	61 290 95	8 8 8
9 9 2.5	6.88 10.18 0.05		28 50 30	1 3 5	43 40 43	-12.6 -3.7 16.3	4.7 3.8 -4.2	-8.1 -9.1 -7.0					66 12 60	33 9 32	11.0 6.3 14.3	7.5 6.3 8.8	43 43 43	-3.1 -3.1 -3.1	-10.1 -10.1 -10.1	0.0 0.0 0.0	19.4 19.4 29.1	11.0 11.0 16.5	4.5 4.5 6.7	0.0 0.0 0.0	44 44 44	92 92 61	0.0 0.0 0.0	14 21 21	50 177 58	8 8 8
17 17 2.5	6.88 10.24 0.10		28 50 30	1 3 5	43 40 43	-8.1 -1.9 9.4	-2.4 3.5 2.9	-10.9 -19.1 -9.8					71 4 67	28 5 29	6.2 6.0 7.2	6.4 6.6 7.1	30 43 30	9.1 1.8 9.1	-2.9 -6.0 -2.9	0.0 0.0 0.0	19.4 19.4 31.2	11.0 11.0 29.5	4.5 4.5 3.5	0.0 0.0 0.0	39 26 39	47 54 31	0.0 0.0 0.0	14 21 21	50 187 54	8 8 8
27 27 2.5	6.88 10.13 0.10		29 30 50	1 3 5	34 18 37	16.6 -2.4 21.7	0.6 -0.9 -3.1	-8.8 -6.6 -15.5					93 4 54	25 3 30	7.3 6.1 10.3	6.7 6.4 6.8	18 34 18	-2.4 -0.4 -2.4	7.2 8.7 7.2	0.0 0.0 0.0	29.6 13.6 29.6	31.3 24.0 31.3	3.5 5.5 3.5	0.0 0.0 0.0	31 29 31	25 36 25	0.0 0.0 0.0	14 17 14	50 180 50	8 8 8
31 31 2.5	6.88 10.13 0.05		29 30 50	1 3 5	15 36 20	-3.4 3.1 10.4	12.3 -1.8 -8.8	-3.3 1.2 0.9					76 9 53	32 5 33	7.9 6.1 8.4	11.8 6.5 8.4	36 20 36	-5.3 -6.0 -5.0	-8.3 -7.0 -8.3	0.0 0.0 0.0	28.8 13.6 28.8	30.4 24.0 30.4	3.5 5.5 3.5	0.0 0.0 0.0	46 44 46	32 44 32	0.0 0.0 0.0	14 17 14	50 180 50	8 8 8
33 33 2.5	6.88 10.13 0.06		28 50 30	1 3 5	15 20 15	-0.2 0.5 1.7	17.1 -3.2 -19.9	-11.8 -10.1 -10.7					95 3 76	24 3 28	6.1 6.3 6.3	7.8 6.3 9.6	20 20 20	-8.6 -8.6 -8.6	-0.4 -0.4 -0.4	0.0 0.0 0.0	29.1 21.5 29.1	16.5 12.2 16.5	6.7 5.0 6.7	0.0 0.0 0.0	29 29 29	29 40 29	0.0 0.0 0.0	14 19 14	50 177 53	8 8 8
34 34 2.5	6.88 10.13 0.05		4 30 60	1 3 5	18 30 24	6.6 2.3 6.4	16.2 1.4 8.5	-10.9 -4.1 -5.8					59 4 53	32 3 25	10.2 7.1 7.1	13.9 7.0 7.0	20 20 20	-6.1 -6.1 -6.1	2.9 2.9 2.9	0.0 0.0 0.0	17.6 15.4 17.6	37.6 33.0 37.6	8.8 7.8 8.8	0.0 0.0 0.0	25 25 25	35 40 35	0.0 0.0 0.0	13 15 13	60 160 60	8 8 8
35 35 2.5	6.88 10.13 0.06		1 30 30	1 3 5	18 36 36	0.6 -0.5 -3.9	5.7 -0.5 -2.3	-1.0 0.8 1.1					75 4 32	24 2 19	5.2 5.1 5.1	6.0 5.1 5.1	20 20 20	-2.0 -2.0 -2.0	0.7 0.7 0.7	0.0 0.0 0.0	17.3 11.0 17.3	17.3 11.0 17.3	1.8 2.4 1.8	0.0 0.0 0.0	16 16 16	12 18 12	0.0 0.0 0.0	14 21 14	47 182 51	8 8 8
37 37 2.5	6.88 10.13 0.12		29 30 50	1 3 5	43 46 37	-21.4 3.2 22.6	0.6 -0.4 -2.1	-19.7 -19.6 -16.8					90 1 73	28 3 32	9.4 6.1 10.6	6.3 6.4 6.4	46 46 46	-0.3 -0.3 -0.3	-9.9 -9.9 -9.9	0.0 0.0 0.0	16.5 14.5 16.5	29.1 25.5 29.1	6.7 5.9 6.7	0.0 0.0 0.0	31 31 31	34 39 34	0.0 0.0 0.0	14 16 14	50 180 50	8 8 8
38 38 2.5	6.88 10.13 0.13		1 30 30	1 3 5	15 9 25	0.3 -0.5 0.3	6.3 -0.5 8.8	-14.9 -23.9 -15.6					37 1 54	20 3 26	5.1 5.1 5.2	5.1 5.1 7.7	24 24 24	2.5 2.5 2.5	-0.2 -0.2 -0.2	0.0 0.0 0.0	16.5 11.0 16.5	16.5 11.0 16.5	3.6 2.4 3.6	0.0 0.0 0.0	14 14 14	15 23 15	0.0 0.0 0.0	14 21 14	48 198 54	8 8 8
39 39 2.5	6.88 10.13 0.13		28 30 50	1 3 5	15 9 25	0.5 -0.5 0.3	17.7 -23.9 8.8	-23.7 -23.9 -15.6					79 1 54	27 3 26	6.5 5.1 5.2	6.5 5.1 7.7	24 24 24	10.0 2.5 2.5	-0.2 -0.2 -0.2	0.0 0.0 0.0	29.19									

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - PILASTRI

Filo Iniz. Fin. Ctg0	Quota Iniz. Final N/Nc	T ra t	Sez a Alt	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE														
					Co mb	M (t°m)	Exd (t°m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area b h	cmq h	Co mb	V (t)	Exd (t)	V Eyd (t°m)	T Sdu (t°m)	V Rxd (t)	V Ryd (t)	TRd (t°m)	TRLd (t°m)	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi			
39 2.5	10.13 0.12		50 30 5	3 5 23	24 0.5 23	0.5 27.6 0.5	3.8 27.6 27.6	-24.4 -24.0 -24.0				1 95	4 31	6.4 6.6	6.1 12.4	24 24	10.0 10.0	-0.2 -0.2	0.0 0.0	25.5 29.1	14.5 16.5	5.9 6.7	0.0 0.0	30 30	39 34	0.0 0.0	16 14	179 51	8 8
40 40 2.28	6.88 10.13 0.12		29 30 50	1 30 5	30 30 23	-10.4 2.8 2.5	-12.4 1.3 20.7	-23.6 -23.0 -23.6				41 2 53	33 4 31	8.8 6.1 9.0	10.4 6.4 17.9	30 46 30	4.3 0.2 4.3	-7.9 -10.8 -7.9	0.0 0.0 0.0	32.7 17.7 32.7	34.5 31.1 34.5	3.7 7.2 3.7	0.0 0.0 0.0	36 32 36	25 35 25	0.0 0.0 0.0	12 12 12	50 180 50	8 8 8
41 41 2.5	6.88 10.13 0.08		1 30 30	1 30 5	30 30 24	-1.4 0.5 0.8	-4.7 0.6 9.5	-9.8 -9.4 -9.6				18 1 58	14 2 28	5.1 5.1 5.4	5.1 5.1 9.1	30 23 30	1.9 2.4 1.9	-1.1 -0.3 -1.1	0.0 0.0 0.0	18.0 11.0 18.0	18.0 11.0 18.0	1.8 2.4 1.8	0.0 0.0 0.0	17 15 17	12 22 12	0.0 0.0 0.0	14 21 14	45 184 51	8 8 8
43 43 2.5	6.88 10.13 0.12		29 30 50	1 30 5	43 34 45	-20.9 -2.9 25.5	0.5 0.4 -0.6	-23.5 -18.1 -22.0				76 1 77	27 3 27	8.4 6.1 11.4	6.6 6.4 6.6	34 34 34	0.2 0.2 0.2	9.0 9.0 9.0	0.0 0.0 0.0	16.5 14.5 16.5	29.1 25.5 29.1	6.7 5.9 6.7	0.0 0.0 0.0	28 28 28	31 35 31	0.0 0.0 0.0	14 16 14	50 180 50	8 8 8
44 44 2.5	6.88 10.13 0.13		1 30 30	1 30 5	20 9 24	0.3 0.5 0.3	6.1 -0.5 8.4	-15.5 -24.5 -15.5				20 1 60	15 3 28	5.1 5.1 5.2	5.1 5.1 7.3	25 25 25	2.4 2.4 2.4	-0.1 -0.1 -0.1	0.0 0.0 0.0	16.5 11.0 16.5	16.5 11.0 16.5	3.6 2.4 3.6	0.0 0.0 0.0	13 13 13	14 22 14	0.0 0.0 0.0	14 21 14	48 197 55	8 8 8
45 45 2.5	6.88 10.13 0.12		1 30 30	1 30 5	34 37 34	11.2 0.7 -10.7	0.4 -0.5 -0.4	-10.1 -14.8 -9.5				49 0 92	25 3 33	11.0 5.1 10.4	5.4 5.1 5.4	37 34 37	-1.5 -0.3 -1.5	-2.3 2.9 -2.3	0.0 0.0 0.0	18.3 11.0 18.3	18.3 11.0 18.3	1.8 2.4 1.8	0.0 0.0 0.0	21 18 21	14 26 14	0.0 0.0 0.0	14 21 14	46 184 49	8 8 8
48 48 2.5	6.88 10.13 0.07		29 30 50	1 30 5	18 27 15	1.7 0.8 -2.0	10.9 1.8 -8.1	-12.3 -1.9 -12.5				66 5 40	27 3 19	6.3 6.2 6.0	9.3 6.4 6.6	15 15 15	-5.5 -5.5 -5.5	1.4 1.4 1.4	0.0 0.0 0.0	16.5 11.0 16.5	29.1 19.4 29.1	6.7 4.5 6.7	0.0 0.0 0.0	23 23 23	33 49 33	0.0 0.0 0.0	14 21 14	50 178 52	8 8 8
50 50 2.5	6.88 10.13 0.06		28 50 30	1 30 5	18 15 18	-0.3 0.8 1.3	19.0 -2.5 -20.4	-10.1 -10.1 -9.1				79 3 93	22 3 29	6.4 6.4 6.5	8.9 6.1 9.7	27 15 27	8.7 -8.7 8.7	0.9 -0.7 0.9	0.0 0.0 0.0	31.3 24.0 31.3	29.6 13.6 29.6	3.5 5.5 3.5	0.0 0.0 0.0	31 30 31	30 36 30	0.0 0.0 0.0	14 17 14	50 180 50	8 8 8
51 51 2.5	6.88 10.13 0.05		4 30 60	1 30 5	23 15 15	4.5 0.5 0.8	-13.7 -1.8 -7.9	-10.8 -3.8 -3.3				77 4 25	33 2 12	7.6 6.9 7.1	11.5 7.2 7.0	27 27 27	5.6 5.6 5.6	1.3 1.3 1.3	0.0 0.0 0.0	17.6 12.2 17.6	37.6 26.1 37.6	8.8 6.1 8.8	0.0 0.0 0.0	20 20 20	32 46 32	0.0 0.0 0.0	13 19 13	60 160 60	8 8 8
52 52 2.5	6.88 10.13 0.06		1 30 30	1 30 5	26 31 18	-0.7 0.4 -0.1	-4.1 -0.3 -4.9	-6.7 -0.3 0.8				15 2 45	10 2 14	5.1 5.1 5.1	5.1 5.1 5.4	15 15 15	-1.8 -1.8 -1.8	-0.2 -0.2 -0.2	0.0 0.0 0.0	17.3 11.0 17.3	17.3 11.0 17.3	1.8 2.4 1.8	0.0 0.0 0.0	11 11 11	11 16 11	0.0 0.0 0.0	14 21 14	47 178 55	8 8 8
54 54 2.5	6.88 10.24 0.09		28 50 30	1 30 5	31 40 31	7.8 -1.7 -8.4	-4.9 3.2 6.3	-6.4 -9.0 -5.3				76 6 62	32 5 32	6.4 6.0 7.2	6.5 6.6 7.6	41 25 41	8.2 9.9 8.2	4.1 0.6 4.1	0.0 0.0 0.0	19.4 19.4 31.0	11.0 11.0 29.4	4.5 4.5 3.5	0.0 0.0 0.0	40 34 40	42 51 28	0.0 0.0 0.0	14 21 21	50 188 53	8 8 8
56 56 2.5	6.88 10.13 0.07		1 30 30	1 30 5	41 37 41	4.1 0.6 -3.1	-2.4 -0.8 2.8	-8.2 -3.9 -7.5				20 3 17	16 3 14	5.1 5.1 5.1	5.1 5.1 5.1	41 41 41	1.7 1.7 1.7	1.9 1.9 1.9	0.0 0.0 0.0	17.7 17.7 17.7	17.7 17.7 17.7	1.8 1.8 1.8	0.0 0.0 0.0	20 20 20	11 17 11	0.0 0.0 0.0	14 21 14	46 200 55	8 8 8
62 62 2.5	6.88 10.13 0.14		1 30 30	1 30 5	31 30 37	12.2 0.9 14.5	-0.4 0.9 -2.9	-17.3 -14.7 -14.7				47 1 36	30 4 33	10.4 5.1 11.3	8.6 5.1 12.9	30 46 30	3.1 0.0 3.1	-3.0 -4.7 -3.0	0.0 0.0 0.0	19.2 12.9 19.2	19.2 12.9 19.2	1.8 2.8 1.8	0.0 0.0 0.0	31 25 31	19 36 19	0.0 0.0 0.0	14 18 14	46 187 48	8 8 8
69 69 2.5	6.88 10.24 0.06		29 30 50	1 30 5	31 31 31	24.1 -4.7 -19.1	0.9 -0.4 -1.2	-3.1 -2.4 -2.0				80 8 82	24 4 25	12.5 6.1 9.6	6.8 6.5 6.8	31 31 31	-0.7 -0.7 -0.7	12.3 12.3 12.3	0.0 0.0 0.0	29.0 13.6 29.0	30.7 24.0 30.7	3.5 5.5 3.5	0.0 0.0 0.0	43 43 43	42 51 42	0.0 0.0 0.0	14 17 14	50 190 51	8 8 8
70 70 2.5	6.88 10.24 0.05		29 30 50	1 30 5	40 40 31	26.2 -4.0 -20.4	-5.4 1.2 2.5	-7.2 -6.5 -7.1				45 7 70	33 5 31	8.5 5.9 9.8	17.5 6.7 7.2	31 31 31	1.7 1.7 1.7	13.4 13.4 13.4	0.0 0.0 0.0	29.5 29.5 29.5	31.2 31.2 31.2	3.5 3.5 3.5	0.0 0.0 0.0	49 49 49	46 46 46	0.0 0.0 0.0	14 14 14	50 190 51	8 8 8
73 73 2.5	6.88 10.24 0.07		29 30 50	1 30 5	36 43 43	-22.5 3.9 16.8	3.1 -0.8 -2.8	-4.1 -1.7 -1.3				73 7 77	33 4 31	11.4 5.9 8.2	7.3 6.7 7.2	43 43 43	-1.7 -1.7 -1.7	-11.1 -11.1 -11.1	0.0 0.0 0.0	28.9 28.9 28.9	30.6 30.6 30.6	3.5 3.5 3.5	0.0 0.0 0.0	42 42 42	38 41 38	0.0 0.0 0.0	14 15 14	50 190 51	8 8 8
27 27 2.5	10.13 12.56 0.04		29 30 50	1 30 5	27 25 36	-4.3 -1.1 3.4	5.1 1.8 -2.6	-3.2 -3.5 -5.1				19 5 9	12 3 7	6.1 6.3 5.9	6.5 6.3 6.7	15 31 15	-2.0 -0.7 -2.0	5.0 5.6 5.0	0.0 0.0 0.0	29.1 11.0 29.1	30.7 19.4 30.7	3.5 4.5 3.5	0.0 0.0 0.0	23 21 23	17 29 17	0.0 0.0 0.0	14 21 14	50 89 50	8 8 8
31 31 2.5	10.13 11.48 0.01		29 30 50	1 30 5	5 5 14	-1.6 -0.8 1.1	1.3 0.5 -0.6	-3.1 -2.9 -2.2				5 1 2	3 1 2	6.2 6.3 5.9	6.4 6.3 6.6	5 0 5	-2.1 0.0 -2.1	-2.0 0.0 -2.0	0.0 0.0 0.0	29.0 11.0 29.0	30.6 19.4 30.6	3.5 4.5 3.5	0.0 0.0 0.0	14 0 14	13 0 13	0.0 0.0 0.0	14 21 14	51 0 51	8 8 8
33 33 1.99	10.13 11.48 0.02		28 50 30	1 30 5	27 40 40	-2.0 1.2 0.3	-18.7 -5.8 1.3	-2.6 -3.5 -3.3				74 10 2	27 6 1	6.4 6.0 6.4	9.8 6.6 6.1	24 0 24	13.1 0.0 13.0	-0.4 0.0 -0.4	0.0 0.0 0.0	36.0 36.1 36.0	34.1 20.5 34.1	4.0 8.3 4.0	0.0 0.0 0.0	37 0 37	36 0 36	0.0 0.0 0.0	9 9 9	55 0 55	8 8 8
34 34 2.5	10.13 11.48 0.01		4 30 60	1 30 5	11 11 11	-1.4 -0.3 1.4	-1.8 -0.6 1.3	-3.4 -3.1 -2.7				4 1 3	3 1 2	6.5 6.2 6.7	7.6 7.9 7.3	11 0 11	2.9 0.0 2.9	-2.6 0.0 -2.6	0.0 0.0 0.0	16.5 11.0 16.5	35.4 23.6 35.4	8.3 5.5 8.3	0.0 0.0 0.0	15 0 15	17 0 17	0.0 0.0 0.0	14 21 14	53 0 53	8 8 8
35	10.13		1	1	29	-0.9	-5.7	-1.0				48	20	5.1	6.1	40	3.7	2.8	0.0	17.3	17.3	1.8	0.0	37	22	0.0	14	45	8

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - PILASTRI

Filo Iniz. Fin. Ctg0	Quota Iniz. Final N/Nc	T r a t	Sez a n	C o n	VERIFICA A PRESSO-FLESSIONE										VERIFICA A TAGLIO E TORSIONE													
					Co mb	M (t*m)	Exd (t*m)	M (t*m)	N Ed (t)	x/ d	εf% 100	εc% 100	Area cmq b h	Co mb	V (t)	Exd (t)	V Eyd (t)	T Sdu (t*m)	V Rxd (t)	V Ryd (t)	TRd (t*m)	TRld (t*m)	Coe Cls	Coe Sta	ALon cmq	Staffe Pas Lun Fi		
35 2.5	11.48 0.02		30 30	3 5	40 20	0.9 -1.3	-1.1 -1.3	-2.3 -1.7		6 8	4 6	5.1 5.1	5.1 5.1	24 40	4.4 3.7	0.2 2.8	0.0 0.0	12.2 17.3	12.2 17.3	2.6 1.8	0.0 0.0	27 37	36 22	0.0 0.0	19 14	20 45	8 8	
37 37 2.5	10.13 12.56 0.05		29 30 50	1 3 5	24 24 46	-4.0 -0.8 6.7	4.9 1.5 -0.6	-9.3 -9.0 -6.7		16 2 10	11 3 6	6.2 6.3 6.4	6.4 6.3 6.2	46 46 46	-0.7 -0.7 -0.7	-6.7 -6.7 -6.7	0.0 0.0 0.0	29.6 11.0 29.6	31.3 19.4 31.3	3.5 4.5 3.5	0.0 0.0 0.0	24 24 24	23 34 23	0.0 0.0 0.0	14 21 14	50 89 50	8 8 8	
38 38 2.5	10.13 12.56 0.05		1 30 30	1 3 5	30 46 20	0.8 0.6 -0.1	-3.1 0.1 -1.8	-6.7 -6.0 -5.4		11 1 5	8 1 4	5.1 5.1 5.1	5.1 20 5.1	20 20 20	-1.5 -1.5 -1.5	-0.1 -0.1 -0.1	0.0 0.0 0.0	16.5 11.0 16.5	16.5 11.0 16.5	3.6 2.4 3.6	0.0 0.0 0.0	9 9 9	9 14 9	0.0 0.0 0.0	14 21 14	46 127 45	8 8 8	
39 39 2.5	10.13 13.88 0.05		28 50 30	1 3 5	30 18 27	1.4 -0.8 0.2	3.6 -1.7 2.1	-10.6 -8.9 -9.3		5 2 1	5 2 2	6.4 6.4 6.4	6.1 6.1 6.1	37 19 37	0.9 1.1 0.9	0.4 0.0 0.4	0.0 0.0 0.0	31.5 19.4 31.5	29.9 11.0 29.9	3.5 4.5 3.5	0.0 0.0 0.0	4 3 4	3 5 3	0.0 0.0 0.0	14 21 14	91 173 65	8 8 8	
40 40 2.5	10.13 13.88 0.04		29 30 50	1 3 5	20 46 46	1.5 2.6 6.1	-3.6 0.1 0.6	-4.6 -6.0 -5.6		10 3 10	6 2 6	6.1 6.1 6.0	6.5 6.4 6.6	46 34 46	0.4 0.0 0.4	-2.7 2.7 -2.7	0.0 0.0 0.0	29.2 11.0 29.2	30.9 19.4 30.9	3.5 4.5 3.5	0.0 0.0 0.0	10 9 10	9 14 9	0.0 0.0 0.0	14 21 14	50 196 76	8 8 8	
41 41 2.5	10.13 13.88 0.04		1 30 30	1 3 5	24 30 30	0.2 0.5 0.4	2.6 0.3 -0.4	-1.8 -1.9 -1.4		10 2 2	6 2 2	5.1 5.1 5.1	5.1 23 5.1	23 19 23	-0.4 0.5 -0.4	0.1 -0.1 0.1	0.0 0.0 0.0	17.4 11.0 17.4	17.4 11.0 17.4	1.8 2.4 1.8	0.0 0.0 0.0	3 3 3	3 4 3	0.0 0.0 0.0	14 21 14	91 191 63	8 8 8	
43 43 2.5	10.13 12.56 0.05		29 30 50	1 3 5	40 24 41	13.2 1.6 -6.7	1.3 1.4 0.5	-7.8 -9.0 -7.0		32 3 10	16 3 6	6.4 6.3 6.4	6.2 6.3 6.2	41 41 41	0.3 0.3 0.3	6.9 6.9 6.9	0.0 0.0 0.0	16.5 11.0 16.5	29.1 19.4 29.1	6.7 4.5 6.7	0.0 0.0 0.0	23 23 23	24 35 24	0.0 0.0 0.0	14 21 14	50 93 50	8 8 8	
44 44 2.5	10.13 12.53 0.05		1 30 30	1 3 5	27 46 25	0.5 0.6 0.1	-3.5 0.1 1.9	-6.9 -6.6 -6.3		12 0 5	9 1 4	5.1 5.1 5.1	5.1 5.1 5.1	25 25 25	1.6 1.6 1.6	0.1 0.1 0.1	0.0 0.0 0.0	16.5 11.0 16.5	16.5 11.0 16.5	3.6 2.4 3.6	0.0 0.0 0.0	9 9 9	10 15 10	0.0 0.0 0.0	14 21 14	46 124 45	8 8 8	
45 45 2.5	10.13 12.53 0.06		1 30 30	1 3 5	31 15 15	8.4 -0.4 -2.3	0.8 -0.6 -1.9	-3.8 -5.8 -5.6		64 1 12	27 2 10	8.5 5.1 5.1	5.4 5.1 5.1	31 31 31	-0.8 -0.8 -0.8	3.5 3.5 3.5	0.0 0.0 0.0	17.6 11.0 17.6	17.6 11.0 17.6	1.8 2.4 1.8	0.0 0.0 0.0	24 24 24	21 31 21	0.0 0.0 0.0	14 21 14	45 100 45	8 8 8	
48 48 2.5	10.13 11.48 0.01		29 30 50	1 3 5	5 8 5	-0.1 -0.5 -0.2	1.2 0.3 -0.8	-3.4 -3.1 -3.0		3 0 2	2 1 1	5.9 6.2 5.7	6.7 6.4 6.9	5 0 5	-2.0 0.0 -2.0	0.1 0.0 0.1	0.0 0.0 0.0	16.5 11.0 16.5	29.1 19.4 29.1	6.7 4.5 6.7	0.0 0.0 0.0	7 0 7	12 0 12	0.0 0.0 0.0	14 21 14	51 0 51	8 8 8	
50 50 2.17	10.13 11.48 0.02		28 50 30	1 3 5	24 27 25	-0.7 -1.4 -0.2	-19.5 -5.6 1.3	-2.9 -2.8 -2.4		78 11 2	22 7 1	6.1 6.0 6.2	10.3 6.6 6.3	25 0 25	12.3 0.0 12.3	-0.8 0.0 -0.8	0.0 0.0 0.0	34.1 35.4 34.1	32.2 20.1 32.2	3.8 8.2 3.8	0.0 0.0 0.0	39 0 39	35 0 35	0.0 0.0 0.0	10 10 10	55 0 55	8 8 8	
51 51 2.5	10.13 11.48 0.01		4 30 60	1 3 5	11 11 11	1.0 0.2 -0.9	-1.8 -0.6 1.3	-3.8 -3.6 -3.2		4 1 3	3 1 2	6.4 6.3 6.5	7.7 7.8 7.6	11 0 11	2.9 0.0 2.9	1.8 0.0 1.8	0.0 0.0 0.0	16.5 11.0 16.5	35.4 23.6 35.4	8.3 5.5 8.3	0.0 0.0 0.0	13 0 13	18 0 18	0.0 0.0 0.0	14 21 14	53 0 53	8 8 8	
52 52 2.5	10.13 11.48 0.02		1 30 30	1 3 5	24 25 21	-1.2 -0.8 1.5	-6.2 -1.3 -1.1	-2.2 -2.2 -0.8		61 6 9	26 5 6	5.2 5.1 5.1	6.4 5.1 5.1	21 21 21	-3.9 -3.9 -3.9	-3.3 -3.3 -3.3	0.0 0.0 0.0	17.3 17.3 17.3	17.3 17.3 17.3	1.8 1.8 1.8	0.0 0.0 0.0	41 41 41	24 34 24	0.0 0.0 0.0	14 20 14	45 20 45	8 8 8	
62 62 2.5	10.13 13.88 0.04		1 30 30	1 3 5	31 37 15	5.2 0.4 -2.2	0.7 -0.5 -1.2	-4.5 -2.7 -2.5		86 2 10	27 2 7	5.1 5.1 5.1	5.1 5.1 5.1	31 31 31	-0.5 -0.5 -0.5	1.6 1.6 1.6	0.0 0.0 0.0	17.6 11.0 17.6	17.6 11.0 17.6	1.8 2.4 1.8	0.0 0.0 0.0	12 12 12	10 15 10	0.0 0.0 0.0	14 21 14	50 216 59	8 8 8	

STAMPA PROGETTO S.L.U. - AZIONI S.L.V. - STABILITA' ELEMENTI SNELLI IN C.A.

Asta	Filo	Quota	Filo	Quota	Lambda	Lambda	Sf.Nor.	Ecc.EX	Ecc.AX	Ecc.2X	Ecc.EY	Ecc.AY	Ecc.2Y
3d	Iniz	Iniz.	Fina	Final	Elemen	Minimo	(t)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
64	5	3.63	5	0.00	33	32	-129.45	14	7	2	21	7	1
65	6	3.63	6	0.00	37	33	-122.59	8	8	1	18	8	1
66	7	3.63	7	0.00	33	33	-123.30	16	7	2	23	7	1
75	38	3.63	38	0.00	39	39	-52.56	8	8	1	20	8	2
80	44	3.63	44	0.00	39	38	-53.89	8	8	1	20	8	2

SETTI C.A. - MEGA-ELEMENTO: 1 - GR. QUOTE: 1 - AZIONI S.L.V. -																		
				PRESSOFLESSIONE						VERIFICA A TAGLIO								
Sez.	Quota	Asc.In.	Asc.Fin	Co	M Ed	N Ed	εf%	εc%	Area	Co	V Ed	VRcd	VRsd	VRd,s	ArmOr	ArmV e	Arm.P	STATUS
N.ro	(m)	(m)	(m)	Nr	(t*m)	(t)	100	100	cmq	Nr	(t)	(t)	(t)	(t)	cmq/ml		cmq	VERIF.
1	0.05	0.00	3.07	24	357.1	13.1	86	-16	37.3	20	99.1	112.0	99.2	147.2	10.3	0.0	0.0	VERIF.
2	1.16	0.00	3.07	24	357.1	15.5	42	-10	38.3	20	99.1	111.8	99.2	130.0	10.3	0.0	0.0	VERIF.
3	1.26	0.00	3.07	24	357.1	15.7	43	-11	38.3	20	99.1	111.8	99.2	128.6	10.3	0.0	0.0	VERIF.
4	2.37	0.00	3.07	24	357.1	18.0	56	-12	38.3	20	99.1	111.6	99.2	116.5	10.3	0.0	0.0	VERIF.
5	2.47	0.00	3.07	24	357.1	18.3	58	-12	38.3	20	99.1	111.6	99.2	115.7	10.3	0.0	0.0	VERIF.
6	3.58	0.00	3.07	24	338.4	20.6	29	-8	37.3	20	99.1	278.7	99.2		10.3	0.0	0.0	VERIF.
7	3.68	0.00	3.07	24	338.4	4.6	68	-14	34.4	20	101.7	272.6	101.8		10.6	0.0	0.0	VERIF.
8	4.66	0.00	3.07	24	302.7	6.7	46	-10	31.4	20	101.7	272.2	101.8		10.6	0.0	0.0	VERIF.
9	4.76	0.00	3.07	24	302.7	6.9	51	-11	31.3	20	101.7	272.2	101.8		10.6	0.0	0.0	VERIF.
10	5.75	0.00	3.07	24	266.9	9.0	30	-8	28.3	20	101.7	271.8	101.8		10.6	0.0	0.0	VERIF.
11	5.85	0.00	3.07	24	266.9	9.3	31	-8	28.3	20	101.7	271.8	101.8		10.6	0.0	0.0	VERIF.
12	6.83	0.00	3.07	24	231.2	11.4	80	-12	24.3	20	101.7	271.4	101.8		10.6	0.0	0.0	VERIF.
13	6.93	0.00	3.07	24	231.2	-5.3	48	-10	22.3	20	50.9	265.0	51.0		5.3	0.0	0.0	VERIF.
14	7.91	0.00	3.07	24	195.4	-3.2	28	-7	19.3	20	50.9	264.7	51.0		5.3	0.0	0.0	VERIF.
15	8.01	0.00	3.07	24	195.4	-3.0	29	-7	19.3	20	50.9	264.6	51.0		5.3	0.0	0.0	VERIF.
16	9.00	0.00	3.07	24	159.7	-0.9	20	-6	16.3	20	50.9	264.3	51.0		5.3	0.0	0.0	VERIF.
17	9.10	0.00	3.07	24	159.7	-0.7	20	-6	16.3	20	50.9	264.2	51.0		5.3	0.0	0.0	VERIF.
18	10.08	0.00	3.07	24	123.9	1.5	58	-8	12.3	20	50.9	263.8	51.0		5.3	0.0	0.0	VERIF.
19	10.18	0.00	3.07	24	123.9	-11.1	20	-5	11.3	20	50.9	258.2	51.0		5.3	0.0	0.0	VERIF.
20	11.33	0.00	3.07	24	82.7	-8.6	20	-4	7.3	20	50.9	257.7	51.0		4.2	3.4	0.0	VERIF.
21	11.43	0.00	3.07	24	82.7	-8.4	20	-4	7.3	20	50.9	257.7	51.0		4.2	3.4	0.0	VERIF.
22	12.58	0.00	3.07	20	42.5	-5.3	72	-6	3.3	20	50.9	257.2	51.0		4.4	3.9	0.0	VERIF.
23	12.68	0.00	3.07	20	42.5	-5.1	83	-7	3.3	20	50.9	257.2	51.0		4.4	3.9	0.0	VERIF.
24	13.83	0.00	3.07	18	2.8	-2.9	0	-1	2.3	41	-29.6	256.9	29.7		2.3	2.0	0.0	VERIF.

SETTI C.A. - MEGA-ELEMENTO: 2 - GR. QUOTE: 1 - AZIONI S.L.V. -																		
				PRESSOFLESSIONE						VERIFICA A TAGLIO								
Sez.	Quota	Asc.In.	Asc.Fin	Co	M Ed	N Ed	εf%	εC%	Area	Co	V Ed	VRcd	VRsd	VRd,s	ArmOr	ArmV e	Arm.P	STATUS
N.ro	(m)	(m)	(m)	Nr	(t*m)	(t)	100	100	cmq	Nr	(t)	(t)	(t)	(t)	cmq/ml		cmq	VERIF.
1	0.05	0.00	2.38	43	357.1	-44.0	97	-22	41.3	46	96.6	83.7	96.7	112.4	16.9	0.0	0.0	VERIF
2	1.16	0.00	2.38	43	357.1	-42.2	33	-14	42.3	46	96.6	83.5	96.7	143.4	16.9	0.0	0.0	VERIF
3	1.26	0.00	2.38	43	357.1	-42.0	33	-14	42.3	46	96.6	83.5	96.7	141.6	16.9	0.0	0.0	VERIF
4	2.37	0.00	2.38	43	357.1	-40.2	49	-16	42.3	46	96.6	83.4	96.7	127.7	16.9	0.0	0.0	VERIF
5	2.47	0.00	2.38	43	355.9	-40.0	38	-14	42.3	46	96.6	83.4	96.7	133.1	16.9	0.0	0.0	VERIF
6	3.58	0.00	2.38	43	318.9	-38.2	55	-16	37.3	43	-126.1	205.8	126.2		16.9	0.0	0.0	VERIF.
7	3.68	0.00	2.38	43	318.9	-33.3	29	-12	38.3	43	-63.1	205.0	63.2		8.5	0.0	0.0	VERIF.
8	4.66	0.00	2.38	43	285.7	-31.6	80	-18	33.3	43	-63.1	204.7	63.2		8.5	0.0	0.0	VERIF.
9	4.76	0.00	2.38	43	285.7	-31.5	82	-18	33.3	43	-63.1	204.6	63.2		8.5	0.0	0.0	VERIF.
10	5.75	0.00	2.38	43	252.6	-29.8	59	-15	29.3	43	-63.1	204.3	63.2		8.5	0.0	0.0	VERIF.
11	5.85	0.00	2.38	43	252.6	-29.7	60	-15	29.3	43	-63.1	204.3	63.2		8.5	0.0	0.0	VERIF.
12	6.83	0.00	2.38	43	219.4	-28.0	41	-12	25.3	43	-63.1	204.0	63.2		8.5	0.0	0.0	VERIF.
13	6.93	0.00	2.38	43	219.4	-23.2	81	-17	25.3	43	-63.1	203.2	63.2		8.5	0.0	0.0	VERIF.
14	7.91	0.00	2.38	43	186.3	-21.6	60	-13	21.3	43	-63.1	202.9	63.2		8.5	0.0	0.0	VERIF.
15	8.01	0.00	2.38	43	186.3	-21.4	62	-13	21.3	43	-63.1	202.8	63.2		8.5	0.0	0.0	VERIF.
16	9.00	0.00	2.38	43	153.2	-19.7	44	-10	17.3	43	-63.1	202.5	63.2		8.5	0.0	0.0	VERIF.
17	9.10	0.00	2.38	43	153.2	-19.6	45	-11	17.3	43	-63.1	202.5	63.2		8.5	0.0	0.0	VERIF.
18	10.08	0.00	2.38	43	120.0	-17.9	30	-8	13.3	43	-63.1	202.2	63.2		8.5	0.0	0.0	VERIF.
19	10.18	0.00	2.38	43	120.0	-12.9	21	-7	14.3	43	-63.1	201.3	63.2		8.5	0.0	0.0	VERIF.
20	11.33	0.00	2.38	43	81.8	-11.0	21	-5	9.3	44	-62.8	201.0	63.5		6.9	5.4	0.0	VERIF.
21	11.43	0.00	2.38	43	81.8	-10.9	21	-6	9.3	43	-63.1	200.9	63.2		6.9	5.4	0.0	VERIF.
22	12.58	0.00	2.38	43	43.5	-8.9	26	-5	4.3	43	-63.1	200.6	63.2		7.2	6.0	0.0	VERIF.
23	12.68	0.00	2.38	43	43.5	-8.8	36	-5	4.3	43	-63.1	200.6	63.2		7.1	6.0	0.0	VERIF.
24	13.83	0.00	2.38	36	5.4	-6.9	0	-1	2.3	43	-63.1	200.2	63.2		7.3	6.3	0.0	VERIF.

SETTI C.A. - MEGA-ELEMENTO: 3 - GR. QUOTE: 1 - AZIONI S.L.V. -																		
				PRESSOFLESSIONE						VERIFICA A TAGLIO								
Sez.	Quota	Asc.In.	Asc.Fin	Co	M Ed	N Ed	εf%	εc%	Area	Co	V Ed	VRcd	VRsd	VRd,s	ArmOr	ArmV e	Arm.P	STATUS
N.ro	(m)	(m)	(m)	Nr	(t*m)	(t)	100	100	cmq	Nr	(t)	(t)	(t)	(t)	cmq/ml		cmq	VERIF.
1	0.05	0.00	2.25	31	-135.2	-58.5	10	-7	25.3	41	49.3	78.8	49.4	249.7	7.0	0.0	0.0	VERIF.
2	1.16	0.00	2.25	31	135.2	-56.9	11	-7	25.3	41	49.3	78.7	49.4	248.3	7.0	0.0	0.0	VERIF.
3	1.26	0.00	2.25	31	135.2	-60.4	11	-7	23.3	41	48.3	77.8	48.4	222.6	6.9	0.0	0.0	VERIF.
4	2.37	0.00	2.25	31	133.0	-58.8	11	-7	23.3	41	48.3	194.2	48.4		6.9	0.0	0.0	VERIF.
5	2.47	0.00	2.25	31	133.0	-54.4	12	-7	21.3	41	48.0	190.1	48.1		6.8	0.0	0.0	VERIF.
6	3.58	0.00	2.25	31	117.0	-52.9	11	-7	19.3	41	48.0	189.8	48.1		6.8	0.0	0.0	VERIF.
7	3.68	0.00	2.25	31	117.0	-46.3	13	-7	18.3	37	-65.2	168.3	65.3		9.3	0.0	0.0	VERIF.
8	4.66	0.00	2.25	31	102.6	-44.9	12	-6	16.3	37	-65.2	168.3	65.3		9.3	0.0	0.0	VERIF.
9	4.76	0.00	2.25	31	102.6	-36.7	14	-7	14.3	37	-65.7	168.3	65.8		9.3	0.0	0.0	VERIF.
10	5.75	0.00	2.25	31	88.3	-35.3	13	-6	13.3	37	-65.7	168.3	65.8		9.3	0.0	0.0	VERIF.
11	5.85	0.00	2.25	31	88.3	-28.3	16	-6	11.3	37	-64.9	168.3	65.0		9.2	0.0	0.0	VERIF.
12	6.83	0.00	2.25	31	73.9	-26.9	15	-6	9.3	37	-64.9	168.3	65.0		9.2	0.0	0.0	VERIF.
13	6.93	0.00	2.25	31	73.9	-22.2	17	-6	9.3	37	-32.9	168.3	33.0		4.7	0.0	0.0	VERIF.
14	7.91	0.00	2.25	31	59.6	-20.8	16	-5	7.3	37	-32.9	168.3	33.0		4.7	0.0	0.0	VERIF.
15	8.01	0.00	2.25	31	59.6	-18.3	19	-5	6.3	37	-32.9	168.3	33.0		4.7	0.0	0.0	VERIF.
16	9.00	0.00	2.25	31	45.3	-16.9	16	-5	5.3	37	-32.9	168.3	33.0		4.7	0.0	0.0	VERIF.
17	9.10	0.00	2.25	31	45.3	-15.2	20	-5	4.3	37	-32.9	169.3	33.0		4.7	0.0	0.0	VERIF.
18	10.08	0.00	2.25	31	30.9	-13.8	15	-4	3.3	37	-32.9	169.1	33.0		4.7	0.0	0.0	VERIF.
19	10.18	0.00	2.25	31	30.9	-6.0	35	-5	3.3	41	29.4	169.5	29.5		4.2	0.0	0.0	VERIF.
20	11.20	0.00	2.25	31	16.0	-4.6	13	-3	2.3	41	29.4	169.2	29.5		2.6	2.2	0.0	VERIF.
21	11.31	0.00	2.25	31	16.0	-3.1	15	-3	2.3	41	29.4	168.9	29.5		2.6	2.2	0.0	VERIF.
22	12.33	0.00	2.25	36	1.6	-0.7	1	-1	2.3	41	29.4	168.6	29.5		2.6	2.5	0.0	VERIF.

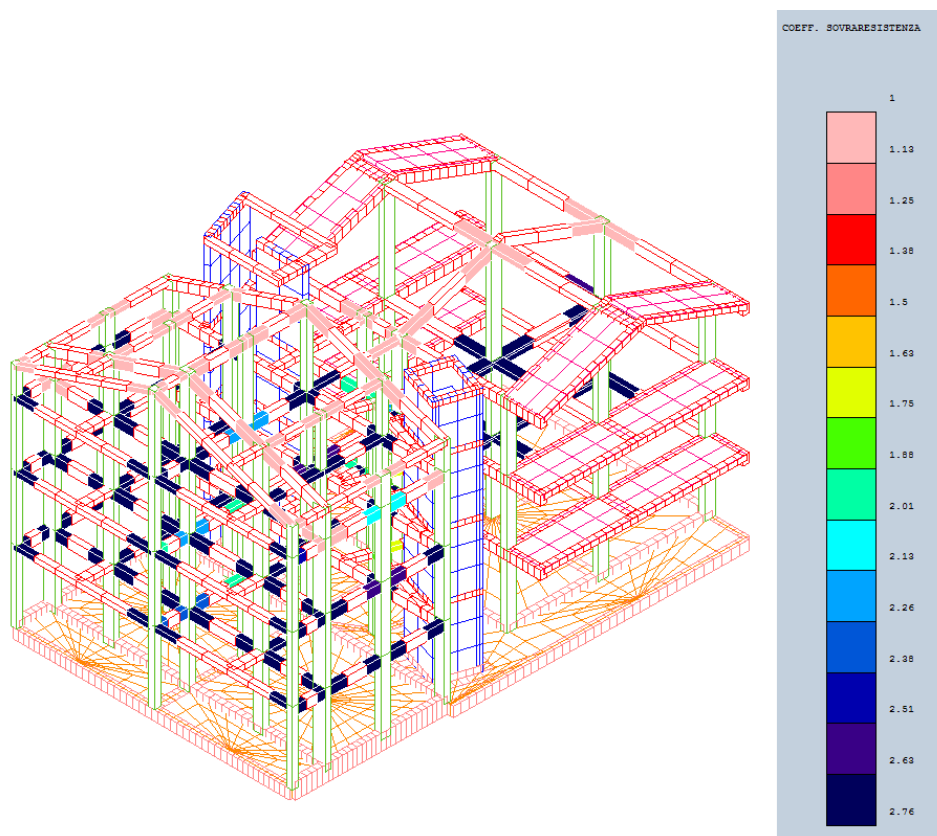
SETTI C.A. - MEGA-ELEMENTO: 4 - GR. QUOTE: 1 - AZIONI S.L.V. -																		
				PRESSOFLESSIONE						VERIFICA A TAGLIO								
Sez. N.ro	Quota (m)	Asc.In. (m)	Asc.Fin (m)	Co Nr	M Ed (t*m)	N Ed (t)	εf% 100	εc% 100	Area cmq	Co Nr	V Ed (t)	VRcd (t)	VRsd (t)	VRd,s (t)	ArmOr cmq/ml	ArmVe cmq	Arm.P cmq	STATUS VERIF.
1	0.05	0.00	2.25	31	-139.4	-168.8	3	-7	35.8	15	84.5	84.1	84.6	161.2	12.0	0.0	0.0	VERIF
2	1.16	0.00	2.25	31	139.4	-167.3	3	-7	36.0	15	84.5	84.1	84.6	160.0	12.0	0.0	0.0	VERIF
3	1.26	0.00	2.25	31	139.4	-145.6	4	-7	32.9	15	85.6	82.0	85.7	131.4	12.1	2.0	0.0	VERIF
4	2.37	0.00	2.25	31	137.1	-144.0	4	-7	32.9	15	85.6	204.8	85.7		12.1	0.0	0.0	VERIF.
5	2.47	0.00	2.25	31	137.1	-113.3	6	-7	27.9	15	85.0	196.8	85.1		12.1	0.0	0.0	VERIF.
6	3.58	0.00	2.25	31	120.7	-111.8	5	-6	26.7	15	85.0	196.5	85.1		12.1	0.0	0.0	VERIF.

SETTI C.A. - MEGA-ELEMENTO: 4 - GR. QUOTE: 1 - AZIONI S.L.V. -																		
				PRESSOFLESSIONE						VERIFICA A TAGLIO								
Sez.	Quota	Asc.In.	Asc.Fin	Co	M Ed	N Ed	εf%	εc%	Area	Co	V Ed	VRcd	VRsd	VRd,s	ArmOr	ArmVe	Arm.P	STATUS
N.ro	(m)	(m)	(m)	Nr	(t*m)	(t)	100	100	cmq	Nr	(t)	(t)	(t)	(t)	cmq/ml	cmq	cmq	VERIF.
7	3.68	0.00	2.25	31	120.7	-22.2	14	-7	20.6	31	74.5	172.3	74.6		10.6	0.0	0.0	VERIF.
8	4.66	0.00	2.25	31	105.9	-20.8	13	-6	19.0	31	74.5	172.0	93.8		7.3	18.0	0.0	VERIF.
9	4.76	0.00	2.25	31	105.9	-12.5	18	-6	15.3	43	-75.1	172.7	92.3		7.3	13.7	0.0	VERIF.
10	5.75	0.00	2.25	31	91.2	-11.1	17	-6	13.7	43	-75.1	172.4	92.1		7.3	14.0	0.0	VERIF.
11	5.85	0.00	2.25	31	91.2	0.1	40	-8	12.3	43	-73.9	174.3	90.1		7.2	10.6	0.0	VERIF.
12	6.83	0.00	2.25	31	76.5	1.5	20	-5	11.3	43	-73.9	174.1	89.9		7.2	10.8	0.0	VERIF.
13	6.93	0.00	2.25	31	76.5	5.9	21	-5	11.3	43	-37.6	174.2	52.6		3.7	6.3	0.0	VERIF.
14	7.91	0.00	2.25	31	61.7	7.3	23	-5	9.3	43	-37.6	174.0	52.4		4.5	7.4	0.0	VERIF.
15	8.01	0.00	2.25	31	61.7	3.5	20	-5	9.3	43	-37.6	173.1	52.0		4.5	6.2	0.0	VERIF.
16	9.00	0.00	2.25	31	47.0	4.8	20	-4	7.3	43	-37.6	172.8	51.5		4.5	6.4	0.0	VERIF.
17	9.10	0.00	2.25	31	47.0	0.2	35	-5	6.3	43	-37.6	171.7	50.6		4.5	5.2	0.0	VERIF.
18	10.08	0.00	2.25	31	32.3	1.5	18	-3	5.3	43	-37.6	171.5	50.3		4.5	5.3	0.0	VERIF.
19	10.18	0.00	2.25	31	32.3	-3.7	18	-4	4.3	15	42.8	169.4	42.9		4.2	3.9	0.0	VERIF.
20	11.20	0.00	2.25	31	17.0	-2.2	17	-3	2.3	15	42.8	169.2	42.9		14.4	14.2	0.0	VERIF.
21	11.30	0.00	2.25	31	17.0	-2.5	17	-3	2.3	15	42.8	168.9	42.9		14.4	14.1	0.0	VERIF.
22	12.33	0.00	2.25	36	2.1	-2.1	0	-1	2.3	15	42.8	168.6	42.9		14.4	14.3	0.0	VERIF.

SETTI C.A. - MEGA-ELEMENTO: 5 - GR. QUOTE: 1 - AZIONI S.L.V. -																		
				PRESSOFLESSIONE						VERIFICA A TAGLIO								
Sez.	Quota	Asc.In.	Asc.Fin	Co	M Ed	N Ed	εf%	εc%	Area	Co	V Ed	VRcd	VRsd	VRd,s	ArmOr	ArmV e	Arm.P	STATUS
N.ro	(m)	(m)	(m)	Nr	(t*m)	(t)	100	100	cmq	Nr	(t)	(t)	(t)	(t)	cmq/ml	cmq	cmq	VERIF.
1	0.05	0.00	1.78	21	-75.9	49.0	17	-4	23.3	31	75.4	53.2	75.5	91.1	9.2	27.7	0.0	VERIF.
2	1.16	0.00	1.78	21	75.9	50.2	17	-4	23.5	31	75.4	53.2	75.5	91.8	9.2	27.9	0.0	VERIF.
3	1.26	0.00	1.78	21	75.9	35.8	17	-5	22.3	32	82.5	53.2	82.6	102.7	10.1	28.5	0.0	VERIF.
4	2.37	0.00	1.78	21	73.3	37.1	17	-5	22.0	15	82.5	132.9	82.6		10.1	28.7	0.0	VERIF.
5	2.47	0.00	1.78	21	73.3	17.6	17	-5	18.3	21	83.0	132.9	83.1		10.2	24.3	0.0	VERIF.
6	3.58	0.00	1.78	21	64.5	18.9	16	-5	17.3	21	83.0	132.9	83.1		10.2	24.6	0.0	VERIF.
7	3.68	0.00	1.78	21	64.5	6.5	18	-6	14.3	21	80.9	132.9	81.0		9.9	19.5	0.0	VERIF.
8	4.66	0.00	1.78	21	56.6	7.6	17	-5	13.3	21	80.9	132.9	81.0		18.1	27.9	0.0	VERIF.
9	4.76	0.00	1.78	21	56.6	2.5	19	-6	11.3	21	81.4	132.9	81.5		18.2	23.3	0.0	VERIF.
10	5.75	0.00	1.78	21	48.7	3.6	18	-5	10.3	21	81.4	132.9	81.5		18.2	23.5	0.0	VERIF.
11	5.85	0.00	1.78	21	48.7	-1.1	25	-6	8.3	21	80.0	133.1	80.1		14.7	16.3	0.0	VERIF.
12	6.83	0.00	1.78	21	40.8	0.0	20	-5	7.3	21	80.0	132.9	80.1		14.7	16.5	0.0	VERIF.
13	6.93	0.00	1.78	21	40.8	4.7	19	-5	8.3	21	41.5	132.9	41.6		9.3	10.6	0.0	VERIF.
14	7.91	0.00	1.78	21	32.9	5.8	63	-7	6.3	21	41.5	132.9	41.6		11.5	13.1	0.0	VERIF.
15	8.01	0.00	1.78	21	32.9	2.6	20	-5	6.3	21	41.5	132.9	41.6		11.5	12.4	0.0	VERIF.
16	9.00	0.00	1.78	21	25.0	3.6	18	-4	5.3	21	41.5	132.9	41.6		11.5	12.6	0.0	VERIF.
17	9.10	0.00	1.78	21	25.0	-0.2	20	-4	4.3	21	41.5	132.9	45.6		9.4	9.5	0.0	VERIF.
18	10.08	0.00	1.78	21	17.1	0.9	19	-3	3.3	21	41.5	132.9	41.6		11.5	11.8	0.0	VERIF.

SETTI C.A. - MEGA-ELEMENTO: 5 - GR. QUOTE: 1 - AZIONI S.L.V. -																		
				PRESSOFLESSIONE						VERIFICA A TAGLIO								
Sez.	Quota	Asc.In.	Asc.Fin	Co	M Ed	N Ed	εf%	εC%	Area	Co	V Ed	VRcd	VRsd	VRd,s	ArmOr	ArmV e	Arm.P	STATUS
N.ro	(m)	(m)	(m)	Nr	(t*m)	(t)	100	100	cmq	Nr	(t)	(t)	(t)	(t)	cmq/ml	cmq	cmq	VERIF.
19	10.18	0.00	1.78	21	17.1	-2.0	16	-3	3.3	21	41.5	133.2	46.1		9.6	9.4	0.0	VERIF.
20	11.20	0.00	1.78	21	8.9	-0.9	12	-2	2.3	21	41.5	133.0	50.8		33.9	33.9	0.0	VERIF.
21	11.31	0.00	1.78	21	8.9	-1.7	11	-2	2.3	21	41.5	133.2	50.8		33.9	33.7	0.0	VERIF.
22	12.33	0.00	1.78	27	0.9	-1.3	0	-1	2.3	27	-39.7	133.1	48.1		31.6	31.6	0.0	VERIF.

SETTI C.A. - MEGA-ELEMENTO: 6 - GR. QUOTE: 1 - AZIONI S.L.V. -																		
				PRESSOFLESSIONE						VERIFICA A TAGLIO								
Sez.	Quota	Asc.In.	Asc.Fin	Co	M Ed	N Ed	εf%	εc%	Area	Co	V Ed	VRcd	VRsd	VRd,s	ArmOr	ArmV e	Arm.P	STATUS
N.ro	(m)	(m)	(m)	Nr	(t*m)	(t)	100	100	cmq	Nr	(t)	(t)	(t)	(t)	cmq/ml	cmq	cmq	VERIF.
1	10.18	0.00	1.78	36	-13.0	-1.4	18	-3	2.3	36	13.5	133.4	13.6		1.0	0.8	0.0	VERIF.
2	11.20	0.00	1.78	36	7.2	-0.3	10	-2	2.3	43	10.4	133.1	10.5		2.8	2.8	0.0	VERIF.
3	11.30	0.00	1.78	36	7.2	-1.7	9	-2	2.3	36	11.7	133.5	11.8		1.2	1.0	0.0	VERIF.
4	12.33	0.00	1.78	36	1.4	-0.5	1	-1	2.3	36	11.7	133.2	11.8		1.2	1.1	0.0	VERIF.



VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI			MOMENTI RESISTENTI				TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO		
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite
35 36 gRd=	3.63 3.63 1.1		26 30 25	0.36	0.44	i c f	2.41	0.18	-2.41	0.18	-0.70 0.00 0.00	-1.55 0.00 0.00	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 251 5 25	2.03 0.00 0.00	1.55 0.00 0.00	q = 1
41 42 gRd=	3.63 3.63 1.1		26 30 25	0.36	0.44	i c f	2.40	0.18	-3.49	0.21	-0.60 0.00 0.00	-2.62 0.00 0.00	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 320 5 25	2.63 0.00 0.00	2.62 0.00 0.00	q = 1
35 34 gRd=	3.63 3.63 1.1		25 30 45	1.07	1.07	i c f	9.18	0.14	-9.18	0.14	12.71 12.23 11.28	-11.28 -12.23 -12.71	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 44 10 45	15.79 15.31 15.79	12.71 12.23 12.71	q = 1
52 51 gRd=	3.63 3.63 1.1		25 30 45	1.07	1.07	i c f	7.06	0.13	-7.06	0.13	12.31 11.83 10.89	-10.89 -11.83 -12.31	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 44 10 45	12.31 11.83 12.31	14.01 13.53 14.01	q = 1
33 31 gRd=	3.63 3.63 1.1		25 30 45	2.16	2.26	i c f	18.16	0.18	-18.16	0.18	17.17 16.16 11.50	-12.75 -17.40 -18.42	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 167 10 45	17.17 17.40 18.42	26.91 25.89 26.91	q = 1
34 33 gRd=	3.63 3.63 1.1		25 30 45	2.16	2.26	i c f	15.19	0.17	-15.19	0.17	18.11 17.09 12.85	-14.18 -18.42 -19.44	27.24 27.24 27.24	36.54 19.23 36.54	10 45 19 148 10 45	18.11 18.42 19.44	30.16 29.15 30.16	q = 1
50 48 gRd=	3.63 3.63 1.1		25 30 45	2.16	2.26	i c f	16.26	0.17	-16.26	0.17	15.47 14.45 9.57	-10.50 -15.38 -16.40	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 177 10 45	15.47 15.38 16.40	24.77 23.75 24.77	q = 1
51 50 gRd=	3.63 3.63 1.1		25 30 45	2.16	2.26	i c f	11.67	0.15	-13.97	0.17	15.19 14.18 9.71	-9.69 -14.16 -15.17	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 158 10 45	15.19 14.18 15.17	23.68 22.67 23.68	q = 1
31 29 gRd=	3.63 3.63 1.1		25 30 45	1.38	1.51	i c f	21.04	0.19	-18.18	0.17	14.30 0.00 0.00	-14.57 0.00 0.00	27.24 27.24 27.24	36.54 20.30 36.54	10 45 18 47 10 45	14.57 0.00 0.00	37.28 0.00 0.00	q = 1
29 27 gRd=	3.63 3.63 1.1		25 30 45	1.38	1.51	i c f	12.18	0.15	-15.15	0.18	0.00 0.00 17.95	0.00 0.00 -10.84	27.24 27.24 27.24	36.54 36.54 36.54	10 45 10 28 10 45	0.00 0.00 17.95	0.00 0.00 32.78	q = 1
27 26 gRd=	3.63 3.63 1.1		25 30 45	1.37	1.40	i c f	9.17	0.13	-12.20	0.17	3.55 0.00 0.00	-9.20 0.00 0.00	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 105 10 45	9.20 0.00 0.00	11.18 0.00 0.00	q = 1
62 74 gRd=	3.63 3.63 1.1		25 30 45	0.84	0.88	i c f	9.18	0.14	-9.18	0.14	3.61 0.00 0.00	-7.81 0.00 0.00	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 78 10 45	7.81 0.00 0.00	14.74 0.00 0.00	q = 1
45 46 gRd=	3.63 3.63 1.1		25 30 45	1.16	1.21	i c f	9.18	0.14	-9.18	0.14	3.33 0.00 0.00	-7.15 0.00 0.00	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 105 10 45	9.55 0.00 0.00	7.15 0.00 0.00	q = 1
46 48 gRd=	3.63 3.63 1.1		25 30 45	1.16	1.21	i c f	9.18	0.14	-9.18	0.14	0.00 0.00 4.66	0.00 0.00 -2.19	27.24 27.24 27.24	36.54 36.54 36.54	10 36 10 0 10 36	0.00 0.00 8.87	0.00 0.00 4.66	q = 1
62 39 gRd=	3.63 3.63 1.1		25 30 45	3.63	3.86	i c f	9.36	0.14	-11.68	0.16	13.82 12.08 3.82	-5.64 -13.90 -15.64	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 177 10 45	13.82 13.90 15.64	23.30 21.57 23.30	q = 1
39 40 gRd=	3.63 3.63 1.1		25 30 45	3.63	3.86	i c f	9.36	0.13	-13.91	0.18	15.11 13.37 5.82	-4.83 -12.38 -14.12	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 158 10 45	15.11 13.37 14.12	23.11 21.37 23.11	q = 1
40 41 gRd=	3.63 3.63 1.1		25 30 45	1.07	1.07	i c f	7.06	0.13	-7.06	0.13	12.31 11.83 10.89	-10.89 -11.83 -12.31	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 44 10 45	12.31 11.83 12.31	17.12 16.65 17.12	q = 1
34 37 gRd=	3.63 3.63 1.1		25 30 45	1.45	1.55	i c f	16.09	0.19	-9.35	0.13	12.35 11.65 8.67	-12.70 -15.68 -16.38	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 156 10 45	12.70 15.68 16.38	18.01 17.31 18.01	q = 1

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE																			
Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI					TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO			
Iniz. Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite	
37 40 gRd=	3.63 3.63 1.1	25 30 45	1.44 1.54 f	1.44 1.54 f	1.54 1.54 f	i c f	13.97 11.66 11.66	0.16 0.14 0.14	-13.97 -16.16 -16.16	0.16 0.19 0.19	10.99 10.30 6.01	-7.49 -11.77 -12.47	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 245 10 45	10.99 11.77 12.47	16.77 16.08 16.77	q = 1	
40 43 gRd=	3.63 3.63 1.1	25 30 45	1.44 1.54 f	1.44 1.54 f	1.54 1.54 f	i c f	11.66 11.66 11.66	0.14 0.14 0.14	-16.16 -16.16 -16.16	0.19 0.19 0.19	11.92 11.23 7.07	-7.07 -11.23 -11.92	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 235 10 45	11.92 11.23 11.92	17.81 17.12 17.81	q = 1	
43 51 gRd=	3.63 3.63 1.1	25 30 45	1.44 1.54 f	1.44 1.54 f	1.54 1.54 f	i c f	11.66 11.66 16.09	0.14 0.14 0.19	-16.16 -16.16 -9.35	0.19 0.13 0.13	15.85 15.16 12.04	-7.21 -10.32 -11.01	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 166 10 45	15.85 15.16 12.04	16.75 16.05 16.75	q = 1	
27 38 gRd=	3.63 3.63 1.1	39 40 25	2.54 2.75 f	2.54 2.75 f	2.75 2.75 f	i c f	3.57 3.57 3.57	0.18 0.18 0.18	-6.80 -5.73 -5.73	0.25 0.23 0.23	7.92 7.24 0.60	-0.17 -6.81 -7.50	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 227 5 25	7.92 7.24 7.50	10.22 9.54 10.22	q = 1	
45 44 gRd=	3.63 3.63 1.1	39 40 25	2.54 2.75 f	2.54 2.75 f	2.75 2.75 f	i c f	3.57 3.57 3.57	0.18 0.18 0.18	-5.73 -5.73 -5.73	0.23 0.23 0.23	7.50 6.81 0.18	-0.18 -6.81 -7.50	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 227 5 25	7.50 6.81 7.50	9.59 8.90 9.59	q = 1	
37 36 gRd=	3.63 3.63 1.1	39 40 25	0.25 0.25 f	0.25 0.25 f	0.25 0.25 f	i c f	3.57 3.57 3.57	0.18 0.18 0.18	-5.73 -5.73 -5.73	0.23 0.23 0.23	1.14 1.08 0.77	-0.77 -1.08 -1.14	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 99 5 25	7.05 6.99 7.05	1.14 1.08 1.14	q = 1	
38 37 gRd=	3.63 3.63 1.1	39 40 25	2.54 2.75 f	2.54 2.75 f	2.75 2.75 f	i c f	3.57 3.57 3.57	0.18 0.18 0.18	-5.73 -5.73 -5.73	0.23 0.23 0.23	7.51 6.82 0.69	-0.69 -6.82 -7.51	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 208 5 25	7.51 6.82 7.51	9.49 8.80 9.49	q = 1	
43 42 gRd=	3.63 3.63 1.1	39 40 25	0.25 0.25 f	0.25 0.25 f	0.25 0.25 f	i c f	3.57 3.57 3.57	0.18 0.19 0.19	-5.73 -4.65 -4.65	0.23 0.21 0.21	0.96 0.90 0.59	-0.59 -0.90 -0.96	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 99 5 25	7.05 6.99 6.68	0.96 0.90 0.96	q = 1	
44 43 gRd=	3.63 3.63 1.1	39 40 25	2.54 2.75 f	2.54 2.75 f	2.75 2.75 f	i c f	3.57 3.57 3.57	0.18 0.18 0.18	-5.73 -5.73 -5.73	0.23 0.23 0.23	7.51 6.82 0.69	-0.69 -6.82 -7.51	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 208 5 25	7.51 6.82 7.51	9.38 8.69 9.38	q = 1	
36 41 gRd=	3.63 3.63 1.1	26 30 25	0.36 0.44 f	0.36 0.44 f	0.44 0.44 f	i c f	2.41 2.41 2.40	0.18 0.18 0.18	-2.41 -3.49 -3.49	0.18 0.21 0.21	0.00 0.00 2.67	0.00 0.00 0.63	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 320 5 25	0.00 0.00 2.67	0.00 0.00 2.71	q = 1	
42 52 gRd=	3.63 3.63 1.1	26 30 25	0.36 0.44 f	0.36 0.44 f	0.44 0.44 f	i c f	2.41 2.41 2.41	0.18 0.18 0.18	-2.41 -2.41 -2.41	0.18 0.18 0.18	0.00 0.00 1.61	0.00 0.00 0.69	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 251 5 25	0.00 0.00 2.05	0.00 0.00 1.61	q = 1	
2 1 gRd=	3.63 3.63 1.1	25 30 45	1.07 1.07 f	1.07 1.07 f	1.07 1.07 f	i c f	18.92 18.92 18.92	0.16 0.16 0.16	-23.41 -23.41 -23.41	0.20 0.20 0.20	11.94 11.46 6.59	-6.59 -11.46 -11.94	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 413 10 45	11.94 11.46 11.94	18.17 17.69 18.17	q = 1	
1 9 gRd=	3.63 3.63 1.1	25 30 45	1.07 1.07 f	1.07 1.07 f	1.07 1.07 f	i c f	18.92 18.92 18.92	0.16 0.16 0.16	-23.41 -23.41 -23.41	0.20 0.20 0.20	11.94 11.46 6.59	-6.59 -11.46 -11.94	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 413 10 45	11.94 11.46 11.94	18.28 17.80 18.28	q = 1	
54 66 gRd=	3.63 3.63 1.1	25 30 45	1.38 1.51 f	1.38 1.51 f	1.51 1.51 f	i c f	14.24 14.24 14.24	0.15 0.15 0.15	-18.79 -18.79 -18.79	0.19 0.19 0.19	21.13 0.00 0.00	-19.05 0.00 0.00	27.24 27.24 27.24	36.54 36.54 36.54	10 45 10 2 10 45	21.13 0.00 0.00	35.34 0.00 0.00	q = 1	
69 70 gRd=	3.63 3.63 1.1	25 30 45	1.07 1.07 f	1.07 1.07 f	1.07 1.07 f	i c f	18.92 18.90 18.90	0.16 0.18 0.18	-23.41 -18.90 -18.90	0.20 0.18 0.18	18.62 18.14 15.73	-13.91 -16.31 -16.79	27.24 27.24 27.24	36.54 18.27 36.54	10 45 20 181 10 45	18.62 18.14 16.79	32.88 32.40 32.88	q = 1	
70 73 gRd=	3.63 3.63 1.1	25 30 45	1.07 1.07 f	1.07 1.07 f	1.07 1.07 f	i c f	18.90 18.90 18.92	0.18 0.18 0.16	-18.90 -18.90 -23.41	0.18 0.18 0.20	32.94 32.46 31.56	-35.39 -36.28 -36.76	37.36 37.36 37.36	40.92 40.92 40.92	5 45 5 39 5 45	35.39 36.28 36.76	70.46 69.98 70.46	q = 1	
73 16 gRd=	3.63 3.63 1.1	25 30 45	1.41 1.52 f	1.41 1.52 f	1.52 1.52 f	i c f	14.24 14.24 14.24	0.15 0.15 0.15	-18.79 -18.79 -18.79	0.19 0.19 0.19	13.43 0.00 0.00	-9.11 0.00 0.00	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 207 10 45	13.43 0.00 0.00	22.46 0.00 0.00	q = 1	
5 6	3.63 3.63	38 50	0.31 0.31 c	0.31 0.31 c	0.31 0.31 c	i c	7.03	0.21	-9.22	0.24	4.29 4.21	-2.22 -3.74	23.52 23.52	37.86 14.56	5 25 13 463	4.29 4.21	5.20 5.12	q = 1	

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI				TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO			
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite
	gRd= 1.1		25			f	7.03	0.21	-7.03	0.21	2.69	-3.82	23.52	37.86	5 25	3.82	5.20	1
6	3.63		38	0.31	0.31	i	7.03	0.21	-7.03	0.21	3.82	-2.22	23.52	37.86	5 25	3.82	5.32	q
7	3.63		50			c					3.74	-3.74	23.52	14.56	13 463	3.74	5.25	=
	gRd= 1.1		25			f	7.03	0.21	-7.03	0.21	2.22	-3.82	23.52	37.86	5 25	3.82	5.32	1
70	3.63		48	4.66	4.98	i	26.71	0.30	-25.05	0.20	23.97	-4.41	27.24	36.54	10 45	23.97	25.95	q
6	3.63		30			c					21.73	-22.86	27.24	22.84	16 339	22.86	23.70	=
	gRd= 1.1		45			f	26.74	0.30	-29.49	0.21	3.28	-25.10	27.24	36.54	10 45	25.10	25.95	1
6	3.63		48	4.67	4.99	i	9.46	0.24	-28.06	0.50	20.63	5.46	27.24	36.54	10 79	20.63	22.25	q
1	3.63		30			c					16.66	-16.58	27.24	17.40	21 379	16.66	20.01	=
	gRd= 1.1		45			f	8.88	0.21	-19.25	0.30	-3.66	-18.83	27.24	36.54	10 45	18.83	22.25	1
62	3.63		26	1.21	1.47	i	3.49	0.19	-5.64	0.25	4.35	1.48	14.11	37.86	5 25	5.51	4.35	q
70	3.63		30			c					3.99	-3.99	14.11	11.13	17 385	5.14	3.99	=
	gRd= 1.1		25			f	3.49	0.19	-5.64	0.25	-1.48	-4.35	14.11	37.86	5 25	5.51	4.35	1
26	3.63		26	0.85	0.94	i	2.40	0.18	-4.56	0.24	3.10	-0.91	14.11	37.86	5 25	3.10	5.51	q
25	3.63		30			c					0.00	0.00	14.11	11.13	17 107	0.00	0.00	=
	gRd= 1.1		25			f	2.40	0.18	-4.56	0.24	0.00	0.00	14.11	37.86	5 25	0.00	0.00	1
21	3.63		26	0.85	0.94	i	3.49	0.19	-5.64	0.25	0.00	0.00	14.11	37.86	5 25	0.00	0.00	q
73	3.63		30			c					0.00	0.00	14.11	11.13	17 54	0.00	0.00	=
	gRd= 1.1		25			f	3.49	0.19	-5.64	0.25	-0.81	-5.07	14.11	37.86	5 25	5.07	8.25	1
25	3.63		26	0.85	0.94	i	3.49	0.19	-5.64	0.25	3.10	-0.91	14.11	37.86	5 25	3.10	6.19	q
21	3.63		30			c					2.86	-4.84	14.11	11.13	17 139	4.84	7.93	=
	gRd= 1.1		25			f	3.49	0.19	-5.64	0.25	-0.81	-5.07	14.11	37.86	5 25	5.07	8.16	1
74	3.63		26	1.82	2.05	i	2.40	0.18	-3.49	0.21	6.93	-5.00	14.11	37.86	5 25	6.93	7.16	q
56	3.63		30			c					6.42	-6.65	14.11	11.13	17 62	7.47	6.65	=
	gRd= 1.1		25			f	2.40	0.18	-4.56	0.24	4.76	-7.16	14.11	37.86	5 25	7.98	7.16	1
26	3.63		25	1.37	1.40	i	9.18	0.14	-9.18	0.14	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q
62	3.63		30			c					0.00	0.00	27.24	17.40	21 60	0.00	0.00	=
	gRd= 1.1		45			f	9.18	0.14	-9.18	0.14	8.31	-4.38	27.24	36.54	10 45	8.31	12.97	1
16	3.63		26	0.96	1.13	i	2.40	0.18	-3.49	0.21	1.92	-4.33	14.11	37.86	5 25	5.54	4.33	q
15	3.63		30			c					0.00	0.00	14.11	11.13	17 69	0.00	0.00	=
	gRd= 1.1		25			f	2.40	0.18	-3.49	0.21	0.00	0.00	14.11	37.86	5 25	0.00	0.00	1
14	3.63		26	0.19	0.19	i	2.40	0.18	-3.49	0.21	3.22	-2.97	14.11	37.86	5 25	4.85	3.22	q
12	3.63		30			c					3.18	-3.18	14.11	18.93	10 87	4.80	3.18	=
	gRd= 1.1		25			f	2.40	0.18	-3.49	0.21	2.97	-3.22	14.11	37.86	5 25	4.85	3.22	1
15	3.63		27	0.16	0.16	i	2.37	0.19	-2.37	0.19	0.60	-0.10	11.76	37.86	5 25	1.87	0.60	q
21	3.63		25			c					0.56	-0.56	11.76	11.13	17 272	1.83	0.56	=
	gRd= 1.1		25			f	2.37	0.19	-2.37	0.19	0.10	-0.60	11.76	37.86	5 25	1.87	0.60	1
56	3.63		26	0.78	0.81	i	3.49	0.19	-5.64	0.25	0.45	-3.64	14.11	37.86	5 25	3.64	12.36	q
58	3.63		30			c					0.00	0.00	14.11	11.13	17 70	0.00	0.00	=
	gRd= 1.1		25			f	2.40	0.17	-5.63	0.28	0.00	0.00	14.11	37.86	5 25	0.00	0.00	1
58	3.63		26	0.78	0.81	i	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 25	0.00	0.00	q
46	3.63		30			c					0.00	0.00	14.11	11.13	17 207	0.00	0.00	=
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	3.50	-0.20	14.11	37.86	5 25	3.50	3.65	1
66	3.63		27	0.46	0.56	i	2.37	0.19	-2.37	0.19	4.72	-4.12	11.76	37.86	5 25	4.72	4.95	q
65	3.63		25			c					4.59	-4.59	11.76	11.13	17 69	4.59	4.81	=
	gRd= 1.1		25			f	2.37	0.19	-2.37	0.19	4.12	-4.72	11.76	37.86	5 25	4.72	4.95	1
65	3.63		27	0.48	0.54	i	2.37	0.19	-2.37	0.19	2.11	-2.09	11.76	37.86	5 25	2.11	4.85	q
64	3.63		25			c					0.00	0.00	11.76	37.86	5 5	0.00	0.00	=
	gRd= 1.1		25			f	2.37	0.19	-2.37	0.19	0.00	0.00	11.76	37.86	5 25	0.00	0.00	1
63	3.63		27	0.16	0.16	i	3.45	0.21	-3.45	0.21	7.23	-7.19	11.76	37.86	5 15	25.82	7.23	q
64	3.63		25			c					7.21	-7.21	11.76	37.86	5 0	25.79	7.21	=
	gRd= 1.1		25			f	3.45	0.21	-3.45	0.21	7.19	-7.23	11.76	37.86	5 15	25.82	7.23	1
60	3.63		27	0.16	0.16	i	3.45	0.21	-3.45	0.21	15.67	15.67	17.05	0.00	0 15	25.82	15.67	q

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI					TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO			
Iniz. Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite	
59 gRd=	3.63 1.1	25				c					15.65	15.65	17.05	0.00	0 0	25.79	15.65	=	
		25				f	3.45	0.21	-3.45	0.21	15.63	15.63	17.05	0.00	0 15	25.82	15.67	1	
59 58 gRd=	3.63 3.63 1.1	27	0.48	0.54		i	2.37	0.19	-3.45	0.22	0.00	0.00	11.76	37.86	5 23	0.00	0.00	q	
		25				c					0.00	0.00	11.76	37.86	5 0	0.00	0.00	=	
gRd=	1.1	25				f	2.37	0.19	-3.45	0.22	3.57	-0.69	11.76	37.86	5 23	3.57	14.10	1	
64 59 gRd=	3.63 3.63 1.1	27	0.48	0.54		i	2.37	0.19	-2.37	0.19	3.57	-0.69	11.76	37.86	5 25	3.57	4.26	q	
		25				c					3.44	-1.95	11.76	11.13	17 128	3.44	4.12	=	
gRd=	1.1	25				f	2.37	0.19	-3.45	0.22	2.11	-2.09	11.76	37.86	5 25	2.11	3.20	1	
56 67 gRd=	3.63 3.63 1.1	26	1.08	1.31		i	2.40	0.18	-3.49	0.21	4.16	-0.42	14.11	37.86	5 25	4.16	4.84	q	
		30				c					3.83	-3.40	14.11	11.13	17 227	3.83	4.51	=	
gRd=	1.1	25				f	2.41	0.18	-2.41	0.18	0.85	-3.73	14.11	37.86	5 25	3.73	4.84	1	
67 69 gRd=	3.63 3.63 1.1	26	1.21	1.47		i	2.40	0.18	-3.49	0.21	3.40	-2.71	14.11	37.86	5 25	12.96	3.40	q	
		30				c					3.03	-3.03	14.11	37.86	5 2	12.59	3.03	=	
gRd=	1.1	25				f	2.40	0.18	-3.49	0.21	2.71	-3.40	14.11	37.86	5 25	12.96	3.40	1	
60 63 gRd=	3.63 3.63 1.1	34	0.38	0.38		i	12.89	0.13	-12.89	0.13	5.44	-4.77	30.90	45.22	11 60	16.23	5.44	q	
		25				c					5.22	-5.22	30.90	23.69	21 58	16.01	5.22	=	
gRd=	1.1	60				f	12.89	0.13	-12.89	0.13	4.77	-5.44	30.90	45.22	11 60	16.23	5.44	1	
15 14 gRd=	3.63 3.63 1.1	26	0.96	1.13		i	2.40	0.18	-3.49	0.21	0.00	0.00	14.11	37.86	5 17	0.00	0.00	q	
		30				c					0.00	0.00	14.11	37.86	5 0	0.00	0.00	=	
gRd=	1.1	25				f	2.40	0.18	-3.49	0.21	3.52	-2.75	14.11	37.86	5 17	4.68	3.52	1	
74 45 gRd=	3.63 3.63 1.1	25	0.84	0.88		i	9.18	0.14	-9.18	0.14	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q	
		30				c					0.00	0.00	27.24	17.40	21 97	0.00	0.00	=	
gRd=	1.1	45				f	9.18	0.14	-9.18	0.14	6.68	-4.78	27.24	36.54	10 45	6.68	7.97	1	
66 69 gRd=	3.63 3.63 1.1	25	1.38	1.51		i	14.24	0.15	-18.79	0.19	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q	
		30				c					0.00	0.00	27.24	36.54	10 0	0.00	0.00	=	
gRd=	1.1	45				f	14.24	0.15	-18.79	0.19	18.48	-21.64	27.24	36.54	10 45	21.64	37.07	1	
16 17 gRd=	3.63 3.63 1.1	25	1.41	1.52		i	14.24	0.15	-18.79	0.19	0.00	0.00	34.52	24.85	10 14	0.00	0.00	q	
		30				c					0.00	0.00	34.52	24.85	10 0	0.00	0.00	=	
gRd=	1.1	45				f	14.24	0.15	-18.79	0.19	8.77	-13.95	34.52	24.85	10 14	13.95	20.92	1	
35 36 gRd=	6.88 6.88 1.1	26	0.38	0.46		i	2.41	0.18	-2.41	0.18	-0.75	-1.71	14.11	37.86	5 25	2.13	1.71	q	
		30				c					0.00	0.00	14.11	11.13	17 251	0.00	0.00	=	
gRd=	1.1	25				f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 25	0.00	0.00	1	
41 42 gRd=	6.88 6.88 1.1	26	0.38	0.45		i	2.40	0.18	-3.49	0.21	-0.61	-2.65	14.11	37.86	5 25	2.65	2.66	q	
		30				c					0.00	0.00	14.11	11.13	17 320	0.00	0.00	=	
gRd=	1.1	25				f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 25	0.00	0.00	1	
35 34 gRd=	6.88 6.88 1.1	25	1.07	1.07		i	9.18	0.14	-9.18	0.14	14.84	-13.41	27.24	36.54	10 45	15.79	14.84	q	
		30				c					14.36	-14.36	27.24	17.40	21 44	15.31	14.36	=	
gRd=	1.1	45				f	9.18	0.14	-9.18	0.14	13.41	-14.84	27.24	36.54	10 45	15.79	14.84	1	
52 51 gRd=	6.88 6.88 1.1	25	1.07	1.07		i	7.06	0.13	-7.06	0.13	12.31	-10.89	27.24	36.54	10 45	12.31	15.78	q	
		30				c					11.83	-11.83	27.24	17.40	21 44	11.83	15.30	=	
gRd=	1.1	45				f	7.06	0.13	-7.06	0.13	10.89	-12.31	27.24	36.54	10 45	12.31	15.78	1	
33 31 gRd=	6.88 6.88 1.1	25	2.16	2.26		i	18.16	0.18	-18.16	0.18	17.17	-12.75	27.24	36.54	10 45	17.17	26.92	q	
		30				c					16.16	-17.40	27.24	17.40	21 167	17.40	25.90	=	
gRd=	1.1	45				f	15.18	0.16	-18.09	0.18	11.50	-18.42	27.24	36.54	10 45	18.42	26.92	1	
34 33 gRd=	6.88 6.88 1.1	25	2.16	2.26		i	15.19	0.17	-15.19	0.17	16.72	-12.81	27.24	36.54	10 45	16.72	28.38	q	
		30				c					15.71	-17.05	27.24	17.40	21 148	17.05	27.36	=	
gRd=	1.1	45				f	15.18	0.16	-18.09	0.18	11.47	-18.07	27.24	36.54	10 45	18.07	28.38	1	
50 48 gRd=	6.88 6.88 1.1	25	2.16	2.26		i	13.96	0.16	-16.22	0.18	15.45	-9.56	27.24	36.54	10 45	15.45	24.54	q	
		30				c					14.44	-14.44	27.24	17.40	21 177	14.44	23.53	=	
gRd=	1.1	45				f	13.96	0.16	-16.22	0.18	9.56	-15.45	27.24	36.54	10 45	15.45	24.54	1	
51 50 gRd=	6.88 6.88 1.1	25	2.16	2.26		i	11.67	0.15	-13.97	0.17	15.19	-9.69	27.24	36.54	10 45	15.19	23.24	q	
		30				c					14.18	-14.16	27.24	17.40	21 158	14.18	22.23	=	
gRd=	1.1	45				f	13.96	0.16	-16.22	0.18	9.71	-15.17	27.24	36.54	10 45	15.17	23.24	1	

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI			MOMENTI RESISTENTI				TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO		
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite
31 29 gRd=	6.88 6.88 1.1		25 30 45	0.93	1.09	i c f	18.16 18.09	0.18 0.18	-18.16 -15.18	0.18 0.16	13.48 0.00 0.00	-14.14 0.00 0.00	27.24 27.24 27.24	36.54 19.23 36.54	10 45 19 47 10 45	14.14 0.00 0.00	34.45 0.00 0.00	q = 1
29 27 gRd=	6.88 6.88 1.1		25 30 45	0.93	1.09	i c f	12.18 12.18	0.15 0.15	-15.15 -15.15	0.18 0.18	0.00 0.00 16.04	0.00 0.00 -11.53	27.24 27.24 27.24	36.54 36.54 36.54	10 45 10 28 10 45	0.00 0.00 16.04	0.00 0.00 35.60	q = 1
27 26 gRd=	6.88 6.88 1.1		25 30 45	1.33	1.37	i c f	9.17 9.18	0.13 0.14	-12.20 -9.18	0.17 0.14	3.40 0.00 0.00	-9.36 0.00 0.00	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 105 10 45	9.36 0.00 0.00	11.66 0.00 0.00	q = 1
62 74 gRd=	6.88 6.88 1.1		25 30 45	0.80	0.85	i c f	9.18 9.18	0.14 0.14	-9.18 -9.18	0.14 0.14	3.72 0.00 0.00	-7.71 0.00 0.00	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 78 10 45	7.71 0.00 0.00	14.90 0.00 0.00	q = 1
45 46 gRd=	6.88 6.88 1.1		25 30 45	1.24	1.30	i c f	9.18 9.18	0.14 0.14	-9.18 -9.18	0.14 0.14	5.97 0.00 0.00	-9.34 0.00 0.00	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 105 10 45	9.34 0.00 0.00	9.35 0.00 0.00	q = 1
46 48 gRd=	6.88 6.88 1.1		25 30 45	1.24	1.30	i c f	9.18 9.18	0.14 0.14	-9.18 -9.18	0.14 0.14	0.00 0.00 7.38	0.00 0.00 -4.00	27.24 27.24 27.24	36.54 36.54 36.54	10 36 10 0 10 36	0.00 0.00 9.33	0.00 0.00 7.38	q = 1
62 39 gRd=	6.88 6.88 1.1		25 30 45	3.63	3.86	i c f	9.36 9.35	0.14 0.13	-11.68 -16.09	0.16 0.19	13.82 12.08 3.82	-5.64 -13.90 -15.64	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 177 10 45	13.82 13.90 15.64	24.50 22.76 24.50	q = 1
39 40 gRd=	6.88 6.88 1.1		25 30 45	3.63	3.86	i c f	9.35 9.36	0.13 0.14	-16.09 -11.68	0.19 0.16	16.08 14.34 6.79	-4.83 -12.38 -14.12	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 158 10 45	16.08 14.34 14.12	24.77 23.03 24.77	q = 1
40 41 gRd=	6.88 6.88 1.1		25 30 45	1.07	1.07	i c f	7.06 7.06	0.13 0.13	-7.06 -7.06	0.13 0.13	12.31 11.83 10.89	-10.89 -11.83 -12.31	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 44 10 45	12.31 11.83 12.31	19.54 19.06 19.54	q = 1
34 37 gRd=	6.88 6.88 1.1		25 30 45	1.45	1.55	i c f	16.16 13.96	0.19 0.16	-11.66 -16.22	0.14 0.18	13.38 12.68 9.70	-12.73 -15.71 -16.41	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 156 10 45	13.38 15.71 16.41	17.99 17.29 17.99	q = 1
37 40 gRd=	6.88 6.88 1.1		25 30 45	1.44	1.54	i c f	13.96 11.66	0.16 0.14	-16.22 -16.16	0.18 0.19	11.73 11.04 6.75	-7.48 -11.77 -12.46	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 245 10 45	11.73 11.77 12.46	17.24 16.55 17.24	q = 1
40 43 gRd=	6.88 6.88 1.1		25 30 45	1.44	1.54	i c f	11.66 11.66	0.14 0.14	-16.16 -16.16	0.19 0.19	11.92 11.23 7.07	-7.07 -11.23 -11.92	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 235 10 45	11.92 11.23 11.92	18.22 17.53 18.22	q = 1
43 51 gRd=	6.88 6.88 1.1		25 30 45	1.44	1.54	i c f	11.67 13.97	0.15 0.17	-13.97 -11.67	0.17 0.15	14.00 13.30 10.19	-8.20 -11.32 -12.01	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 166 10 45	14.00 13.30 12.01	18.20 17.51 18.20	q = 1
27 38 gRd=	6.88 6.88 1.1		39 40 25	2.54	2.75	i c f	4.65 3.57	0.19 0.18	-7.87 -5.73	0.25 0.23	8.35 7.66 1.03	-0.61 -7.24 -7.93	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 227 5 25	8.35 7.66 7.93	10.57 9.88 10.57	q = 1
45 44 gRd=	6.88 6.88 1.1		39 40 25	2.54	2.75	i c f	3.57 3.57	0.18 0.18	-5.73 -5.73	0.23 0.23	7.50 6.81 0.18	-0.18 -6.81 -7.50	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 227 5 25	7.50 6.81 7.50	9.67 8.98 9.67	q = 1
37 36 gRd=	6.88 6.88 1.1		39 40 25	0.25	0.25	i c f	3.57 3.57	0.18 0.18	-5.73 -5.73	0.23 0.23	1.30 1.24 0.93	-0.93 -1.24 -1.30	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 99 5 25	7.05 6.99 7.05	1.30 1.24 1.30	q = 1
38 37 gRd=	6.88 6.88 1.1		39 40 25	2.54	2.75	i c f	3.57 3.57	0.18 0.18	-5.73 -5.73	0.23 0.23	7.51 6.82 0.69	-0.69 -6.82 -7.51	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 208 5 25	7.51 6.82 7.51	9.57 8.89 9.57	q = 1
43 42 gRd=	6.88 6.88 1.1		39 40 25	0.25	0.25	i c f	3.57 3.57	0.18 0.19	-5.73 -4.65	0.23 0.21	1.00 0.94 0.63	-0.63 -0.94 -1.00	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 99 5 25	7.05 6.99 6.68	1.00 0.94 1.00	q = 1

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI					TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO		
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite
44 43 gRd=	6.88 6.88 1.1	39 40 25	2.54 2.75 f	2.54 2.75 f	2.75 2.75 f	i c f	3.57 3.57 3.57	0.18 0.18 0.18	-5.73 -5.73 -5.73	0.23 0.23 0.23	7.51 6.82 0.69	-0.69 -6.82 -7.51	18.82 18.82 18.82	37.86 11.83 37.86	5 25 16 208 5 25	7.51 6.82 7.51	9.43 8.74 9.43	q = 1
36 41 gRd=	6.88 6.88 1.1	26 30 25	0.38 0.46 f	0.38 0.46 f	0.46 0.46 f	i c f	2.41 2.41 2.40	0.18 0.18 0.18	-2.41 -2.41 -3.49	0.18 0.18 0.21	0.00 0.00 2.70	0.00 0.00 0.66	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 320 5 25	0.00 0.00 2.70	0.00 0.00 2.74	q = 1
42 52 gRd=	6.88 6.88 1.1	26 30 25	0.38 0.45 f	0.38 0.45 f	0.45 0.45 f	i c f	2.41 2.41 2.41	0.18 0.18 0.18	-2.41 -2.41 -2.41	0.18 0.18 0.18	0.00 0.00 1.88	0.00 0.00 0.62	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 251 5 25	0.00 0.00 2.16	0.00 0.00 1.88	q = 1
2 1 gRd=	6.88 6.88 1.1	25 30 45	1.07 1.07 f	1.07 1.07 f	1.07 1.07 f	i c f	18.92 18.92 18.92	0.16 0.16 0.16	-23.41 -23.41 -23.41	0.20 0.20 0.20	11.94 11.46 6.59	-6.59 -11.46 -11.94	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 413 10 45	11.94 11.46 11.94	18.59 18.11 18.59	q = 1
1 9 gRd=	6.88 6.88 1.1	25 30 45	1.07 1.07 f	1.07 1.07 f	1.07 1.07 f	i c f	18.92 18.92 18.92	0.16 0.16 0.16	-23.41 -23.41 -23.41	0.20 0.20 0.20	11.94 11.46 6.59	-6.59 -11.46 -11.94	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 413 10 45	11.94 11.46 11.94	18.59 18.11 18.59	q = 1
54 66 gRd=	6.88 6.88 1.1	25 30 45	1.43 1.57 f	1.43 1.57 f	1.57 1.57 f	i c f	14.24 14.24 14.24	0.15 0.15 0.15	-18.79 -18.79 -18.79	0.19 0.19 0.19	20.92 0.00 0.00	-19.27 0.00 0.00	27.24 27.24 27.24	36.54 36.54 36.54	10 45 10 2 10 45	20.92 0.00 0.00	34.30 0.00 0.00	q = 1
69 70 gRd=	6.88 6.88 1.1	25 30 45	1.07 1.07 f	1.07 1.07 f	1.07 1.07 f	i c f	18.92 18.92 23.51	0.16 0.16 0.18	-23.41 -23.41 -23.51	0.20 0.20 0.18	20.49 20.01 17.60	-15.78 -18.19 -18.67	27.24 27.24 27.24	36.54 20.30 36.54	10 45 18 181 10 45	20.49 20.01 18.67	33.25 32.78 33.25	q = 1
70 73 gRd=	6.88 6.88 1.1	25 30 45	1.07 1.07 f	1.07 1.07 f	1.07 1.07 f	i c f	18.90 18.90 18.90	0.18 0.18 0.18	-18.90 -18.90 -18.90	0.18 0.18 0.18	32.91 32.44 31.54	-31.54 -32.44 -32.91	33.54 33.54 33.54	32.88 32.88 32.88	8 45 8 39 8 45	32.91 32.44 32.91	61.49 61.01 61.49	q = 1
73 16 gRd=	6.88 6.88 1.1	25 30 45	1.39 1.49 f	1.39 1.49 f	1.49 1.49 f	i c f	14.24 14.24 14.24	0.15 0.15 0.15	-18.79 -18.79 -18.79	0.19 0.19 0.19	13.42 0.00 0.00	-9.11 0.00 0.00	27.24 27.24 27.24	36.54 17.40 36.54	10 45 21 207 10 45	13.42 0.00 0.00	22.24 0.00 0.00	q = 1
5 6 gRd=	6.88 6.88 1.1	38 50 25	0.31 0.31 f	0.31 0.31 f	0.31 0.31 f	i c f	7.03 7.03 7.03	0.21 0.21 0.21	-7.03 -7.03 -7.03	0.21 0.21 0.21	3.82 3.74 2.22	-2.22 -3.74 -3.82	23.52 23.52 23.52	37.86 14.56 37.86	5 25 13 463 5 25	3.82 3.74 3.82	4.55 4.47 4.55	q = 1
6 7 gRd=	6.88 6.88 1.1	38 50 25	0.31 0.31 f	0.31 0.31 f	0.31 0.31 f	i c f	7.03 7.03 7.03	0.21 0.21 0.21	-7.03 -7.03 -7.03	0.21 0.21 0.21	3.82 3.74 2.22	-2.22 -3.74 -3.82	23.52 23.52 23.52	37.86 14.56 37.86	5 25 13 463 5 25	3.82 3.74 3.82	4.61 4.53 4.61	q = 1
70 6 gRd=	6.88 6.88 1.1	48 30 45	4.66 4.98 f	4.66 4.98 f	4.98 4.98 f	i c f	24.28 24.28 24.31	0.28 0.28 0.29	-23.54 -23.54 -25.75	0.20 0.20 0.21	22.96 20.72 2.27	-2.83 -21.28 -23.52	27.24 27.24 27.24	36.54 21.49 36.54	10 45 17 339 10 45	22.96 21.28 23.52	24.17 21.93 24.17	q = 1
6 1 gRd=	6.88 6.88 1.1	48 30 45	4.67 4.99 f	4.67 4.99 f	4.99 4.99 f	i c f	26.73 26.73 26.68	0.30 0.30 0.29	-28.03 -28.03 -21.39	0.21 0.21 0.18	21.10 17.89 -3.19	3.19 -18.85 -21.10	27.24 27.24 27.24	36.54 19.23 36.54	10 64 19 394 10 45	24.52 21.30 23.08	21.10 18.85 21.10	q = 1
62 70 gRd=	6.88 6.88 1.1	26 30 25	1.21 1.47 f	1.21 1.47 f	1.47 1.47 f	i c f	3.49 3.49 3.49	0.19 0.19 0.19	-5.64 -5.64 -5.64	0.25 0.25 0.25	4.36 3.99 -1.47	1.47 -3.99 -4.36	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 385 5 25	5.51 5.14 5.51	4.36 3.99 4.36	q = 1
26 25 gRd=	6.88 6.88 1.1	26 30 25	0.84 0.93 f	0.84 0.93 f	0.93 0.93 f	i c f	2.40 2.40 2.40	0.18 0.18 0.18	-4.56 -4.56 -4.56	0.24 0.24 0.24	3.08 0.00 0.00	-0.93 0.00 0.00	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 107 5 25	3.08 0.00 0.00	5.29 0.00 0.00	q = 1
21 73 gRd=	6.88 6.88 1.1	26 30 25	0.84 0.93 f	0.84 0.93 f	0.93 0.93 f	i c f	2.40 2.40 3.49	0.17 0.17 0.19	-5.63 -5.63 -5.64	0.28 0.28 0.25	0.00 0.00 -0.79	0.00 0.00 -5.05	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 54 5 25	0.00 0.00 5.05	0.00 0.00 7.91	q = 1
25 21 gRd=	6.88 6.88 1.1	26 30 25	0.84 0.93 f	0.84 0.93 f	0.93 0.93 f	i c f	3.49 3.49 2.40	0.19 0.19 0.17	-5.64 -5.64 -5.63	0.25 0.25 0.28	3.08 2.84 -0.79	-0.93 -4.82 -5.05	14.11 14.11 14.11	37.86 11.13 37.86	5 25 17 139 5 25	3.08 4.82 5.05	5.62 7.37 7.60	q = 1
74 56	6.88 6.88	26 30	1.82 2.05 c	1.82 2.05 c	2.05 2.05 c	i c	2.40 2.40	0.18 0.21	-3.49 -3.49	0.21 0.21	7.84 7.33	-5.68 -7.33	14.11 14.11	37.86 11.13	5 25 17 62	8.00 8.53	7.84 7.33	q =

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI				TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO			
Iniz. Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite
	gRd= 1.1		25			f	3.49	0.19	-5.64	0.25	5.68	-7.84	14.11	37.86	5 25	9.04	7.84	1
26 62	6.88 6.88		25 30	1.33	1.37	i c	9.18	0.14	-9.18	0.14	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q =
	gRd= 1.1		45			f	9.18	0.14	-9.18	0.14	8.05	-4.67	27.24	36.54	10 45	8.05	13.45	1
16 15	6.88 6.88		26 30	0.96	1.13	i c	2.41	0.18	-2.41	0.18	1.90	-4.14	14.11	37.86	5 25	4.68	4.14	q =
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 25	0.00	0.00	1
14 12	6.88 6.88		26 30	0.19	0.19	i c	2.40	0.18	-3.49	0.21	3.08	-2.82	14.11	37.86	5 25	4.85	3.08	q =
	gRd= 1.1		25			f	2.40	0.18	-3.49	0.21	3.03	-3.03	14.11	18.93	10 87	4.80	3.03	=
											2.82	-3.08	14.11	37.86	5 25	4.85	3.08	1
15 21	6.88 6.88		27 25	0.16	0.16	i c	2.37	0.19	-2.37	0.19	0.57	-0.07	11.76	37.86	5 25	1.87	0.57	q =
	gRd= 1.1		25			f	2.37	0.19	-2.37	0.19	0.53	-0.53	11.76	11.13	17 272	1.83	0.53	=
											0.07	-0.57	11.76	37.86	5 25	1.87	0.57	1
56 58	6.88 6.88		26 30	0.77	0.80	i c	4.57	0.21	-5.64	0.24	0.77	-3.66	14.11	37.86	5 25	3.66	13.38	q =
	gRd= 1.1		25			f	3.49	0.19	-5.64	0.25	0.00	0.00	14.11	18.93	10 70	0.00	0.00	=
											0.00	0.00	14.11	37.86	5 25	0.00	0.00	1
58 46	6.88 6.88		26 30	0.77	0.80	i c	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 25	0.00	0.00	q =
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	11.13	17 207	0.00	0.00	=
											3.75	-0.54	14.11	37.86	5 25	3.75	3.86	1
66 65	6.88 6.88		27 25	0.46	0.56	i c	2.37	0.19	-2.37	0.19	4.72	-4.12	11.76	37.86	5 25	4.72	5.19	q =
	gRd= 1.1		25			f	2.37	0.19	-2.37	0.19	4.59	-4.59	11.76	11.13	17 69	4.59	5.05	=
											4.12	-4.72	11.76	37.86	5 25	4.72	5.19	1
65 64	6.88 6.88		27 25	0.54	0.62	i c	2.37	0.19	-2.37	0.19	2.55	-2.07	11.76	37.86	5 25	2.55	5.07	q =
	gRd= 1.1		25			f	2.37	0.19	-2.37	0.19	0.00	0.00	11.76	37.86	5 5	0.00	0.00	=
											0.00	0.00	11.76	37.86	5 25	0.00	0.00	1
63 64	6.88 6.88		27 25	0.16	0.16	i c	3.45	0.21	-3.45	0.21	7.90	-7.86	11.76	37.86	5 15	25.82	7.90	q =
	gRd= 1.1		25			f	3.45	0.21	-3.45	0.21	7.88	-7.88	11.76	37.86	5 0	25.79	7.88	=
											7.86	-7.90	11.76	37.86	5 15	25.82	7.90	1
60 59	6.88 6.88		27 25	0.16	0.16	i c	3.45	0.21	-3.45	0.21	17.35	17.35	17.05	0.00	0 15	25.82	17.35	q =
	gRd= 1.1		25			f	3.45	0.21	-3.45	0.21	17.32	17.32	17.05	0.00	0 0	25.79	17.32	=
											17.30	17.30	17.05	0.00	0 15	25.82	17.35	1
59 58	6.88 6.88		27 25	0.54	0.62	i c	2.37	0.18	-4.52	0.25	0.00	0.00	11.76	37.86	5 23	0.00	0.00	q =
	gRd= 1.1		25			f	2.37	0.18	-4.52	0.25	0.00	0.00	11.76	37.86	5 0	0.00	0.00	=
											4.22	-0.49	11.76	37.86	5 23	4.22	15.66	1
64 59	6.88 6.88		27 25	0.54	0.62	i c	2.37	0.19	-2.37	0.19	4.22	-0.49	11.76	37.86	5 25	4.22	4.82	q =
	gRd= 1.1		25			f	2.37	0.19	-3.45	0.22	4.07	-1.91	11.76	11.13	17 128	4.07	4.66	=
											2.55	-2.07	11.76	37.86	5 25	2.55	3.51	1
56 67	6.88 6.88		26 30	1.08	1.31	i c	2.40	0.18	-3.49	0.21	4.16	-0.42	14.11	37.86	5 25	4.16	4.50	q =
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	3.83	-3.40	14.11	11.13	17 227	3.83	4.17	=
											0.85	-3.73	14.11	37.86	5 25	3.73	4.50	1
67 69	6.88 6.88		26 30	1.21	1.47	i c	2.40	0.18	-3.49	0.21	3.06	-2.38	14.11	37.86	5 25	12.96	3.06	q =
	gRd= 1.1		25			f	2.40	0.18	-3.49	0.21	2.70	-2.70	14.11	37.86	5 2	12.59	2.70	=
											2.38	-3.06	14.11	37.86	5 25	12.96	3.06	1
60 63	6.88 6.88		34 25	0.38	0.38	i c	12.89	0.13	-12.89	0.13	5.62	-4.95	30.90	45.22	11 60	16.23	5.62	q =
	gRd= 1.1		60			f	12.89	0.13	-12.89	0.13	5.39	-5.39	30.90	23.69	21 58	16.01	5.39	=
											4.95	-5.62	30.90	45.22	11 60	16.23	5.62	1
15 14	6.88 6.88		26 30	0.96	1.13	i c	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 17	0.00	0.00	q =
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 0	0.00	0.00	=
											3.46	-2.52	14.11	37.86	5 17	3.98	3.46	1
74 45	6.88 6.88		25 30	0.80	0.85	i c	9.18	0.14	-9.18	0.14	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q =
	gRd= 1.1		45			f	9.18	0.14	-9.18	0.14	0.00	0.00	27.24	17.40	21 97	0.00	0.00	=
											6.68	-4.81	27.24	36.54	10 45	6.68	7.71	1
66	6.88		25	1.43	1.57	i	14.24	0.15	-18.79	0.19	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI					TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO		
Iniz. Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite
69 gRd=	6.88 1.1		30			c					0.00	0.00	27.24	36.54	10 0	0.00	0.00	=
		45			f	14.24	0.15	-18.79	0.19	18.17	-21.95	27.24	36.54	10 45	21.95	36.64	1	
16 17 gRd=	6.88 6.88 1.1		25	1.39	1.49	i	14.24	0.15	-18.79	0.19	0.00	0.00	32.56	27.77	10 14	0.00	0.00	q
		30			c					0.00	0.00	32.56	27.77	10 0	0.00	0.00	=	
			45			f	14.24	0.15	-18.79	0.19	8.86	-13.85	32.56	27.77	10 14	13.85	21.16	1
35 36 gRd=	10.13 10.13 1.1		26	0.38	0.46	i	2.41	0.18	-2.41	0.18	-0.51	-1.97	14.11	37.86	5 25	2.15	1.97	q
		30			c					0.00	0.00	14.11	11.13	17 251	0.00	0.00	=	
			25			f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 25	0.00	0.00	1
41 42 gRd=	10.13 10.13 1.1		26	0.38	0.46	i	2.40	0.18	-3.49	0.21	-0.68	-2.42	14.11	37.86	5 25	2.66	2.42	q
		30			c					0.00	0.00	14.11	11.13	17 320	0.00	0.00	=	
			25			f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 25	0.00	0.00	1
35 34 gRd=	10.13 10.13 1.1		25	0.69	0.69	i	7.06	0.13	-7.06	0.13	9.58	-8.66	27.24	36.54	10 45	12.06	9.58	q
		30			c					9.27	-9.27	27.24	17.40	21 44	11.75	9.27	=	
			45			f	7.06	0.13	-7.06	0.13	8.66	-9.58	27.24	36.54	10 45	12.06	9.58	1
52 51 gRd=	10.13 10.13 1.1		25	0.69	0.69	i	7.06	0.13	-7.06	0.13	8.94	-8.02	27.24	36.54	10 45	12.06	8.94	q
		30			c					8.63	-8.63	27.24	17.40	21 44	11.75	8.63	=	
			45			f	7.06	0.13	-7.06	0.13	8.02	-8.94	27.24	36.54	10 45	12.06	8.94	1
33 31 gRd=	10.13 10.13 1.1		25	1.78	1.88	i	13.97	0.16	-13.97	0.16	12.13	-8.19	27.24	36.54	10 45	12.13	18.30	q
		30			c					11.28	-12.23	27.24	17.40	21 177	12.23	17.46	=	
			45			f	9.36	0.14	-11.68	0.16	7.24	-13.08	27.24	36.54	10 45	13.08	18.30	1
34 33 gRd=	10.13 10.13 1.1		25	1.78	1.88	i	9.36	0.14	-11.68	0.16	12.69	-8.14	27.24	36.54	10 45	12.69	20.15	q
		30			c					11.84	-11.84	27.24	17.40	21 158	11.84	19.30	=	
			45			f	11.67	0.15	-13.97	0.17	8.15	-12.69	27.24	36.54	10 45	12.69	20.15	1
50 48 gRd=	10.13 10.13 1.1		25	1.78	1.88	i	11.67	0.15	-13.97	0.17	12.13	-7.24	27.24	36.54	10 45	12.13	18.95	q
		30			c					11.28	-11.29	27.24	17.40	21 177	11.29	18.11	=	
			45			f	9.36	0.14	-11.68	0.16	7.24	-12.13	27.24	36.54	10 45	12.13	18.95	1
51 50 gRd=	10.13 10.13 1.1		25	1.78	1.88	i	9.36	0.14	-11.68	0.16	12.69	-8.14	27.24	36.54	10 45	12.69	19.96	q
		30			c					11.84	-11.84	27.24	17.40	21 158	11.84	19.12	=	
			45			f	11.67	0.15	-13.97	0.17	8.15	-12.69	27.24	36.54	10 45	12.69	19.96	1
31 29 gRd=	10.13 10.13 1.1		25	0.89	1.04	i	13.97	0.17	-11.67	0.15	9.83	-10.48	27.24	36.54	10 45	10.48	26.95	q
		30			c					0.00	0.00	27.24	17.40	21 47	0.00	0.00	=	
			45			f	13.97	0.17	-11.67	0.15	0.00	0.00	27.24	36.54	10 45	0.00	0.00	1
29 27 gRd=	10.13 10.13 1.1		25	0.89	1.04	i	9.36	0.14	-11.68	0.16	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q
		30			c					0.00	0.00	27.24	36.54	10 28	0.00	0.00	=	
			45			f	9.36	0.14	-11.68	0.16	12.28	-7.99	27.24	36.54	10 45	12.28	31.94	1
27 26 gRd=	10.13 10.13 1.1		25	1.27	1.32	i	7.05	0.12	-11.66	0.18	2.04	-8.52	27.24	36.54	10 45	8.52	9.05	q
		30			c					0.00	0.00	27.24	17.40	21 105	0.00	0.00	=	
			45			f	7.06	0.12	-9.38	0.15	0.00	0.00	27.24	36.54	10 45	0.00	0.00	1
62 74 gRd=	10.13 10.13 1.1		25	0.78	0.82	i	7.06	0.13	-7.06	0.13	3.15	-6.34	27.24	36.54	10 45	6.34	12.41	q
		30			c					0.00	0.00	27.24	17.40	21 78	0.00	0.00	=	
			45			f	7.06	0.13	-7.06	0.13	0.00	0.00	27.24	36.54	10 45	0.00	0.00	1
45 46 gRd=	10.13 10.13 1.1		25	1.27	1.33	i	7.06	0.13	-7.06	0.13	4.06	-7.60	27.24	36.54	10 45	7.66	7.60	q
		30			c					0.00	0.00	27.24	17.40	21 105	0.00	0.00	=	
			45			f	7.06	0.13	-7.06	0.13	0.00	0.00	27.24	36.54	10 45	0.00	0.00	1
46 48 gRd=	10.13 10.13 1.1		25	1.27	1.33	i	7.06	0.13	-7.06	0.13	0.00	0.00	27.24	36.54	10 36	0.00	0.00	q
		30			c					0.00	0.00	27.24	36.54	10 0	0.00	0.00	=	
			45			f	7.06	0.13	-7.06	0.13	5.40	-2.02	27.24	36.54	10 36	7.58	5.40	1
62 39 gRd=	10.13 10.13 1.1		25	3.63	3.86	i	7.06	0.12	-9.38	0.15	11.93	-2.86	27.24	36.54	10 45	11.93	17.78	q
		30			c					10.19	-11.13	27.24	17.40	21 177	11.13	16.04	=	
			45			f	7.05	0.12	-11.66	0.18	1.92	-12.87	27.24	36.54	10 45	12.87	17.78	1
39 40 gRd=	10.13 10.13 1.1		25	3.63	3.86	i	7.06	0.12	-9.38	0.15	12.08	-2.79	27.24	36.54	10 45	12.08	17.53	q
		30			c					10.34	-10.34	27.24	17.40	21 158	10.34	15.80	=	
			45			f	7.06	0.12	-9.38	0.15	2.79	-12.08	27.24	36.54	10 45	12.08	17.53	1

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo		Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI				TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO				
Iniz Fin. N.ro	Iniz. Final (m)		at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite	
40 41 gRd=	10.13 10.13 1.1		25 30 45		1.07 1.07		i c f	7.06 7.06	0.13 0.13	-7.06 -7.06	0.13 0.13	8.90 8.42 7.48	-7.48 -8.42 -8.90	27.24 27.24 27.24	36.54 17.40 36.54	10 21 10	45 44 45	12.31 11.83 12.31	8.90 8.42 8.90	q = 1
34 37 gRd=	10.13 10.13 1.1		25 30 45		1.21 1.31		i c f	13.91 11.67	0.18 0.15	-9.36 -11.67	0.13 0.15	11.03 10.44 7.94	-9.97 -12.48 -13.07	27.24 27.24 27.24	36.54 17.40 36.54	10 21 10	45 156 45	11.03 12.48 13.07	14.74 14.15 14.74	q = 1
37 40 gRd=	10.13 10.13 1.1		25 30 45		1.39 1.49		i c f	11.67 9.36	0.15 0.13	-11.67 -13.91	0.15 0.18	9.40 8.73 4.58	-6.07 -10.22 -10.89	27.24 27.24 27.24	36.54 17.40 36.54	10 21 10	45 245 45	9.40 10.22 10.89	14.41 13.74 14.41	q = 1
40 43 gRd=	10.13 10.13 1.1		25 30 45		1.39 1.49		i c f	9.36 9.36	0.13 0.13	-13.91 -13.91	0.18 0.18	10.30 9.63 5.61	-5.61 -9.63 -10.30	27.24 27.24 27.24	36.54 17.40 36.54	10 21 10	45 235 45	10.30 9.63 10.30	15.21 14.54 15.21	q = 1
43 51 gRd=	10.13 10.13 1.1		25 30 45		1.20 1.30		i c f	9.36 11.68	0.14 0.16	-11.68 -9.36	0.16 0.14	11.72 11.14 8.52	-6.52 -9.14 -9.73	27.24 27.24 27.24	36.54 17.40 36.54	10 21 10	45 166 45	11.72 11.14 9.73	14.87 14.28 14.87	q = 1
27 38 gRd=	10.13 10.13 1.1		39 40 25		2.54 2.75		i c f	3.57 3.57	0.18 0.18	-5.73 -5.73	0.23 0.23	7.50 6.81 0.18	-0.18 -6.81 -7.50	18.82 18.82 18.82	37.86 11.83 37.86	5 16 5	25 227 25	7.50 6.81 7.50	9.19 8.50 9.19	q = 1
45 44 gRd=	10.13 10.13 1.1		39 40 25		2.54 2.75		i c f	3.57 3.57	0.18 0.18	-5.73 -5.73	0.23 0.23	7.50 6.81 0.18	-0.18 -6.81 -7.50	18.82 18.82 18.82	37.86 11.83 37.86	5 16 5	25 227 25	7.50 6.81 7.50	8.32 7.63 8.32	q = 1
37 36 gRd=	10.13 10.13 1.1		39 40 25		0.25 0.25		i c f	3.57 3.57	0.18 0.19	-5.73 -4.65	0.23 0.21	0.58 0.52 0.21	-0.21 -0.52 -0.58	18.82 18.82 18.82	37.86 11.83 37.86	5 16 5	25 99 25	7.05 6.99 6.68	0.58 0.52 0.58	q = 1
38 37 gRd=	10.13 10.13 1.1		39 40 25		2.54 2.75		i c f	3.57 3.57	0.19 0.18	-4.65 -5.73	0.21 0.23	7.05 6.36 0.23	-0.69 -6.82 -7.51	18.82 18.82 18.82	37.86 11.83 37.86	5 16 5	25 208 25	7.05 6.82 7.51	7.89 7.21 7.89	q = 1
43 42 gRd=	10.13 10.13 1.1		39 40 25		0.25 0.25		i c f	3.57 3.57	0.18 0.19	-5.73 -4.65	0.23 0.21	0.60 0.54 0.23	-0.23 -0.54 -0.60	18.82 18.82 18.82	37.86 11.83 37.86	5 16 5	25 99 25	7.05 6.99 6.68	0.60 0.54 0.60	q = 1
44 43 gRd=	10.13 10.13 1.1		39 40 25		2.54 2.75		i c f	3.57 3.57	0.19 0.18	-4.65 -5.73	0.21 0.23	7.05 6.36 0.23	-0.69 -6.82 -7.51	18.82 18.82 18.82	37.86 11.83 37.86	5 16 5	25 208 25	7.05 6.82 7.51	7.79 7.10 7.79	q = 1
36 41 gRd=	10.13 10.13 1.1		26 30 25		0.38 0.46		i c f	2.41 2.40	0.18 0.18	-2.41 -3.49	0.18 0.21	0.00 0.00 2.46	0.00 0.00 0.72	14.11 14.11 14.11	37.86 11.13 37.86	5 17 5	25 320 25	0.00 0.00 2.70	0.00 0.00 2.46	q = 1
42 52 gRd=	10.13 10.13 1.1		26 30 25		0.38 0.46		i c f	2.41 2.41	0.18 0.18	-2.41 -2.41	0.18 0.18	0.00 0.00 2.08	0.00 0.00 0.45	14.11 14.11 14.11	37.86 11.13 37.86	5 17 5	25 251 25	0.00 0.00 2.17	0.00 0.00 2.08	q = 1
2 1 gRd=	10.18 10.18 1.1		25 30 45		0.34 0.34		i c f	9.36 13.97	0.14 0.16	-11.68 -13.97	0.16 0.16	6.46 6.31 4.77	-4.26 -5.80 -5.96	27.24 27.24 27.24	36.54 17.40 36.54	10 21 10	45 413 45	6.46 6.31 5.96	9.77 9.62 9.77	q = 1
1 9 gRd=	10.18 10.18 1.1		25 30 45		0.34 0.34		i c f	13.97 9.37	0.16 0.14	-13.97 -9.37	0.16 0.14	5.96 5.81 4.26	-4.26 -5.81 -5.96	27.24 27.24 27.24	36.54 17.40 36.54	10 21 10	45 413 45	5.96 5.81 5.96	10.03 9.88 10.03	q = 1
54 66 gRd=	10.24 10.24 1.1		25 30 45		2.25 2.47		i c f	7.06 7.06	0.13 0.13	-7.06 -7.06	0.13 0.13	10.22 0.00 0.00	-8.49 0.00 0.00	27.24 27.24 27.24	36.54 36.54 36.54	10 10 10	45 2 45	10.22 0.00 0.00	14.27 0.00 0.00	q = 1
69 70 gRd=	10.24 10.24 1.1		25 30 45		0.34 0.34		i c f	13.96 16.26	0.16 0.17	-16.22 -16.26	0.18 0.17	13.64 13.49 12.73	-11.81 -12.57 -12.73	27.24 27.24 27.24	36.54 17.40 36.54	10 21 10	45 181 45	13.64 13.49 12.73	23.50 23.35 23.50	q = 1
70 73 gRd=	10.24 10.24 1.1		25 30 45		0.34 0.34		i c f	9.36 9.36	0.13 0.13	-13.91 -13.91	0.18 0.18	20.06 19.90 19.62	-19.62 -19.90 -20.06	27.24 27.24 27.24	36.54 36.54 	10 18 10	45 39 45	20.06 19.90 20.06	28.37 28.22 28.37	q = 1

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI					TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO			
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite	
73 16	10.24 10.24	25 30	25 30	0.67	0.75	i c	9.36	0.13	-13.91	0.18	9.42	-4.14	27.24	36.54	10 45	9.42	13.61	q =	
						f	9.38	0.15	-7.06	0.12	0.00	0.00	27.24	17.40	21 207	0.00	0.00	=	
											0.00	0.00	27.24	36.54	10 45	0.00	0.00	1	
5 6	11.87 11.87	38 50	38 50	0.31	0.31	i c	3.64	0.17	-3.64	0.17	1.26	0.34	23.52	37.86	5 25	2.36	1.26	q =	
						f	3.64	0.17	-3.64	0.17	1.18	-1.18	23.52	14.56	13 463	2.28	1.18	=	
											-0.34	-1.26	23.52	37.86	5 25	2.36	1.26	1	
6 7	11.87 11.87	38 50	38 50	0.31	0.31	i c	3.64	0.17	-3.64	0.17	1.36	0.24	23.52	37.86	5 25	2.36	1.36	q =	
						f	3.64	0.17	-3.64	0.17	1.28	-1.28	23.52	14.56	13 463	2.28	1.28	=	
											-0.24	-1.36	23.52	37.86	5 25	2.36	1.36	1	
62 70	10.13 10.24	26 30	26 30	1.21	1.47	i c	3.49	0.20	-4.57	0.22	4.15	1.68	14.11	37.86	5 25	5.24	4.15	q =	
						f	3.49	0.19	-5.64	0.25	3.79	-3.79	14.11	11.13	17 386	5.14	3.79	=	
											-1.68	-4.15	14.11	37.86	5 25	5.51	4.15	1	
26 25	10.13 10.13	26 30	26 30	0.82	0.91	i c	3.49	0.19	-5.64	0.25	3.33	-1.20	14.11	37.86	5 25	3.33	6.02	q =	
						f	3.49	0.19	-5.64	0.25	0.00	0.00	14.11	11.13	17 107	0.00	0.00	=	
											0.00	0.00	14.11	37.86	5 25	0.00	0.00	1	
21 73	10.13 10.24	26 30	26 30	0.82	0.91	i c	3.49	0.19	-5.64	0.25	0.00	0.00	14.11	37.86	5 25	0.00	0.00	q =	
						f	3.49	0.19	-5.64	0.25	0.00	0.00	14.11	11.13	17 55	0.00	0.00	=	
											-0.44	-5.23	14.11	37.86	5 25	5.23	7.45	1	
25 21	10.13 10.13	26 30	26 30	0.82	0.91	i c	3.49	0.19	-5.64	0.25	3.33	-1.20	14.11	37.86	5 25	3.33	5.37	q =	
						f	3.49	0.19	-5.64	0.25	3.11	-5.00	14.11	11.13	17 139	5.00	7.03	=	
											-0.44	-5.23	14.11	37.86	5 25	5.23	7.26	1	
74 56	10.13 10.13	26 30	26 30	1.82	2.05	i c	2.40	0.18	-3.49	0.21	5.97	-3.81	14.11	37.86	5 25	6.93	5.97	q =	
						f	2.40	0.18	-4.56	0.24	5.46	-5.46	14.11	11.13	17 62	7.47	5.46	=	
											3.81	-5.97	14.11	37.86	5 25	7.98	5.97	1	
26 62	10.13 10.13	25 30	25 30	1.27	1.32	i c	7.06	0.13	-7.06	0.13	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q =	
						f	7.06	0.13	-7.06	0.13	0.00	0.00	27.24	17.40	21 60	0.00	0.00	=	
											6.50	-4.04	27.24	36.54	10 45	6.50	10.55	1	
16 15	10.24 10.13	26 30	26 30	0.97	1.14	i c	2.41	0.18	-2.41	0.18	1.49	-3.81	14.11	37.86	5 25	4.72	3.81	q =	
						f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	11.13	17 70	0.00	0.00	=	
											0.00	0.00	14.11	37.86	5 25	0.00	0.00	1	
14 12	10.13 10.13	26 30	26 30	0.19	0.19	i c	2.40	0.18	-3.49	0.21	2.72	-2.47	14.11	37.86	5 25	4.85	2.72	q =	
						f	2.40	0.18	-3.49	0.21	2.68	-2.68	14.11	18.93	10 87	4.80	2.68	=	
											2.47	-2.72	14.11	37.86	5 25	4.85	2.72	1	
15 21	10.13 10.13	27 25	27 25	0.16	0.16	i c	2.37	0.19	-2.37	0.19	0.47	0.03	11.76	37.86	5 25	1.87	0.47	q =	
						f	2.37	0.19	-2.37	0.19	0.43	-0.43	11.76	11.13	17 272	1.83	0.43	=	
											-0.03	-0.47	11.76	37.86	5 25	1.87	0.47	1	
56 58	10.13 10.13	26 30	26 30	0.71	0.74	i c	3.49	0.20	-4.57	0.22	0.63	-3.16	14.11	37.86	5 25	3.16	11.01	q =	
						f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	11.13	17 70	0.00	0.00	=	
											0.00	0.00	14.11	37.86	5 25	0.00	0.00	1	
58 46	10.13 10.13	26 30	26 30	0.71	0.74	i c	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 25	0.00	0.00	q =	
						f	2.41	0.18	-2.41	0.18	0.00	0.00	14.11	11.13	17 207	0.00	0.00	=	
											3.40	-0.47	14.11	37.86	5 25	3.40	4.01	1	
66 65	10.24 10.13	27 25	27 25	0.46	0.55	i c	2.37	0.19	-2.37	0.19	4.71	-4.10	11.76	37.86	5 25	4.71	5.05	q =	
						f	2.37	0.19	-2.37	0.19	4.57	-4.57	11.76	11.13	17 69	4.57	4.91	=	
											4.10	-4.71	11.76	37.86	5 25	4.71	5.05	1	
65 64	10.13 10.13	27 25	27 25	0.63	0.71	i c	2.37	0.19	-2.37	0.19	2.13	-2.08	11.76	37.86	5 25	2.13	4.92	q =	
						f	2.37	0.19	-2.37	0.19	0.00	0.00	11.76	37.86	5 5	0.00	0.00	=	
											0.00	0.00	11.76	37.86	5 25	0.00	0.00	1	
63 64	10.13 10.13	27 25	27 25	0.16	0.16	i c	3.45	0.21	-3.45	0.21	7.87	-7.82	11.76	37.86	5 15	25.82	7.87	q =	
						f	3.45	0.21	-3.45	0.21	7.85	-7.85	11.76	21.03	9 0	25.79	7.85	=	
											7.82	-7.87	11.76	37.86	5 15	25.82	7.87	1	
60 59	10.13 10.13	27 25	27 25	0.16	0.16	i c	3.45	0.21	-3.45	0.21	15.19	15.19	17.05	0.00	0 15	25.82	15.19	q =	
											15.17	15.17	17.05	0.00	0 0	25.79	15.17	=	

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE

Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI				TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO			
Iniz. Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite
	gRd= 1.1		25			f	3.45	0.21	-3.45	0.21	15.14	15.14	17.05	0.00	0 15	25.82	15.19	1
59	10.13	27	0.63	0.71	i		2.37	0.19	-3.45	0.22	0.00	0.00	11.76	37.86	5 23	0.00	0.00	q
58	10.13	25			c						0.00	0.00	11.76	37.86	5 0	0.00	0.00	=
	gRd= 1.1	25			f		2.37	0.19	-3.45	0.22	4.04	-0.26	11.76	37.86	5 23	4.04	13.96	1
64	10.13	27	0.63	0.71	i		2.37	0.19	-2.37	0.19	4.04	-0.26	11.76	37.86	5 25	4.04	5.01	q
59	10.13	25			c						3.86	-1.90	11.76	11.13	17 128	3.86	4.83	=
	gRd= 1.1	25			f		2.37	0.19	-3.45	0.22	2.13	-2.08	11.76	37.86	5 25	2.13	3.47	1
56	10.13	26	1.08	1.31	i		2.40	0.18	-3.49	0.21	4.05	-0.42	14.11	37.86	5 25	4.16	4.05	q
67	10.13	30			c						3.72	-3.40	14.11	11.13	17 227	3.83	3.72	=
	gRd= 1.1	25			f		2.41	0.18	-2.41	0.18	0.74	-3.73	14.11	37.86	5 25	3.73	4.05	1
67	10.13	26	1.18	1.44	i		2.40	0.18	-3.49	0.21	2.66	-1.97	14.11	37.86	5 25	12.68	2.66	q
69	10.24	30			c						2.30	-2.30	14.11	37.86	5 3	12.32	2.30	=
	gRd= 1.1	25			f		2.40	0.18	-3.49	0.21	1.97	-2.66	14.11	37.86	5 25	12.68	2.66	1
15	10.13	26	0.97	1.14	i		2.41	0.18	-2.41	0.18	0.00	0.00	14.11	37.86	5 17	0.00	0.00	q
14	10.13	30			c						0.00	0.00	14.11	37.86	5 0	0.00	0.00	=
	gRd= 1.1	25			f		2.41	0.18	-2.41	0.18	3.09	-2.19	14.11	37.86	5 17	3.96	3.09	1
74	10.13	25	0.78	0.82	i		7.06	0.13	-7.06	0.13	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q
45	10.13	30			c						0.00	0.00	27.24	17.40	21 97	0.00	0.00	=
	gRd= 1.1	45			f		7.06	0.12	-9.38	0.15	6.03	-3.53	27.24	36.54	10 45	6.03	6.84	1
66	10.24	25	2.25	2.47	i		7.06	0.12	-9.38	0.15	0.00	0.00	27.24	36.54	10 45	0.00	0.00	q
69	10.24	30			c						0.00	0.00	27.24	36.54	10 0	0.00	0.00	=
	gRd= 1.1	45			f		7.06	0.12	-9.38	0.15	5.95	-12.80	27.24	36.54	10 45	12.80	16.38	1
16	10.24	25	0.67	0.75	i		9.38	0.15	-7.06	0.12	0.00	0.00	27.24	36.54	10 14	0.00	0.00	q
17	10.24	30			c						0.00	0.00	27.24	36.54	10 0	0.00	0.00	=
	gRd= 1.1	45			f		9.38	0.15	-7.06	0.12	7.19	-6.51	27.24	36.54	10 14	7.19	11.46	1
62	13.88	25	2.35	2.35	i		7.06	0.13	-7.06	0.13	5.34	0.93	27.24	36.54	10 45	8.95	5.34	q
39	13.88	30			c						4.28	-4.28	27.24	17.40	21 177	7.90	4.28	=
	gRd= 1.1	45			f		7.06	0.13	-7.06	0.13	-0.93	-5.34	27.24	36.54	10 45	8.95	5.34	1
51	11.48	26	1.02	1.02	i		2.41	0.18	-2.41	0.18	3.40	-1.11	14.11	37.86	5 25	3.40	3.64	q
50	11.48	30			c						3.14	-3.39	14.11	11.13	17 198	3.63	3.39	=
	gRd= 1.1	25			f		2.40	0.18	-3.49	0.21	0.87	-3.64	14.11	37.86	5 25	3.88	3.64	1
39	13.88	25	2.35	2.35	i		7.06	0.13	-7.06	0.13	4.34	1.47	27.24	36.54	10 45	9.18	4.34	q
40	13.88	30			c						3.29	-3.29	27.24	17.40	21 158	8.12	3.29	=
	gRd= 1.1	45			f		7.06	0.13	-7.06	0.13	-1.47	-4.34	27.24	36.54	10 45	9.18	4.34	1
50	11.48	26	1.02	1.02	i		2.41	0.18	-2.41	0.18	2.46	0.27	14.11	37.86	5 25	3.34	2.46	q
48	11.48	30			c						2.20	-2.20	14.11	11.13	17 217	3.09	2.20	=
	gRd= 1.1	25			f		2.41	0.18	-2.41	0.18	-0.27	-2.46	14.11	37.86	5 25	3.34	2.46	1
34	11.48	26	1.02	1.02	i		2.41	0.18	-2.41	0.18	3.40	-1.23	14.11	37.86	5 25	3.40	3.77	q
33	11.48	30			c						3.14	-3.51	14.11	11.13	17 198	3.63	3.51	=
	gRd= 1.1	25			f		2.40	0.18	-3.49	0.21	0.86	-3.77	14.11	37.86	5 25	3.88	3.77	1
33	11.48	26	1.02	1.02	i		2.41	0.18	-2.41	0.18	2.84	-0.11	14.11	37.86	5 25	3.35	2.84	q
31	11.48	30			c						2.58	-2.58	14.11	11.13	17 217	3.09	2.58	=
	gRd= 1.1	25			f		2.41	0.18	-2.41	0.18	0.11	-2.84	14.11	37.86	5 25	3.35	2.84	1
25	13.88	38	0.52	0.52	i		3.64	0.17	-3.64	0.17	0.00	0.00	23.52	37.86	5 25	0.00	0.00	q
75	13.88	50			c						0.00	0.00	23.52	14.56	13 73	0.00	0.00	=
	gRd= 1.1	25			f		3.64	0.17	-3.64	0.17	1.63	-0.22	23.52	37.86	5 25	3.59	1.63	1
25	13.88	38	0.52	0.52	i		3.63	0.17	-5.81	0.21	0.00	0.00	27.28	30.29	5 25	0.00	0.00	q
22	13.88	50			c						0.00	0.00	27.28	11.65	13 105	0.00	0.00	=
	gRd= 1.1	25			f		3.64	0.17	-3.64	0.17	-0.30	-1.17	27.28	30.29	5 25	3.61	1.17	1
37	12.56	26	2.00	2.00	i		2.41	0.18	-2.41	0.18	3.94	1.23	14.11	37.86	5 25	4.64	3.94	q
38	12.56	30			c						3.44	-3.44	14.11	11.13	17 208	4.13	3.44	=
	gRd= 1.1	25			f		2.41	0.18	-2.41	0.18	-1.23	-3.94	14.11	37.86	5 25	4.64	3.94	1
22	13.88	26	0.19	0.19	i		2.41	0.18	-2.41	0.18	0.86	0.00	14.11	37.86	5 25	1.58	0.86	q

VERIFICHE DI DUTTILITA' ASTE IN C.A. - TRAVI ELEVAZIONE																			
Filo	Quota	Tr	Sez	CARICHI		MOMENTI RESISTENTI					TAGLIO PROGETTO		VERIFICA A TAGLIO			VALORI DEL TAGLIO			
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	g (t/m)	g+s*q (t/m)	Co nc	Mru+ (t*m)	x/d	Mru- (t*m)	x/d	Vmax (t)	Vmin (t)	VRcd (t)	VRsd (t)	Staffe Pas Lu	SovrRes (t)	con q=1 (t)	Lim ite	
12	13.88		30			c					0.82	-0.82	14.11	11.13	17 408	1.54	0.82	=	
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	0.00	-0.86	14.11	37.86	5 25	1.58	0.86	1	
38	12.56		26	2.00	2.00	i	2.41	0.18	-2.41	0.18	4.68	0.65	14.11	37.86	5 25	4.68	4.89	q	
27	12.56		30			c					4.18	-4.39	14.11	11.13	17 227	4.61	4.39	=	
	gRd= 1.1		25			f	2.40	0.18	-3.49	0.21	-0.87	-4.89	14.11	37.86	5 25	5.11	4.89	1	
44	12.53		26	2.00	2.00	i	2.40	0.18	-3.49	0.21	4.58	0.97	14.11	37.86	5 25	5.11	4.58	q	
45	12.53		30			c					4.08	-4.08	14.11	11.13	17 227	4.61	4.08	=	
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	-0.97	-4.58	14.11	37.86	5 25	4.68	4.58	1	
34	11.48		26	0.19	0.19	i	2.41	0.18	-2.41	0.18	1.56	-1.31	14.11	37.86	5 25	4.07	1.56	q	
35	11.48		30			c					1.51	-1.51	14.11	11.13	17 84	4.03	1.51	=	
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	1.31	-1.56	14.11	37.86	5 25	4.07	1.56	1	
51	11.48		26	0.19	0.19	i	2.41	0.18	-2.41	0.18	2.04	-1.79	14.11	37.86	5 25	4.07	2.04	q	
52	11.48		30			c					2.00	-2.00	14.11	11.13	17 84	4.03	2.00	=	
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	1.79	-2.04	14.11	37.86	5 25	4.07	2.04	1	
40	13.88		26	0.19	0.19	i	2.41	0.18	-2.41	0.18	3.45	-3.20	14.11	37.86	5 25	4.07	3.45	q	
41	13.88		30			c					3.41	-3.41	14.11	11.13	17 84	4.03	3.41	=	
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	3.20	-3.45	14.11	37.86	5 25	4.07	3.45	1	
37	12.56		26	0.19	0.19	i	2.40	0.18	-3.49	0.21	1.31	-1.03	14.11	37.86	5 25	4.49	1.31	q	
36	12.56		30			c					1.26	-1.26	14.11	11.13	17 99	4.44	1.26	=	
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	1.03	-1.31	14.11	37.86	5 25	4.21	1.31	1	
43	12.56		26	0.19	0.19	i	2.40	0.18	-3.49	0.21	1.25	-0.97	14.11	37.86	5 25	4.49	1.25	q	
42	12.56		30			c					1.20	-1.20	14.11	11.13	17 99	4.44	1.20	=	
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	0.97	-1.25	14.11	37.86	5 25	4.21	1.25	1	
75	13.88		26	0.19	0.19	i	2.41	0.18	-2.41	0.18	1.27	-0.57	14.11	37.86	5 25	1.76	1.27	q	
30	13.88		30			c					1.23	-1.23	14.11	11.13	17 325	1.71	1.23	=	
	gRd= 1.1		25			f	2.41	0.18	-2.41	0.18	0.57	-1.27	14.11	37.86	5 25	1.76	1.27	1	

VERIFICHE DI DUTTILITA' ASTE IN C.A. - PILASTRI																					
Filo	Quota	Tr	Sez	SOVRARESIST.			SOLLECITAZIONI SISMA X			SOLLECITAZIONI SISMA Y			MOM. RESISTENTI		TAGLIO PROG.		TAGLIO RESISTENTE				
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	Co nc	αx	αy	$\alpha x * M_x$ (t*m)	M_y (t*m)	N (t)	M_x (t*m)	$\alpha y * M_y$ (t*m)	N (t)	$M_{ru x}$ (t*m)	$M_{ru y}$ (t*m)	V_x (t)	V_y (t)	V_{Rxd} (t)	V_{Ryd} (t)	staffe Pas	L_i Lun	m.
1 1 gRd=	3.63 0.00 1.1	29 30 50	i c f		2.7 1.0	1.9 1.0	31.71 -31.56	-3.68 -2.04	-52.30 -48.07	-1.12 1.90	-9.86 -8.65	-56.11 -37.28	-41.15 41.17	20.78 -20.80	10.57 10.57 10.57	31.44 31.44 31.44	33.70 19.30 28.94	35.59 33.97 50.95	8 12 8	50 177 61	q = 1
2 2 gRd=	3.63 0.00 1.2	28 50 30	i c f		1.0 1.0	1.0 1.0	-9.20 13.25	-4.95 3.29	-33.37 -34.45	-5.73 -7.03	-7.61 -21.50	-45.72 -40.40	-20.31 20.32	-37.00 37.02	15.43 15.43 15.43	8.47 8.47 8.47	34.62 19.41 45.29	32.77 11.03 25.73	9 21 9	50 175 63	q = 1
5 5 gRd=	3.63 0.00 1.2	28 50 30	i c f		1.0 1.0	1.0 1.0	-5.86 9.99	2.38 -2.16	-77.27 -78.35	-2.36 1.48	17.06 -24.73	-72.90 -73.98	17.36 17.37	31.20 -31.21	13.00 13.00 13.00	7.24 7.24 7.24	24.12 19.41 24.12	22.84 11.03 22.84	4 21 4	50 176 62	q = 1
6 6 gRd=	3.63 0.00 1.1	28 50 30	i c f		2.5 1.0	2.5 1.0	9.01 -8.38	1.74 -1.76	-87.07 -88.24	1.59 -1.61	31.83 -18.47	-79.28 -80.47	-23.88 -23.89	50.82 -50.85	24.63 24.63 24.63	10.69 10.69 10.69	28.33 25.48 28.33	26.82 14.47 26.82	5 16 5	50 200 68	q = 1
7 7 gRd=	3.63 0.00 1.2	28 50 30	i c f		1.0 1.0	1.0 1.0	6.21 -10.92	-9.99 4.17	-77.77 -71.08	1.45 -1.47	19.16 -27.95	-72.64 -73.72	-19.69 -19.70	37.32 -37.33	15.55 15.55 15.55	8.21 8.21 8.21	26.69 19.41 26.69	25.27 11.03 25.27	5 21 5	50 177 61	q = 1
9 9 gRd=	3.63 0.00 1.2	28 50 30	i c f		1.0 1.0	1.0 1.0	9.84 -14.12	-3.82 1.34	-28.31 -29.39	2.34 0.67	-8.91 -22.82	-47.44 -33.50	21.44 -21.45	37.46 -37.48	15.62 15.62 15.62	8.94 8.94 8.94	45.29 19.41 45.29	25.73 11.03 25.73	9 21 9	50 175 63	q = 1
17 17 gRd=	3.63 0.00 1.2	28 50 30	i c f		1.0 1.0	1.0 1.0	8.16 -11.23	-6.35 16.07	-11.57 -12.65	-2.17 4.63	15.22 -25.54	-74.00 -75.08	19.49 -19.50	-36.95 36.97	15.41 15.41 15.41	8.12 8.12 8.12	32.05 19.41 32.05	30.35 11.03 30.35	6 21 6	50 175 63	q = 1
27 27	3.63 0.00	29 30	i c		2.4	1.5	15.75	-2.64	-40.18	-1.47	-4.67	-15.54	-32.43	-17.91	7.82 7.82	20.83 20.83	29.46 12.19	31.12 21.45	8 19	50 180	q =

VERIFICHE DI DUTTILITA' ASTE IN C.A. - PILASTRI																						
Filo	Quota	Tr	Sez	SOVRARESIST.			SOLLECITAZIONI SISMA X			SOLLECITAZIONI SISMA Y			MOM. RESISTENTI		TAGLIO PROG.		TAGLIO RESISTENTE					
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	Co nc	α_x	α_y	$\alpha_x \cdot M_x$ (t*m)	M_y (t*m)	N (t)	M_x (t*m)	$\alpha_y \cdot M_y$ (t*m)	N (t)	M_{ruX} (t*m)	M_{ruY} (t*m)	V_x (t)	V_y (t)	V_{Rxd} (t)	V_{Ryd} (t)	staffe PasLun	Li m.		
gRd= 1.1		50	f		1.0	1.0	-13.77	2.24	-54.58	1.07	5.60	-13.65	32.46	17.93	7.82	20.83	28.94	50.95	8 58	1		
31 31	3.63 0.00	29 30	i c		1.3	1.5	14.85	-6.93	6.94	9.56	-10.80	1.86	32.73	-20.18	12.68	23.95	28.77	30.39	14 50	q =		
gRd= 1.1		50	f		1.0	1.0	-16.82	7.34	5.86	-12.65	7.38	0.78	-32.82	20.24	12.68	23.95	28.77	30.39	14 57	1		
33 33	3.63 0.00	35 70	i c		1.0	2.7	0.86	6.15	-32.32	0.70	-26.01	-30.76	-20.73	-52.98	40.56	2.82	45.95	42.53	11 70	q =		
gRd= 1.1		30	f		1.0	1.0	-4.50	9.97	-18.03	-1.45	40.31	-29.41	-20.82	53.22	40.56	2.82	45.95	42.53	11 70	1		
34 34	3.63 0.00	4 30	i c		1.4	2.7	11.97	-1.54	-1.85	-3.91	-14.95	-27.45	46.52	-22.45	15.13	23.85	17.81	38.13	13 60	q =		
gRd= 1.1		60	f		1.0	1.0	-21.62	-5.12	-10.00	3.40	8.60	-20.71	-46.66	22.53	15.13	23.85	17.81	38.13	13 60	1		
35 35	3.63 0.00	1 30	i c		2.8	2.7	-1.97	-2.51	9.29	-0.55	-5.48	4.67	-12.33	-12.33	5.38	2.92	17.26	17.26	14 45	q =		
gRd= 1.1		30	f		1.0	1.0	-2.98	-2.55	-23.38	1.44	3.31	10.07	12.34	12.34	5.38	2.92	17.26	17.26	14 58	1		
37 37	3.63 0.00	29 30	i c		1.6	2.6	20.00	-0.92	-45.98	6.84	4.26	-63.03	-34.96	-19.24	7.01	25.67	32.95	34.80	7 50	q =		
gRd= 1.1		50	f		1.0	1.0	-17.50	0.94	-47.06	4.41	5.23	-31.78	34.98	19.26	7.01	25.67	33.08	58.23	7 57	1		
38 38	3.63 0.00	1 30	i c		1.0	2.6	0.70	2.42	-34.99	-0.65	-5.60	-32.27	-11.99	-11.99	5.78	1.64	21.49	21.49	10 49	q =		
gRd= 1.1		30	f		1.0	1.0	-2.04	0.65	-32.70	0.64	3.99	-32.08	-12.00	12.00	5.78	1.64	23.16	23.16	10 70	1		
39 39	3.63 0.00	28 50	i c		1.0	1.9	1.05	15.25	-52.44	1.05	15.28	-52.43	-18.05	-34.12	20.93	4.05	37.76	35.75	9 50	q =		
gRd= 1.1		30	f		1.0	1.0	-4.29	1.07	-53.63	-1.07	-14.42	-53.38	18.06	34.23	20.93	4.05	45.29	25.73	9 70	1		
40 40	3.63 0.00	29 30	i c		2.1	1.9	-19.42	3.50	-50.09	1.06	10.78	-53.24	-39.18	-24.67	11.43	29.81	33.68	35.57	9 50	q =		
gRd= 1.1		50	f		1.0	1.0	-19.16	0.90	-44.86	4.29	6.46	-37.24	39.22	24.68	11.43	29.81	17.81	31.36	13 180	1		
41 41	3.63 0.00	1 30	i c		2.8	2.0	3.54	-0.39	-14.53	-0.46	-3.92	-2.12	-12.51	-12.51	4.27	3.55	17.26	17.26	11 48	q =		
gRd= 1.1		30	f		1.0	1.0	-2.90	0.49	-15.24	0.82	2.81	0.69	12.52	12.52	4.27	3.55	17.26	17.26	11 70	1		
43 43	3.63 0.00	29 30	i c		2.6	2.6	-19.93	0.91	-45.38	-7.80	4.41	-59.21	34.46	-18.16	6.54	23.80	33.25	35.13	8 50	q =		
gRd= 1.1		50	f		1.0	1.0	15.75	-2.60	-49.27	-5.93	4.78	-36.53	-34.49	18.18	6.54	23.80	28.94	50.95	8 60	1		
44 44	3.63 0.00	1 30	i c		1.0	2.2	0.69	-0.69	-34.61	0.67	-5.59	-33.74	-10.92	10.92	5.49	1.57	21.58	21.58	10 49	q =		
gRd= 1.1		30	f		1.0	1.0	1.89	-2.56	-34.37	1.21	-3.89	-34.98	10.94	-10.94	5.49	1.57	23.16	23.16	10 78	1		
45 45	3.63 0.00	1 30	i c		2.8	1.5	-9.91	0.85	-19.85	1.21	-3.56	-32.44	-15.28	13.60	5.07	6.71	19.80	19.80	11 45	q =		
gRd= 1.1		30	f		1.0	1.0	4.03	-2.41	-20.50	2.48	-3.43	-19.30	15.29	-13.60	5.07	6.71	21.05	21.05	11 60	1		
48 48	3.63 0.00	29 30	i c		2.8	1.6	-3.01	-5.11	-36.07	-1.10	-10.10	-44.20	25.15	15.41	11.79	4.15	21.05	37.06	11 50	q =		
gRd= 1.1		50	f		1.0	1.0	4.60	5.87	-37.15	4.31	7.28	-45.28	-25.25	-15.45	11.79	4.15	21.05	37.06	11 59	1		
50 50	3.63 0.00	28 50	i c		1.0	1.6	-0.77	10.24	-29.60	0.50	-21.63	-25.15	16.78	-30.23	23.13	1.91	29.12	16.54	14 50	q =		
gRd= 1.1		30	f		1.0	1.0	3.01	-0.37	-18.48	2.17	-19.84	-25.46	-16.84	30.34	23.13	1.91	29.12	16.54	14 57	1		
51 51	3.63 0.00	4 30	i c		2.5	1.9	-14.44	-1.55	-12.40	-5.97	12.42	-30.91	-44.29	-20.40	13.21	20.42	17.81	38.13	13 60	q =		
gRd= 1.1		60	f		1.0	1.0	19.29	-0.20	-10.19	0.74	7.34	-12.52	44.40	20.47	13.21	20.42	17.81	38.13	13 65	1		
52 52	3.63 0.00	1 30	i c		2.8	1.6	1.66	-1.87	5.10	0.61	-4.03	10.35	10.69	-10.69	4.89	2.33	17.26	17.26	14 45	q =		
gRd= 1.1		30	f		1.0	1.0	2.51	-1.92	-20.43	-0.44	2.88	9.70	-10.70	10.70	4.89	2.33	17.26	17.26	14 60	1		
54 54	3.63 0.00	28 50	i c		1.0	1.0	-7.16	3.21	-1.16	-1.14	13.43	-57.16	-17.07	-30.76	12.83	7.12	30.56	28.93	6 50	q =		
gRd= 1.2		30	f		1.0	1.0	7.74	-1.15	-2.24	1.79	21.99	-20.05	17.08	-30.78	12.83	7.12	30.56	28.93	6 63	1		
56 56	3.63 0.00	1 30	i c		1.5	1.3	-3.75	1.17	-26.10	-0.39	2.79	-17.31	10.75	-10.75	3.94	4.92	18.58	18.58	13 45	q =		
gRd= 1.1		30	f		1.0	1.0	4.01	-1.47	-26.86	0.36	-2.81	-18.08	-10.77	10.77	3.94	4.92	18.58	18.58	13 68	1		
62 62	3.63 0.00	1 30	i c		2.4	2.5	11.80	-2.51	-44.35	3.76	9.48	-34.90	16.44	15.81	9.29	12.29	20.70	20.70	8 45	q =		
															9.29	12.29	12.86	12.86	18 192			

VERIFICHE DI DUTTILITA' ASTE IN C.A. - PILASTRI

Filo	Quota	Tr	Sez	SOVRARESIST.	SOLLECITAZIONI SISMA X				SOLLECITAZIONI SISMA Y				MOM. RESISTENTI		TAGLIO PROG.		TAGLIO RESISTENTE			
Iniz Fin. N.ro	Iniz. Final (m)	at Nr	Bas Alt cm	Co nc	αx	αy	$\alpha x \cdot M_x$ (t*m)	M_y (t*m)	N (t)	M_x (t*m)	$\alpha y \cdot M_y$ (t*m)	N (t)	$M_{ru x}$ (t*m)	$M_{ru y}$ (t*m)	V_x (t)	V_y (t)	V_{Rxd} (t)	V_{Ryd} (t)	staffe PasLun	Li m.
	gRd= 1.1	30	f		1.0	1.0	-6.90	-0.82	-41.15	-0.75	-5.25	-34.56	-16.45	-15.82	9.29	12.29	28.94	28.94	8 51	1
69 69	3.63 0.00	29 30	i c		1.6	1.6	-24.70	-0.59	-18.96	-11.53	-3.58	-21.02	-31.34	16.74	8.32	23.98	16.54	29.12	14 50	q
	gRd= 1.1	50	f		1.0	1.0	24.22	1.07	-20.33	5.49	7.13	-23.28	31.44	-16.80	8.32	23.98	16.54	29.12	14 60	= 1
70 70	3.63 0.00	29 30	i c		1.3	2.3	-26.02	2.23	-12.10	1.76	18.16	-42.10	-39.62	-24.82	15.01	30.28	30.42	32.13	7 50	q
	gRd= 1.1	50	f		1.0	1.0	-26.21	1.34	-66.93	-0.81	-9.00	-40.51	39.65	-24.84	15.01	30.28	32.55	57.30	7 54	= 1
73 73	3.63 0.00	29 30	i c		1.8	2.2	24.43	-2.96	3.54	-8.43	-5.02	-51.43	38.94	-19.60	8.92	29.75	36.18	38.22	7 50	q
	gRd= 1.1	50	f		1.0	1.0	-22.98	2.65	15.81	-2.89	7.11	-28.67	-38.96	19.61	8.92	29.75	17.53	30.85	13 176	= 1
1 1	6.88 3.63	29 30	i c		1.9	1.9	-25.45	-0.52	-25.98	2.19	-14.13	-35.17	-39.32	20.30	11.05	29.80	33.69	35.58	13 50	q
	gRd= 1.1	50	f		2.1	2.2	25.72	1.00	-27.03	5.23	15.62	-35.05	39.43	-20.35	11.05	29.80	17.60	30.98	13 180	= 1
2 2	6.88 3.63	28 50	i c		1.0	1.0	-7.27	-4.13	-22.20	-2.13	-8.77	-30.76	-19.49	35.29	12.96	8.38	29.12	16.54	14 50	q
	gRd= 1.2	30	f		1.0	1.0	7.70	5.63	-23.25	2.07	10.39	-31.81	19.55	-35.39	12.96	8.38	19.41	11.03	21 180	= 1
5 5	6.88 3.63	28 50	i c		1.0	1.0	-6.93	2.81	-50.40	-3.90	19.23	-47.44	16.15	26.43	11.34	6.93	29.12	16.54	14 51	q
	gRd= 1.2	30	f		1.0	1.0	5.85	-2.42	-51.45	3.81	-16.73	-48.49	-16.17	-26.45	11.34	6.93	19.41	11.03	21 179	= 1
6 6	6.88 3.63	28 50	i c		2.5	2.8	12.79	1.61	-55.81	-1.02	47.18	-50.99	-23.71	49.83	28.41	9.55	29.12	16.54	14 50	q
	gRd= 1.1	30	f		2.6	2.5	9.86	-11.57	-51.76	1.04	-39.49	-52.04	23.72	-49.86	28.41	9.55	29.12	16.54	14 50	= 1
7 7	6.88 3.63	28 50	i c		1.0	1.0	6.98	-1.85	-44.13	3.94	21.59	-46.94	-16.94	30.56	13.11	7.20	29.12	16.54	14 50	q
	gRd= 1.2	30	f		1.0	1.0	-5.64	1.54	-45.18	-3.83	-18.89	-47.99	16.95	-30.58	13.11	7.20	19.41	11.03	21 180	= 1
9 9	6.88 3.63	28 50	i c		1.0	1.0	7.41	-6.32	-17.94	2.41	-9.75	-27.78	20.11	33.98	14.60	8.64	29.12	16.54	14 50	q
	gRd= 1.2	30	f		1.0	1.0	-7.77	7.20	-18.99	-2.18	11.02	-28.83	-20.17	-34.07	14.60	8.64	19.41	11.03	21 180	= 1
17 17	6.88 3.63	28 50	i c		1.0	1.0	7.85	0.38	-17.57	1.48	12.06	-45.56	15.48	-25.33	10.90	6.65	29.12	16.54	14 50	q
	gRd= 1.2	30	f		1.0	1.0	-7.59	-1.27	-18.62	-1.51	-11.14	-46.61	-15.51	25.43	10.90	6.65	19.41	11.03	21 180	= 1
27 27	6.88 3.63	29 50	i c		2.7	1.5	15.38	-2.62	-25.87	-3.71	-4.59	-9.92	-31.03	-17.24	4.53	20.41	16.54	29.12	14 50	q
	gRd= 1.1	50	f		2.6	2.0	18.52	0.37	-18.72	8.08	4.56	-7.40	31.13	17.30	4.53	20.41	12.19	21.45	19 180	= 1
31 31	6.88 3.63	29 30	i c		1.3	1.5	12.28	-7.54	3.96	7.64	-11.71	1.29	31.77	-19.57	14.83	17.74	16.54	29.12	14 50	q
	gRd= 1.1	50	f		2.8	2.6	13.73	-1.10	-17.39	-2.32	12.89	-6.19	-31.87	19.63	14.83	17.74	15.44	27.18	15 180	= 1
33 33	6.88 3.63	35 70	i c		1.0	1.4	-0.70	19.36	-20.04	0.42	-31.81	-18.21	19.51	-48.24	38.00	1.31	45.11	41.75	11 70	q
	gRd= 1.1	30	f		1.0	2.6	1.24	-16.20	-21.51	0.90	-26.80	-14.22	-19.63	48.50	38.00	1.31	38.91	15.44	15 140	= 1
34 34	6.88 3.63	4 30	i c		2.0	1.9	9.07	-5.45	-4.36	-2.22	-16.13	-14.33	45.27	-21.83	17.18	12.05	17.81	38.13	13 60	q
	gRd= 1.1	60	f		2.8	2.5	12.89	-5.72	-22.46	-0.57	-17.83	-14.35	-45.42	21.91	17.18	12.05	17.81	38.13	13 60	= 1
35 35	6.88 3.63	1 30	i c		2.8	2.3	-2.98	2.02	-13.26	-0.79	6.53	-15.80	12.18	-12.18	6.36	1.70	17.26	17.26	14 46	q
	gRd= 1.1	30	f		2.5	2.6	3.72	-2.57	-15.46	1.32	-7.05	-15.96	-12.19	12.19	6.36	1.70	11.03	11.03	21 186	= 1
37 37	6.88 3.63	29 50	i c		2.1	1.3	18.49	-1.43	-27.28	-3.45	-2.87	-22.72	-34.02	-18.85	3.74	22.13	16.54	29.12	14 50	q
	gRd= 1.1	50	f		2.2	2.5	19.80	0.70	-34.91	-5.88	-3.20	-44.11	34.11	18.90	3.74	22.13	12.86	22.65	18 180	= 1
38 38	6.88 3.63	1 30	i c		1.0	1.7	0.50	2.82	-25.19	-0.50	6.05	-25.13	-11.79	-11.79	6.78	0.48	16.54	16.54	14 49	q
	gRd= 1.1	30	f		1.0	2.4	0.52	-2.97	-25.86	0.50	-6.63	-25.18	-11.80	11.80	6.78	0.48	11.03	11.03	21 200	= 1
39 39	6.88 3.63	28 50	i c		1.0	1.5	-0.76	15.27	-38.10	0.74	-15.52	-37.19	17.54	-32.80	22.15	1.34	29.12	16.54	14 50	q
	gRd= 1.1	30	f		1.0	1.5	0.88	0.78	-38.99	0.78	-17.88	-39.02	-17.60	32.90	22.15	1.34	22.65	12.86	18 180	= 1
40 40	6.88 3.63	29 30	i c		2.0	1.7	-16.06	4.57	-35.46	3.25	12.09	-37.95	-38.64	-24.15	13.52	21.19	16.54	29.12	14 50	q
															13.52	21.19	13.62	23.98	17 180	=

VERIFICHE DI DUTTILITA' ASTE IN C.A. - PILASTRI																						
Filo	Quota	Tr	Sez	SOVRARESIST.			SOLLECITAZIONI SISMA X			SOLLECITAZIONI SISMA Y			MOM. RESISTENTI		TAGLIO PROG.		TAGLIO RESISTENTE					
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	Co nc	αx	αy	$\alpha x \cdot M_x$ (t*m)	M_y (t*m)	N (t)	M_x (t*m)	$\alpha y \cdot M_y$ (t*m)	N (t)	$M_{ru x}$ (t*m)	$M_{ru y}$ (t*m)	V_x (t)	V_y (t)	V_{Rxd} (t)	V_{Ryd} (t)	staffe PasLun	Li m.		
gRd= 1.1		50	f		2.2	2.4	-17.08	0.64	-31.82	-7.90	-13.68	-37.59	38.68	24.20	13.52	21.19	16.54	29.12	14 50	1		
41 41	6.88 3.63	1 30	i 30	i c	2.8	1.5	2.51	-0.27	-11.31	-0.31	-4.68	-1.85	-12.31	-12.31	6.30	1.81	16.54	16.54	14 46	q =		
gRd= 1.1		30	f		2.8	2.3	-2.69	0.33	-11.94	-0.75	-5.69	-20.62	12.33	12.33	6.30	1.81	16.54	16.54	14 48	1		
43 43	6.88 3.63	29 30	i 30	i c	2.1	2.1	16.59	-1.58	-32.32	-2.26	2.86	-40.17	-33.13	-17.72	3.55	20.65	16.54	29.12	14 50	q =		
gRd= 1.1		50	f		2.4	2.6	-21.42	0.76	-38.05	2.16	-3.04	-41.22	33.23	17.78	3.55	20.65	16.54	29.12	14 50	1		
44 44	6.88 3.63	1 30	i 30	i c	1.0	2.1	-0.50	6.07	-25.02	-0.50	6.10	-24.95	10.73	-10.73	6.20	0.42	16.54	16.54	14 49	q =		
gRd= 1.1		30	f		1.0	2.5	-0.51	-6.53	-25.69	-0.51	-6.53	-25.69	10.74	10.74	6.20	0.42	16.54	16.54	14 51	1		
45 45	6.88 3.63	1 30	i 30	i c	2.8	1.7	-11.72	-0.60	-16.51	-2.32	-3.61	-21.88	15.05	13.02	3.88	8.23	19.03	19.03	14 47	q =		
gRd= 1.1		30	f		2.8	1.9	11.96	0.76	-17.14	2.58	4.05	-21.73	-15.06	-13.02	3.88	8.23	19.03	19.03	14 47	1		
48 48	6.88 3.63	29 30	i 30	i c	2.7	1.5	6.45	-0.52	-23.88	-1.25	-10.18	-26.10	-23.69	14.60	11.50	6.18	16.54	29.12	14 50	q =		
gRd= 1.1		50	f		2.8	2.6	-10.84	-2.36	-17.27	-0.54	11.38	-26.97	23.80	-14.67	11.50	6.18	16.54	29.12	14 50	1		
50 50	6.88 3.63	28 50	i 50	i c	1.0	1.9	0.62	9.79	-19.81	0.28	20.75	-13.82	-16.19	29.20	22.98	1.24	29.12	16.54	14 50	q =		
gRd= 1.1		30	f		1.0	2.6	-1.12	-9.31	-20.86	-0.40	20.96	-20.09	16.25	-29.31	22.98	1.24	29.12	16.54	14 50	1		
51 51	6.88 3.63	4 30	i 30	i c	1.4	1.8	-7.55	0.49	-7.25	-1.60	13.78	-22.10	-37.91	-18.16	14.29	10.92	17.81	38.13	13 60	q =		
gRd= 1.1		60	f		2.8	2.4	-14.12	-5.58	-25.23	-4.76	-15.10	-24.71	38.08	18.23	14.29	10.92	17.81	38.13	13 60	1		
52 52	6.88 3.63	1 30	i 30	i c	2.8	1.8	2.79	1.81	-12.11	0.91	5.11	-15.87	-10.49	-10.49	5.96	1.68	17.26	17.26	14 46	q =		
gRd= 1.1		30	f		2.5	2.7	-3.59	-1.89	-13.05	-1.26	-5.37	-13.73	10.51	10.51	5.96	1.68	17.26	17.26	14 48	1		
54 54	6.88 3.63	28 50	i 50	i c	1.0	1.0	-8.67	3.12	-4.27	-1.93	10.56	-35.59	-15.45	-25.25	10.86	6.64	29.12	16.54	14 50	q =		
gRd= 1.2		30	f		1.0	1.0	8.85	-3.77	-5.32	1.82	-9.97	-36.64	15.49	25.35	10.86	6.64	29.12	16.54	14 50	1		
56 56	6.88 3.63	1 30	i 30	i c	1.6	1.3	-3.28	2.26	-16.01	-0.37	3.07	-11.38	10.53	-10.53	4.44	3.99	18.13	18.13	14 49	q =		
gRd= 1.1		30	f		1.9	1.3	3.61	-2.32	-16.18	0.41	-3.34	-12.05	-10.55	10.55	4.44	3.99	18.13	18.13	14 52	1		
62 62	6.88 3.63	1 30	i 30	i c	2.4	2.0	11.87	-2.83	-27.71	-0.62	-9.79	-31.12	16.18	15.57	9.74	12.13	16.54	16.54	14 47	q =		
gRd= 1.1		30	f		2.7	2.2	12.21	-3.08	-28.54	0.63	10.34	-31.56	-16.19	-15.58	9.74	12.13	16.54	16.54	14 47	1		
69 69	6.88 3.63	29 30	i 30	i c	2.2	1.3	26.50	-1.17	-16.56	-1.86	-1.93	-13.74	-30.78	16.43	1.39	24.22	16.54	29.12	14 50	q =		
gRd= 1.1		50	f		2.1	2.8	-26.10	0.77	-17.61	-10.89	1.27	-17.29	30.88	-16.49	1.39	24.22	16.54	29.12	14 50	1		
70 70	6.88 3.63	29 30	i 30	i c	2.2	2.3	29.33	-1.94	-30.97	-0.79	18.44	-22.24	-38.51	-23.96	13.43	30.27	18.27	32.17	11 50	q =		
gRd= 1.1		50	f		1.3	2.3	26.81	-2.78	-12.33	0.81	-18.94	-23.29	38.55	24.02	13.43	30.27	18.27	32.17	11 50	1		
73 73	6.88 3.63	29 30	i 30	i c	2.0	1.4	26.56	-2.06	-2.03	1.78	-2.97	-18.10	37.15	-19.14	3.07	29.23	28.77	30.39	13 50	q =		
gRd= 1.1		50	f		1.6	1.5	25.37	0.73	-36.35	-1.84	2.42	-19.15	-37.25	-19.19	3.07	29.23	28.77	30.39	13 50	1		
1 1	10.18 6.88	29 30	i 30	i c	1.0	1.0	20.67	-4.45	-12.18	1.47	-8.02	-14.12	-37.24	19.20	9.92	28.79	30.13	31.82	12 50	q =		
gRd= 1.1		50	f		2.0	2.2	-32.92	3.61	-13.23	10.95	13.94	-14.77	37.34	-19.26	9.92	28.79	30.13	31.82	12 50	1		
2 2	10.18 6.88	28 50	i 50	i c	1.0	1.0	-15.59	-1.29	-10.97	-1.16	-13.14	-8.23	18.36	-33.31	14.07	7.76	29.12	16.54	14 57	q =		
gRd= 1.2		30	f		1.0	1.0	12.09	6.86	-12.04	7.27	10.03	-9.93	-18.42	33.42	14.07	7.76	29.12	16.54	14 50	1		
5 5	11.87 6.88	28 50	i 50	i c	1.0	1.0	-4.93	-4.93	-23.98	1.74	10.23	-25.33	-15.21	-24.60	6.67	4.08	29.12	16.54	14 99	q =		
gRd= 1.2		30	f		1.0	1.0	3.23	-0.84	-25.65	1.44	-7.48	-23.04	-15.27	-24.76	6.67	4.08	29.12	16.54	14 61	1		
6 6	11.87 6.88	28 50	i 50	i c	1.0	1.0	4.35	2.04	-25.69	0.54	10.05	-24.05	-14.38	-23.37	8.41	4.02	29.12	16.54	14 95	q =		
gRd= 1.1		30	f		2.8	2.8	-5.78	-1.62	-27.44	-0.57	-18.33	-25.64	14.49	23.54	8.41	4.02	29.12	16.54	14 58	1		
7 7	11.87 6.88	28 50	i 50	i c	1.0	1.0	5.13	-2.18	-18.21	0.80	11.80	-20.72	14.91	24.13	6.55	4.05	29.12	16.54	14 95	q =		

VERIFICHE DI DUTTILITA' ASTE IN C.A. - PILASTRI

Filo	Quota	Tr	Sez	SOVRARESIST.	SOLLECITAZIONI SISMA X				SOLLECITAZIONI SISMA Y				MOM. RESISTENTI		TAGLIO PROG.		TAGLIO RESISTENTE			
Iniz Fin. N.ro	Iniz. Final (m)	at Nr	Bas Alt cm	Co nc	αx	αy	$\alpha x \cdot M_x$ (t*m)	M_y (t*m)	N (t)	M_x (t*m)	$\alpha y \cdot M_y$ (t*m)	N (t)	$M_{ru x}$ (t*m)	$M_{ru y}$ (t*m)	V_x (t)	V_y (t)	V_{Rxd} (t)	V_{Ryd} (t)	staffe Pas	Li m.
	gRd= 1.2	30	f		1.0	1.0	-3.31	0.81	-19.88	-1.68	-8.45	-22.39	15.02	-24.30	6.55	4.05	29.12	16.54	14 61	1
9 9	10.18 6.88	28 50	i c		1.0	1.0	16.26	-4.20	-6.99	1.08	-14.18	-7.00	18.91	-32.01	13.52	7.99	29.12	16.54	14 58	q
	gRd= 1.2	30	f		1.0	1.0	-12.60	4.70	-8.05	-1.39	10.55	-8.07	-18.97	32.11	13.52	7.99	29.12	16.54	14 50	=
17 17	10.24 6.88	28 50	i c		1.0	1.0	9.36	2.90	-9.81	0.39	16.66	-19.69	-13.76	-22.77	9.43	5.72	29.12	16.54	14 54	q
	gRd= 1.2	30	f		1.0	1.0	-8.12	-2.44	-10.91	-0.69	-13.83	-20.78	13.88	22.87	9.43	5.72	31.19	29.53	14 50	=
27 27	10.13 6.88	29 30	i c		2.7	2.8	21.67	-3.12	-15.54	3.77	7.20	-18.36	-29.09	-16.12	6.91	22.90	29.62	31.28	14 50	q
	gRd= 1.1	50	f		1.5	2.0	16.60	0.63	-8.78	8.91	5.71	-7.57	29.19	16.18	6.91	22.90	29.62	31.28	17 180	=
31 31	10.13 6.88	29 30	i c		1.0	1.0	12.38	-7.70	1.65	10.38	-8.79	0.88	28.53	-16.73	13.16	21.60	28.77	30.39	14 50	q
	gRd= 1.1	50	f		1.3	2.7	-14.11	7.03	0.60	-3.43	12.35	-3.34	-28.65	16.78	13.16	21.60	28.77	30.39	17 180	=
33 33	10.13 6.88	28 50	i c		1.0	2.7	2.00	3.71	-11.14	1.75	-19.88	-10.71	-14.55	-26.22	20.64	2.74	29.12	16.54	14 53	q
	gRd= 1.1	30	f		1.0	2.6	-0.99	-7.75	-11.25	-0.24	17.14	-11.76	14.60	26.32	20.64	2.74	29.12	16.54	19 177	=
34 34	10.13 6.88	4 30	i c		1.0	1.0	10.18	-0.75	-2.09	-4.52	-8.83	-7.47	38.92	-19.46	15.33	17.65	17.81	38.13	13 60	q
	gRd= 1.1	60	f		1.9	2.7	-13.31	2.50	-4.03	-9.15	-16.25	-4.82	-39.07	19.56	15.33	17.65	17.81	38.13	15 160	=
35 35	10.13 6.88	1 30	i c		2.8	2.6	-3.92	-2.34	1.05	-0.62	-4.61	-0.79	-9.98	-9.98	5.21	1.74	17.26	17.26	14 51	q
	gRd= 1.1	30	f		2.8	2.7	2.21	2.34	0.42	0.65	5.72	-1.02	10.02	10.02	5.21	1.74	17.26	17.26	21 182	=
37 37	10.13 6.88	29 30	i c		2.2	2.8	22.60	-2.13	-16.85	6.61	8.45	-24.70	-32.31	-17.88	5.97	25.43	16.54	29.12	14 50	q
	gRd= 1.1	50	f		2.7	2.6	21.86	-0.44	-22.08	-11.57	-4.79	-24.47	32.41	17.94	5.97	25.43	16.54	29.12	16 180	=
38 38	10.13 6.88	1 30	i c		1.0	2.5	0.90	-0.32	-14.22	0.31	8.82	-15.61	11.54	-11.54	6.90	1.12	16.54	16.54	14 54	q
	gRd= 1.1	30	f		1.0	2.7	-0.40	0.30	-14.89	0.30	6.30	-14.92	-11.56	11.56	6.90	1.12	16.54	16.54	21 198	=
39 39	10.13 6.88	28 50	i c		1.0	1.8	1.79	-0.47	-23.26	0.48	27.56	-23.97	-16.79	-31.42	24.73	2.65	29.12	16.54	14 51	q
	gRd= 1.1	30	f		1.0	1.7	-0.99	-0.49	-24.31	-0.61	-17.82	-24.90	16.84	31.52	24.73	2.65	29.12	16.54	16 179	=
40 40	10.13 6.88	29 50	i c		2.1	2.8	26.85	-3.46	-15.32	4.70	20.76	-23.64	-37.82	-23.38	13.78	29.13	32.67	34.51	12 50	q
	gRd= 1.1	50	f		2.0	2.1	-21.13	-0.38	-19.14	-7.63	-12.39	-23.62	37.91	23.44	13.78	29.13	32.67	34.51	12 180	=
41 41	10.13 6.88	1 30	i c		2.8	2.8	6.23	-0.15	-7.26	0.79	9.48	-9.61	-12.02	-12.02	6.40	3.87	17.96	17.96	14 51	q
	gRd= 1.1	30	f		2.8	1.8	-4.94	0.16	-7.89	-0.93	-4.72	-9.82	12.05	12.05	6.40	3.87	17.96	17.96	21 184	=
43 43	10.13 6.88	29 30	i c		2.1	2.8	25.61	-0.67	-21.94	-1.13	7.92	-23.48	-31.44	-16.80	5.56	24.23	16.54	29.12	14 50	q
	gRd= 1.1	50	f		2.7	2.4	-20.91	0.47	-23.52	-1.49	-4.68	-24.11	31.55	16.86	5.56	24.23	16.54	29.12	16 180	=
44 44	10.13 6.88	1 30	i c		1.0	2.5	0.89	-0.31	-15.55	0.31	8.45	-15.48	-10.48	-10.48	6.27	1.10	16.54	16.54	14 55	q
	gRd= 1.1	30	f		1.0	2.3	0.34	-0.64	-15.44	0.31	6.13	-15.51	10.50	10.50	6.27	1.10	16.54	16.54	21 197	=
45 45	10.13 6.88	1 30	i c		2.8	1.6	11.01	-0.97	-12.83	-0.30	-4.79	-14.91	14.83	12.76	4.85	7.97	18.27	18.27	14 49	q
	gRd= 1.1	30	f		2.8	1.5	11.24	0.41	-10.13	0.30	3.90	-15.01	-14.84	-12.79	4.85	7.97	18.27	18.27	21 184	=
48 48	10.13 6.88	29 50	i c		1.0	1.0	3.98	4.63	-6.65	-2.00	-8.11	-12.51	22.18	13.11	10.35	6.41	16.54	29.12	14 52	q
	gRd= 1.1	50	f		2.5	2.4	6.16	5.24	-8.42	0.33	11.06	-13.53	-22.27	-13.23	10.35	6.41	16.54	29.12	14 50	=
50 50	10.13 6.88	28 50	i c		1.0	2.0	-1.92	8.79	-10.15	1.33	-20.37	-9.10	16.09	-30.20	23.77	2.65	29.12	16.54	14 50	q
	gRd= 1.1	30	f		1.0	2.6	0.89	-8.55	-11.20	-0.23	19.17	-11.36	-16.15	-30.30	23.77	2.65	29.12	16.54	17 180	=
51 51	10.13 6.88	4 30	i c		1.0	1.0	-8.93	0.67	-4.64	-1.84	8.19	-11.81	-30.85	-15.30	12.08	15.68	17.81	38.13	13 60	q
	gRd= 1.1	60	f		2.5	2.6	11.67	4.85	-4.19	3.89	-13.73	-10.90	31.04	15.44	12.08	15.68	17.81	26.09	19 160	=
52 52	10.13 6.88	1 30	i c		2.8	2.4	3.99	-0.66	-2.19	-0.12	-4.87	0.76	-9.97	-9.97	4.70	1.72	16.54	16.54	14 55	q
															4.70	1.72	11.03	11.03	21 178	=

VERIFICHE DI DUTTILITA' ASTE IN C.A. - PILASTRI

Filo	Quota	Tr	Sez	SOVRARESIST.	SOLLECITAZIONI SISMA X				SOLLECITAZIONI SISMA Y				MOM. RESISTENTI		TAGLIO PROG.		TAGLIO RESISTENTE			
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	Co nc	αx	αy	$\alpha x \cdot M_x$ (t*m)	M_y (t*m)	N (t)	M_x (t*m)	$\alpha y \cdot M_y$ (t*m)	N (t)	M_{rux} (t*m)	M_{ruy} (t*m)	V_x (t)	V_y (t)	V_{Rxd} (t)	V_{Ryd} (t)	staffe PasLun	Li m.
	gRd= 1.1	30	f		2.7	2.6	-2.16	0.63	-2.82	0.04	4.23	-0.85	10.02	10.02	4.70	1.72	16.54	16.54	14 47	1
54	10.24	28	i		1.0	1.0	-8.44	6.32	-5.30	-0.57	15.93	-15.82	-13.60	-22.62	9.37	5.66	29.12	16.54	14 53	q
54	6.88	50	c												9.37	5.66	19.41	11.03	21 188	=
	gRd= 1.2	30	f		1.0	1.0	7.79	-4.91	-6.39	1.15	-12.75	-16.92	13.72	22.73	9.37	5.66	31.02	29.37	14 50	1
56	10.13	1	i		1.0	1.0	-3.59	1.37	-7.92	-0.34	-3.09	-5.55	10.01	-10.01	5.18	5.55	17.70	17.70	14 55	q
56	6.88	30	c												5.18	5.55	11.03	11.03	21 200	=
	gRd= 1.1	30	f		1.5	1.3	4.10	-1.14	-8.42	0.29	3.39	-6.22	-10.05	10.05	5.18	5.55	17.70	17.70	14 46	1
62	10.13	1	i		2.8	2.8	14.53	-2.89	-14.70	-0.62	-13.89	-16.12	15.95	-15.38	10.21	12.54	16.54	16.54	14 48	q
62	6.88	30	c												10.21	12.54	12.86	12.86	18 187	=
	gRd= 1.1	30	f		2.1	2.6	12.19	-0.42	-17.33	3.62	10.00	-17.16	-15.96	15.38	10.21	12.54	16.54	16.54	14 46	1
69	10.24	29	i		1.0	1.0	-19.08	-1.19	-1.98	-3.46	-2.98	-6.05	-30.18	16.08	3.93	22.85	16.54	29.12	14 51	q
69	6.88	30	c												3.93	22.85	13.62	23.98	17 190	=
	gRd= 1.1	50	f		1.6	1.3	24.14	0.77	-4.05	2.95	3.13	-7.15	30.28	-16.14	3.93	22.85	16.54	29.12	14 50	1
70	10.24	29	i		1.0	1.0	-20.44	2.52	-7.15	-0.51	7.52	-5.50	36.59	22.60	11.93	27.70	16.54	29.12	14 51	q
70	6.88	30	c												11.93	27.70	16.54	29.12	14 190	=
	gRd= 1.1	50	f		1.4	2.8	26.31	-2.50	-8.24	-10.45	-16.74	-7.34	-36.69	-22.66	11.93	27.70	16.54	29.12	14 50	1
73	10.24	29	i		1.0	1.0	16.78	-2.77	-1.30	1.64	-4.08	-8.33	34.74	-17.87	5.40	26.30	28.95	30.58	14 51	q
73	6.88	30	c												5.40	26.30	15.44	17.18	15 190	=
	gRd= 1.1	50	f		1.5	2.1	-22.53	2.09	-2.39	8.14	4.54	-12.86	-34.84	-17.93	5.40	26.30	28.95	30.58	14 50	1
27	12.56	29	i		1.0	1.0	-4.95	-0.42	-6.64	-0.69	-3.18	-7.51	21.65	12.49	4.79	14.28	29.07	30.71	14 50	q
27	10.13	30	c												4.79	14.28	11.03	19.41	21 89	=
	gRd= 1.1	50	f		1.5	2.8	9.40	1.57	-7.35	-2.21	6.14	-3.75	-21.71	-12.57	4.79	14.28	29.07	30.71	14 50	1
33	11.48	28	i		1.0	1.0	0.40	0.67	-3.67	-0.08	1.49	-2.52	-14.05	25.47	34.95	5.39	35.98	34.07	9 55	q
33	10.13	50	c												34.95	5.39	35.98	34.07	9 0	=
	gRd= 1.1	30	f		1.0	2.6	2.61	-4.85	-4.08	-1.98	-18.71	-2.64	-14.08	-25.51	34.95	5.39	35.98	34.07	9 55	1
35	11.48	1	i		1.0	1.0	-1.73	-0.88	-2.12	0.03	1.60	-1.30	9.45	-9.45	11.72	8.61	17.34	17.34	14 45	q
35	10.13	30	c												11.72	8.61	12.19	12.19	19 20	=
	gRd= 1.1	30	f		2.0	2.8	4.12	-2.72	-2.40	-0.93	-5.72	-1.05	-9.48	9.48	11.72	8.61	17.34	17.34	14 45	1
37	12.56	29	i		1.0	1.0	6.75	-0.61	-6.69	-1.91	-1.83	-6.92	21.75	-12.61	2.92	16.77	16.54	29.12	14 50	q
37	10.13	30	c												2.92	16.77	11.03	19.41	21 89	=
	gRd= 1.1	50	f		1.9	2.8	-10.87	-0.15	-7.59	-3.95	4.92	-9.29	-21.82	-12.69	2.92	16.77	16.54	29.12	14 50	1
38	12.56	1	i		1.0	1.0	-0.13	1.23	-6.39	-0.11	-1.83	-5.44	9.89	-9.89	4.20	1.05	16.54	16.54	14 45	q
38	10.13	30	c												4.20	1.05	11.03	11.03	21 127	=
	gRd= 1.1	30	f		1.0	2.2	0.97	0.16	-6.17	0.35	-3.32	-6.87	9.93	9.93	4.20	1.05	16.54	16.54	14 46	1
39	13.88	28	i		1.0	1.0	0.28	1.60	-8.72	0.19	2.10	-9.35	-12.65	-21.78	2.84	1.43	31.54	29.86	14 65	q
39	10.13	50	c												2.84	1.43	19.41	11.03	21 173	=
	gRd= 1.1	30	f		1.0	1.8	2.04	-0.72	-9.96	0.48	4.57	-10.73	-12.78	-21.90	2.84	1.43	31.54	29.86	14 91	1
40	13.88	29	i		1.0	1.0	6.09	0.59	-5.55	-1.85	1.16	-3.40	-21.63	12.47	1.75	7.32	16.54	29.12	14 76	q
40	10.13	30	c												1.75	7.32	11.03	19.41	21 196	=
	gRd= 1.1	50	f		2.3	2.8	6.02	0.14	-6.95	1.46	-3.60	-4.61	21.74	-12.60	1.75	7.32	16.54	29.12	14 50	1
41	13.88	1	i		1.0	1.0	0.48	0.14	-2.83	-0.18	0.65	-4.20	9.64	-9.64	1.25	0.41	17.40	17.40	14 63	q
41	10.13	30	c												1.25	0.41	11.03	11.03	21 191	=
	gRd= 1.1	30	f		2.8	2.8	1.84	-0.13	-3.60	0.23	2.64	-1.81	9.73	9.73	1.25	0.41	17.40	17.40	14 91	1
43	12.56	29	i		1.0	1.0	-6.75	0.50	-6.97	2.82	-1.79	-6.79	21.75	-12.61	2.94	16.79	16.54	29.12	14 50	q
43	10.13	30	c												2.94	16.79	11.03	19.41	21 93	=
	gRd= 1.1	50	f		2.1	2.8	13.17	1.32	-7.82	5.50	4.58	-9.31	-21.82	-12.69	2.94	16.79	16.54	29.12	14 50	1
44	12.53	1	i		1.0	1.0	0.13	1.28	-6.40	0.13	1.88	-6.32	-9.89	-9.89	4.12	1.03	16.54	16.54	14 45	q
44	10.13	30	c												4.12	1.03	11.03	11.03	21 124	=
	gRd= 1.1	30	f		1.0	2.3	0.93	0.16	-6.81	0.15	-3.68	-6.80	-9.93	9.93	4.12	1.03	16.54	16.54	14 46	1
45	12.53	1	i		1.0	1.0	-3.33	-0.77	-3.38	-0.71	-2.22	-6.64	-12.17	10.88	3.78	9.25	17.55	17.55	14 45	q
45	10.13	30	c												3.78	9.25	11.03	11.03	21 100	=
	gRd= 1.1	30	f		2.6	2.0	8.38	0.78	-3.81	2.14	2.77	-5.82	12.20	-10.90	3.78	9.25	17.55	17.55	14 45	1
50	11.48	28	i		1.0	1.0	-0.37	0.15	-3.16	-0.18	1.33	-2.38	-15.10	27.45	32.62	5.27	34.05	32.24	10 55	q
50	10.13	50	c												32.62	5.27	34.05	32.24	10 0	=
	gRd= 1.1	30	f		1.0	2.0	-2.48	-1.09	-3.58	-0.67	-19.50	-2.89	-15.13	-27.49	32.62	5.27	34.05	32.24	10 55	1
52	11.48	1	i		1.0	1.0	1.78	-0.04	-1.83	0.45	1.56	-2.51	-9.46	-9.46	11.29	8.82	17.31	17.31	14 45	q
52	10.13	30	c												11.29	8.82	11.58	11.58	20 20	=

VERIFICHE DI DUTTILITA' ASTE IN C.A. - PILASTRI																					
Filo	Quota	Tr	Sez	SOVRARESIST.			SOLLECITAZIONI SISMA X			SOLLECITAZIONI SISMA Y			MOM. RESISTENTI		TAGLIO PROG.		TAGLIO RESISTENTE				
Iniz Fin. N.ro	Iniz. Final (m)	at to Nr	Bas Alt cm	Co nc	αx	αy	$\alpha x \cdot M_x$ (t*m)	M_y (t*m)	N (t)	M_x (t*m)	$\alpha y \cdot M_y$ (t*m)	N (t)	$M_{ru x}$ (t*m)	$M_{ru y}$ (t*m)	V_x (t)	V_y (t)	V_{Rxd} (t)	V_{Ryd} (t)	staffe Pas	Li Lun	m.
gRd= 1.1		30	f		1.8	2.4	-4.08	1.42	-2.23	-1.24	-6.19	-2.21	9.48	9.48	11.29	8.82	17.31	17.31	14	45	1
62	13.88	1	i		1.0	1.0	-2.85	-0.20	-3.75	-0.85	-1.36	-2.18	-9.70	-9.70	1.81	4.24	17.55	17.55	14	59	q
62	10.13	30	c												1.81	4.24	11.03	11.03	21	216	=
gRd= 1.1		30	f		2.2	2.8	5.24	0.74	-4.48	1.85	2.92	-3.32	9.78	9.78	1.81	4.24	17.55	17.55	14	50	1

VERIFICHE ASTE IN C.A. - PILASTRI																								
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																								
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li	
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi	
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te	
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)		
1	3.63	29	1	43		0.2	-17.3	10.6	31.4	33.7	35.6	0.89	28.9	51.0	0.62	8	50	8	10.6	46.6	15.9	31.4	q	
1	0.00	30	3	43		0.2	-17.3	10.6	31.4	33.7	35.6	0.89	19.3	34.0	1.00	12	177	8	10.6	46.6	15.9	31.4	=	
2.50		50	5	43		0.2	-17.3	10.6	31.4	33.7	35.6	0.89	19.3	34.0	1.00	8	61	8	10.6	46.6	15.9	31.4	1	
2	3.63	28	1	31		-2.9	7.8	15.4	8.5	34.6	32.8	0.44	45.3	25.7	0.34	9	50	8	23.8	20.7	15.4	8.5	q	
2	0.00	50	3	31		-2.9	7.8	15.4	8.5	34.6	32.8	0.44	19.4	11.0	0.79	21	175	8	23.8	20.7	15.4	8.5	=	
2.50		30	5	31		-2.9	7.8	15.4	8.5	34.6	32.8	0.44	29.1	16.5	0.53	9	63	8	23.8	20.7	15.4	8.5	1	
5	3.63	28	1	25		14.5	1.1	13.0	7.2	24.1	22.8	0.59	101.9	57.9	0.13	4	50	8	37.3	12.4	13.0	7.2	q	
5	0.00	50	3	25		14.5	1.1	13.0	7.2	24.1	22.8	0.59	19.4	11.0	0.67	21	176	8	37.3	12.4	13.0	7.2	=	
2.50		30	5	25		14.5	1.1	13.0	7.2	24.1	22.8	0.59	29.1	16.5	0.45	4	62	8	37.3	12.4	13.0	7.2	1	
6	3.63	28	1	27		8.0	-2.4	24.6	10.7	28.3	26.8	0.96	81.5	46.3	0.30	5	50	8	24.6	10.7	35.2	16.5	q	
6	0.00	50	3	23		9.8	-0.3	24.6	10.7	28.3	26.8	0.88	25.5	14.5	0.97	16	200	8	24.6	10.7	35.2	16.5	=	
2.50		30	5	27		8.0	-2.4	24.6	10.7	28.3	26.8	0.96	29.1	16.5	0.85	5	68	8	24.6	10.7	35.2	16.5	1	
7	3.63	28	1	24		16.4	-1.4	15.6	8.2	26.7	25.3	0.64	81.5	46.3	0.19	5	50	8	42.3	13.0	15.6	8.2	q	
7	0.00	50	3	24		16.4	-1.4	15.6	8.2	26.7	25.3	0.64	19.4	11.0	0.80	21	177	8	42.3	13.0	15.6	8.2	=	
2.50		30	5	24		16.4	-1.4	15.6	8.2	26.7	25.3	0.64	29.1	16.5	0.53	5	61	8	42.3	13.0	15.6	8.2	1	
9	3.63	28	1	43		-1.8	-8.3	15.6	8.9	34.3	32.5	0.33	45.3	25.7	0.35	9	50	8	26.2	21.3	15.6	8.9	q	
9	0.00	50	3	43		-1.8	-8.3	15.6	8.9	34.3	32.5	0.33	19.4	11.0	0.81	21	175	8	26.2	21.3	15.6	8.9	=	

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			30	5	43	-1.8	-8.3	15.6	8.9	34.3	32.5	0.33	29.1	16.5	0.54	9	63	8	26.2	21.3	15.6	8.9	1
17	3.63		28	1	20	-11.8	-4.6	15.4	8.1	32.1	30.3	0.63	67.9	38.6	0.23	6	50	8	37.0	16.6	15.4	8.1	q
17	0.00		50	3	24	14.2	2.4	15.4	8.1	32.1	30.3	0.56	19.4	11.0	0.79	21	175	8	37.0	16.6	15.4	8.1	=
2.50			30	5	20	-11.8	-4.6	15.4	8.1	32.1	30.3	0.63	29.1	16.5	0.53	6	63	8	37.0	16.6	15.4	8.1	1
27	3.63		29	1	46	-1.3	-8.1	7.8	20.8	29.5	31.1	0.71	28.9	51.0	0.41	8	50	8	7.8	20.8	13.7	24.8	q
27	0.00		30	3	46	-1.3	-8.1	7.8	20.8	29.5	31.1	0.71	12.2	21.5	0.97	19	180	8	7.8	20.8	13.7	24.8	=
2.50			50	5	46	-1.3	-8.1	7.8	20.8	29.5	31.1	0.71	16.5	29.1	0.71	8	58	8	7.8	20.8	13.7	24.8	1
31	3.63		29	1	36	-5.0	-9.7	12.7	24.0	28.8	30.4	0.96	16.5	29.1	0.82	14	50	8	12.7	24.0	15.4	25.0	q
31	0.00		30	3	36	-5.0	-9.7	12.7	24.0	28.8	30.4	0.96	13.6	24.0	1.00	17	181	8	12.7	24.0	15.4	25.0	=
2.50			50	5	36	-5.0	-9.7	12.7	24.0	28.8	30.4	0.96	16.5	29.1	0.82	14	57	8	12.7	24.0	15.4	25.0	1
33	3.63		35	1	20	-20.4	-0.6	40.6	2.8	45.9	42.5	0.90	53.1	21.1	0.76	11	70	8	53.7	2.8	40.6	15.9	q
33	0.00		70	3	20	-20.4	-0.6	40.6	2.8	45.9	42.5	0.90	41.7	16.5	0.97	14	148	8	53.7	2.8	40.6	15.9	=
2.50			30	5	20	-20.4	-0.6	40.6	2.8	45.9	42.5	0.90	53.1	21.1	0.76	11	70	8	53.7	2.8	40.6	15.9	1
34	3.63		4	1	30	3.4	-10.9	15.1	23.9	34.8	37.2	0.43	17.8	38.1	0.85	13	60	8	15.1	23.9	17.2	35.6	q
34	0.00		30	3	20	-5.7	2.0	15.1	23.9	34.8	37.2	0.49	15.4	33.0	0.98	15	168	8	15.1	23.9	17.2	35.6	=
2.50			60	5	30	3.4	-10.9	15.1	23.9	34.8	37.2	0.43	17.8	38.1	0.85	13	60	8	15.1	23.9	17.2	35.6	1
35	3.63		1	1	20	-2.1	0.8	5.4	2.9	17.3	17.3	0.35	16.5	16.5	0.32	14	45	8	5.4	2.9	9.4	9.4	q
35	0.00		30	3	20	-2.1	0.8	5.4	2.9	17.3	17.3	0.35	11.0	11.0	0.49	21	185	8	5.4	2.9	9.4	9.4	=
2.50			30	5	20	-2.1	0.8	5.4	2.9	17.3	17.3	0.35	16.5	16.5	0.32	14	58	8	5.4	2.9	9.4	9.4	1
37	3.63		29	1	46	-0.5	-10.5	7.0	25.7	32.9	34.8	0.75	33.1	58.2	0.44	7	50	8	7.0	25.7	14.7	26.7	q
37	0.00		30	3	46	-0.5	-10.5	7.0	25.7	32.9	34.8	0.75	15.4	27.2	0.94	15	181	8	7.0	25.7	14.7	26.7	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			50	5	46	-0.5	-10.5	7.0	25.7	32.9	34.8	0.75	16.5	29.1	0.88	7	57	8	7.0	25.7	14.7	26.7	1
38	3.63		1	1	20	-2.1	0.1	5.8	1.6	21.5	21.5	0.27	23.2	23.2	0.25	10	49	8	5.8	1.6	7.8	7.8	q
38	0.00		30	3	20	-2.1	0.1	5.8	1.6	21.5	21.5	0.27	11.0	11.0	0.52	21	219	8	5.8	1.6	7.8	7.8	=
2.50			30	5	20	-2.1	0.1	5.8	1.6	21.5	21.5	0.27	16.5	16.5	0.35	10	70	8	5.8	1.6	7.8	7.8	1
39	3.63		28	1	24	7.7	-0.3	20.9	4.0	37.8	35.8	0.56	45.3	25.7	0.46	9	50	8	20.9	4.0	23.6	12.5	q
39	0.00		50	3	24	7.7	-0.3	20.9	4.0	37.8	35.8	0.56	21.5	12.2	0.98	19	198	8	20.9	4.0	23.6	12.5	=
2.50			30	5	24	7.7	-0.3	20.9	4.0	37.8	35.8	0.56	29.1	16.5	0.72	9	70	8	20.9	4.0	23.6	12.5	1
40	3.63		29	1	46	-0.4	-11.0	11.4	29.8	33.7	35.6	0.85	25.7	45.3	0.66	9	50	8	11.4	29.8	18.8	29.9	q
40	0.00		30	3	46	-0.4	-11.0	11.4	29.8	33.7	35.6	0.34	17.8	31.4	0.99	13	180	8	11.4	29.8	18.8	29.9	=
2.50			50	5	46	-0.4	-11.0	11.4	29.8	33.7	35.6	0.85	17.8	31.4	0.95	9	58	8	11.4	29.8	18.8	29.9	1
41	3.63		1	1	18	-1.3	0.9	4.3	3.6	17.3	17.3	0.30	21.1	21.1	0.20	11	48	8	4.3	3.6	8.7	8.7	q
41	0.00		30	3	19	-1.6	0.1	4.3	3.6	17.3	17.3	0.25	11.0	11.0	0.39	21	200	8	4.3	3.6	8.7	8.7	=
2.50			30	5	18	-1.3	0.9	4.3	3.6	17.3	17.3	0.30	16.5	16.5	0.26	11	70	8	4.3	3.6	8.7	8.7	1
43	3.63		29	1	41	1.3	9.5	6.5	23.8	33.3	35.1	0.71	28.9	51.0	0.47	8	50	8	6.5	23.8	13.9	26.3	q
43	0.00		30	3	41	1.3	9.5	6.5	23.8	33.3	35.1	0.71	13.6	24.0	0.99	17	178	8	6.5	23.8	13.9	26.3	=
2.50			50	5	41	1.3	9.5	6.5	23.8	33.3	35.1	0.71	16.5	29.1	0.82	8	60	8	6.5	23.8	13.9	26.3	1
44	3.63		1	1	25	2.1	0.4	5.5	1.6	21.6	21.6	0.27	23.2	23.2	0.24	10	49	8	5.5	1.6	7.1	7.1	q
44	0.00		30	3	25	2.1	0.4	5.5	1.6	21.6	21.6	0.27	11.0	11.0	0.50	21	211	8	5.5	1.6	7.1	7.1	=
2.50			30	5	25	2.1	0.4	5.5	1.6	21.6	21.6	0.27	16.5	16.5	0.33	10	78	8	5.5	1.6	7.1	7.1	1
45	3.63		1	1	41	1.1	2.6	5.1	6.7	19.8	19.8	0.40	21.1	21.1	0.32	11	45	8	5.1	6.7	10.4	11.7	q
45	0.00		30	3	41	1.1	2.6	5.1	6.7	19.8	19.8	0.40	11.0	11.0	0.61	21	183	8	5.1	6.7	10.4	11.7	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	cm	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			30	5	41	1.1	2.6	5.1	6.7	19.8	19.8	0.40	16.5	16.5	0.41	11	60	8	5.1	6.7	10.4	11.7	1
48	3.63		29	1	15	-4.8	1.9	11.8	4.2	28.8	30.4	0.47	21.1	37.1	0.56	11	50	8	12.7	4.2	11.8	19.3	q
48	0.00		30	3	15	-4.8	1.9	11.8	4.2	28.8	30.4	0.47	12.2	21.5	0.97	19	179	8	12.7	4.2	11.8	19.3	=
2.50			50	5	15	-4.8	1.9	11.8	4.2	28.8	30.4	0.47	16.5	29.1	0.71	11	59	8	12.7	4.2	11.8	19.3	1
50	3.63		28	1	27	11.7	1.0	23.1	1.9	32.9	31.1	0.73	29.1	16.5	0.79	14	50	8	32.0	1.9	23.1	12.8	q
50	0.00		50	3	27	11.7	1.0	23.1	1.9	32.9	31.1	0.72	24.0	13.6	1.00	17	181	8	32.0	1.9	23.1	12.8	=
2.50			30	5	27	11.7	1.0	23.1	1.9	32.9	31.1	0.73	29.1	16.5	0.79	14	57	8	32.0	1.9	23.1	12.8	1
51	3.63		4	1	25	3.8	9.0	13.2	20.4	35.1	37.6	0.38	17.8	38.1	0.74	13	60	8	13.2	20.4	15.6	33.9	q
51	0.00		30	3	15	-4.8	0.1	13.2	20.4	35.1	37.6	0.38	13.6	29.2	0.97	17	163	8	13.2	20.4	15.6	33.9	=
2.50			60	5	25	3.8	9.0	13.2	20.4	35.1	37.6	0.38	17.8	38.1	0.74	13	65	8	13.2	20.4	15.6	33.9	1
52	3.63		1	1	27	1.6	0.8	4.9	2.3	17.3	17.3	0.33	16.5	16.5	0.29	14	45	8	4.9	2.3	8.2	8.2	q
52	0.00		30	3	15	-1.9	-0.3	4.9	2.3	17.3	17.3	0.30	11.0	11.0	0.44	21	183	8	4.9	2.3	8.2	8.2	=
2.50			30	5	27	1.6	0.8	4.9	2.3	17.3	17.3	0.33	16.5	16.5	0.29	14	60	8	4.9	2.3	8.2	8.2	1
54	3.63		28	1	41	9.1	3.8	12.8	7.1	30.6	28.9	0.55	67.9	38.6	0.19	6	50	8	32.5	12.8	12.8	7.1	q
54	0.00		50	3	25	12.2	0.4	12.8	7.1	30.6	28.9	0.43	19.4	11.0	0.66	21	175	8	32.5	12.8	12.8	7.1	=
2.50			30	5	41	9.1	3.8	12.8	7.1	30.6	28.9	0.55	29.1	16.5	0.44	6	63	8	32.5	12.8	12.8	7.1	1
56	3.63		1	1	41	1.4	1.6	3.9	4.9	18.6	18.6	0.34	17.8	17.8	0.28	13	45	8	3.9	4.9	7.0	7.0	q
56	0.00		30	3	34	0.8	1.9	3.9	4.9	18.6	18.6	0.31	11.0	11.0	0.44	21	224	8	3.9	4.9	7.0	7.0	=
2.50			30	5	41	1.4	1.6	3.9	4.9	18.6	18.6	0.34	16.5	16.5	0.30	13	68	8	3.9	4.9	7.0	7.0	1
62	3.63		1	1	46	0.0	-4.5	9.3	12.3	20.7	20.7	0.59	28.9	28.9	0.42	8	45	8	9.3	12.3	12.1	12.6	q
62	0.00		30	3	46	0.0	-4.5	9.3	12.3	20.7	20.7	0.59	12.9	12.9	0.95	18	192	8	9.3	12.3	12.1	12.6	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			30	5	46	0.0	-4.5	9.3	12.3	20.7	20.7	0.59	16.5	16.5	0.74	8	51	8	9.3	12.3	12.1	12.6	1
69	3.63		29	1	31	-0.6	14.4	8.3	24.0	31.3	33.1	0.75	16.5	29.1	0.82	14	50	8	8.3	38.7	12.8	24.0	q
69	0.00		30	3	31	-0.6	14.4	8.3	24.0	31.3	33.1	0.74	13.6	24.0	1.00	17	178	8	8.3	38.7	12.8	24.0	=
2.50			50	5	31	-0.6	14.4	8.3	24.0	31.3	33.1	0.75	16.5	29.1	0.82	14	60	8	8.3	38.7	12.8	24.0	1
70	3.63		29	1	43	-0.2	-16.0	15.0	30.3	30.4	32.1	0.95	32.5	57.3	0.53	7	50	8	15.0	44.0	19.0	30.3	q
70	0.00		30	3	43	-0.2	-16.0	15.0	30.3	30.4	32.1	0.49	17.5	30.9	0.99	13	184	8	15.0	44.0	19.0	30.3	=
2.46			50	5	43	-0.2	-16.0	15.0	30.3	30.4	32.1	0.95	17.5	30.9	0.98	7	54	8	15.0	44.0	19.0	30.3	1
73	3.63		29	1	43	-1.6	-14.2	8.9	29.8	36.2	38.2	0.82	32.5	57.3	0.52	7	50	8	8.9	38.4	15.0	29.8	q
73	0.00		30	3	43	-1.6	-14.2	8.9	29.8	36.2	38.2	0.82	17.5	30.9	0.96	13	176	8	8.9	38.4	15.0	29.8	=
2.46			50	5	43	-1.6	-14.2	8.9	29.8	36.2	38.2	0.82	17.5	30.9	0.96	7	62	8	8.9	38.4	15.0	29.8	1
1	6.88		29	1	36	-4.4	-9.4	11.0	29.8	33.7	35.6	0.97	17.6	31.0	0.96	13	50	8	11.0	29.8	16.0	30.9	q
1	3.63		30	3	43	-2.7	-10.9	11.0	29.8	33.7	35.6	0.33	17.6	31.0	0.96	13	180	8	11.0	29.8	16.0	30.9	=
2.47			50	5	36	-4.4	-9.4	11.0	29.8	33.7	35.6	0.97	17.6	31.0	0.96	13	50	8	11.0	29.8	16.0	30.9	1
2	6.88		28	1	31	-3.5	5.3	13.0	8.4	33.3	31.5	0.37	29.1	16.5	0.51	14	50	8	13.0	13.2	15.2	8.4	q
2	3.63		50	3	31	-3.5	5.3	13.0	8.4	33.3	31.5	0.37	19.4	11.0	0.76	21	180	8	13.0	13.2	15.2	8.4	=
2.50			30	5	31	-3.5	5.3	13.0	8.4	33.3	31.5	0.37	29.1	16.5	0.51	14	50	8	13.0	13.2	15.2	8.4	1
5	6.88		28	1	25	12.8	2.8	11.3	6.9	36.9	35.0	0.20	29.1	16.5	0.42	14	51	8	32.0	7.4	11.3	6.9	q
5	3.63		50	3	25	12.8	2.8	11.3	6.9	36.9	35.0	0.20	19.4	11.0	0.63	21	179	8	32.0	7.4	11.3	6.9	=
2.50			30	5	25	12.8	2.8	11.3	6.9	36.9	35.0	0.20	29.1	16.5	0.42	14	50	8	32.0	7.4	11.3	6.9	1
6	6.88		28	1	24	11.8	0.2	28.4	9.5	37.7	35.7	0.76	29.1	16.5	0.98	14	50	8	28.4	9.5	39.2	18.6	q
6	3.63		50	3	24	11.8	0.2	28.4	9.5	37.7	35.7	0.76	29.1	16.5	0.98	14	180	8	28.4	9.5	39.2	18.6	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			30	5	24	11.8	0.2	28.4	9.5	37.7	35.7	0.76	29.1	16.5	0.98	14	50	8	28.4	9.5	39.2	18.6	1
7	6.88		28	1	24	14.5	-2.8	13.1	7.2	36.5	34.5	0.44	29.1	16.5	0.45	14	50	8	36.2	7.2	13.1	7.3	q
7	3.63		50	3	24	14.5	-2.8	13.1	7.2	36.5	34.5	0.44	19.4	11.0	0.68	21	180	8	36.2	7.2	13.1	7.3	=
2.50			30	5	24	14.5	-2.8	13.1	7.2	36.5	34.5	0.44	29.1	16.5	0.45	14	50	8	36.2	7.2	13.1	7.3	1
9	6.88		28	1	36	-6.7	-4.9	14.6	8.6	32.9	31.1	0.28	29.1	16.5	0.52	14	50	8	14.7	13.2	14.6	8.6	q
9	3.63		50	3	43	-4.8	-5.4	14.6	8.6	32.9	31.1	0.42	19.4	11.0	0.78	21	180	8	14.7	13.2	14.6	8.6	=
2.50			30	5	36	-6.7	-4.9	14.6	8.6	32.9	31.1	0.60	29.1	16.5	0.50	14	50	8	14.7	13.2	14.6	8.6	1
17	6.88		28	1	43	0.6	-5.5	10.9	6.6	31.9	30.2	0.24	29.1	16.5	0.40	14	50	8	18.9	12.8	10.9	6.6	q
17	3.63		50	3	43	0.6	-5.5	10.9	6.6	31.9	30.2	0.24	19.4	11.0	0.60	21	180	8	18.9	12.8	10.9	6.6	=
2.50			30	5	43	0.6	-5.5	10.9	6.6	31.9	30.2	0.24	29.1	16.5	0.40	14	50	8	18.9	12.8	10.9	6.6	1
27	6.88		29	1	34	-0.6	7.5	4.5	20.4	29.4	31.1	0.68	16.5	29.1	0.70	14	50	8	4.5	20.4	13.6	24.4	q
27	3.63		30	3	34	-0.6	7.5	4.5	20.4	29.4	31.1	0.68	12.2	21.5	0.95	19	180	8	4.5	20.4	13.6	24.4	=
2.50			50	5	34	-0.6	7.5	4.5	20.4	29.4	31.1	0.68	16.5	29.1	0.70	14	50	8	4.5	20.4	13.6	24.4	1
31	6.88		29	1	36	-5.5	-6.7	14.8	17.7	28.8	30.4	0.51	16.5	29.1	0.90	14	50	8	14.8	17.7	15.4	25.0	q
31	3.63		30	3	20	-5.8	-5.3	14.8	17.7	28.8	30.4	0.69	15.4	27.2	0.96	15	180	8	14.8	17.7	15.4	25.0	=
2.50			50	5	36	-5.5	-6.7	14.8	17.7	28.8	30.4	0.51	16.5	29.1	0.90	14	50	8	14.8	17.7	15.4	25.0	1
33	6.88		35	1	20	-14.9	0.0	38.0	1.3	45.1	41.7	0.84	53.1	21.1	0.72	11	70	8	40.8	1.3	38.0	15.4	q
33	3.63		70	3	20	-14.9	0.0	38.0	1.3	45.1	41.7	0.84	38.9	15.4	0.98	15	140	8	40.8	1.3	38.0	15.4	=
2.50			30	5	20	-14.9	0.0	38.0	1.3	45.1	41.7	0.84	53.1	21.1	0.72	11	70	8	40.8	1.3	38.0	15.4	1
34	6.88		4	1	20	-6.3	1.7	17.2	12.1	34.9	37.3	0.54	17.8	38.1	0.96	13	60	8	17.2	12.1	17.2	35.6	q
34	3.63		30	3	20	-6.3	1.7	17.2	12.1	34.9	37.3	0.54	17.8	38.1	0.96	13	160	8	17.2	12.1	17.2	35.6	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			60	5	20	-6.3	1.7	17.2	12.1	34.9	37.3	0.54	17.8	38.1	0.96	13	60	8	17.2	12.1	17.2	35.6	1
35	6.88		1	1	24	2.0	0.7	6.4	1.7	17.3	17.3	0.41	16.5	16.5	0.38	14	46	8	6.4	1.7	9.6	9.6	q
35	3.63		30	3	20	-2.4	0.2	6.4	1.7	17.3	17.3	0.38	11.0	11.0	0.58	21	186	8	6.4	1.7	9.6	9.6	=
2.50			30	5	24	2.0	0.7	6.4	1.7	17.3	17.3	0.41	16.5	16.5	0.38	14	48	8	6.4	1.7	9.6	9.6	1
37	6.88		29	1	46	-0.4	-8.6	3.7	22.1	31.9	33.7	0.67	16.5	29.1	0.76	14	50	8	3.7	22.1	14.8	26.8	q
37	3.63		30	3	46	-0.4	-8.6	3.7	22.1	31.9	33.7	0.67	12.9	22.6	0.98	18	180	8	3.7	22.1	14.8	26.8	=
2.50			50	5	46	-0.4	-8.6	3.7	22.1	31.9	33.7	0.67	16.5	29.1	0.76	14	50	8	3.7	22.1	14.8	26.8	1
38	6.88		1	1	24	2.5	0.1	6.8	0.5	20.3	20.3	0.34	16.5	16.5	0.41	14	49	8	6.8	0.5	8.6	8.6	q
38	3.63		30	3	24	2.5	0.1	6.8	0.5	20.3	20.3	0.34	11.0	11.0	0.62	21	200	8	6.8	0.5	8.6	8.6	=
2.50			30	5	24	2.5	0.1	6.8	0.5	20.3	20.3	0.34	16.5	16.5	0.41	14	51	8	6.8	0.5	8.6	8.6	1
39	6.88		28	1	24	8.2	0.1	22.1	1.3	35.7	33.8	0.62	29.1	16.5	0.76	14	50	8	22.1	1.3	25.8	13.8	q
39	3.63		50	3	24	8.2	0.1	22.1	1.3	35.7	33.8	0.62	22.6	12.9	0.98	18	180	8	22.1	1.3	25.8	13.8	=
2.50			30	5	24	8.2	0.1	22.1	1.3	35.7	33.8	0.62	29.1	16.5	0.76	14	50	8	22.1	1.3	25.8	13.8	1
40	6.88		29	1	24	5.1	-2.3	13.5	21.2	32.1	33.9	0.49	16.5	29.1	0.82	14	50	8	13.5	21.2	19.0	30.4	q
40	3.63		30	3	24	5.1	-2.3	13.5	21.2	32.1	33.9	0.49	13.6	24.0	0.99	17	180	8	13.5	21.2	19.0	30.4	=
2.50			50	5	24	5.1	-2.3	13.5	21.2	32.1	33.9	0.49	16.5	29.1	0.82	14	50	8	13.5	21.2	19.0	30.4	1
41	6.88		1	1	24	2.3	-0.3	6.3	1.8	17.5	17.5	0.37	16.5	16.5	0.38	14	46	8	6.3	1.8	9.7	9.7	q
41	3.63		30	3	19	-2.3	0.0	6.3	1.8	17.5	17.5	0.36	11.0	11.0	0.57	21	186	8	6.3	1.8	9.7	9.7	=
2.50			30	5	24	2.3	-0.3	6.3	1.8	17.5	17.5	0.37	16.5	16.5	0.38	14	48	8	6.3	1.8	9.7	9.7	1
43	6.88		29	1	34	0.0	7.9	3.6	20.7	32.1	33.9	0.61	16.5	29.1	0.71	14	50	8	3.6	20.7	13.9	26.1	q
43	3.63		30	3	34	0.0	7.9	3.6	20.7	32.1	33.9	0.61	12.2	21.5	0.96	19	180	8	3.6	20.7	13.9	26.1	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			50	5	34	0.0	7.9	3.6	20.7	32.1	33.9	0.61	16.5	29.1	0.71	14	50	8	3.6	20.7	13.9	26.1	1
44	6.88		1	1	25	2.4	-0.1	6.2	0.4	20.5	20.5	0.31	16.5	16.5	0.37	14	49	8	6.2	0.4	7.9	7.9	q
44	3.63		30	3	25	2.4	-0.1	6.2	0.4	20.5	20.5	0.31	11.0	11.0	0.56	21	200	8	6.2	0.4	7.9	7.9	=
2.50			30	5	25	2.4	-0.1	6.2	0.4	20.5	20.5	0.31	16.5	16.5	0.37	14	51	8	6.2	0.4	7.9	7.9	1
45	6.88		1	1	37	-1.3	-2.3	3.9	8.2	19.0	19.0	0.50	16.5	16.5	0.50	14	47	8	3.9	8.2	10.2	11.8	q
45	3.63		30	3	34	-0.5	3.1	3.9	8.2	19.0	19.0	0.46	11.0	11.0	0.75	21	186	8	3.9	8.2	10.2	11.8	=
2.50			30	5	37	-1.3	-2.3	3.9	8.2	19.0	19.0	0.50	16.5	16.5	0.50	14	47	8	3.9	8.2	10.2	11.8	1
48	6.88		29	1	15	-4.9	0.9	11.5	6.2	28.8	30.4	0.43	16.5	29.1	0.69	14	50	8	12.6	6.2	11.5	18.7	q
48	3.63		30	3	15	-4.9	0.9	11.5	6.2	28.8	30.4	0.43	11.6	20.4	0.99	20	180	8	12.6	6.2	11.5	18.7	=
2.50			50	5	15	-4.9	0.9	11.5	6.2	28.8	30.4	0.43	16.5	29.1	0.69	14	50	8	12.6	6.2	11.5	18.7	1
50	6.88		28	1	27	9.5	-0.5	23.0	1.2	32.1	30.4	0.73	29.1	16.5	0.79	14	50	8	26.1	1.2	23.0	12.7	q
50	3.63		50	3	27	9.5	-0.5	23.0	1.2	32.1	30.4	0.72	24.0	13.6	1.00	17	180	8	26.1	1.2	23.0	12.7	=
2.50			30	5	27	9.5	-0.5	23.0	1.2	32.1	30.4	0.73	29.1	16.5	0.79	14	50	8	26.1	1.2	23.0	12.7	1
51	6.88		4	1	27	5.6	-1.3	14.3	10.9	35.1	37.5	0.44	17.8	38.1	0.80	13	60	8	15.1	10.9	14.3	29.9	q
51	3.63		30	3	27	5.6	-1.3	14.3	10.9	35.1	37.5	0.42	14.5	31.0	1.00	16	160	8	15.1	10.9	14.3	29.9	=
2.50			60	5	27	5.6	-1.3	14.3	10.9	35.1	37.5	0.44	17.8	38.1	0.80	13	60	8	15.1	10.9	14.3	29.9	1
52	6.88		1	1	27	2.0	-0.9	6.0	1.7	17.3	17.3	0.39	16.5	16.5	0.36	14	46	8	6.0	1.7	8.3	8.3	q
52	3.63		30	3	15	-2.2	-0.2	6.0	1.7	17.3	17.3	0.35	11.0	11.0	0.54	21	186	8	6.0	1.7	8.3	8.3	=
2.50			30	5	27	2.0	-0.9	6.0	1.7	17.3	17.3	0.39	16.5	16.5	0.36	14	48	8	6.0	1.7	8.3	8.3	1
54	6.88		28	1	31	2.5	6.3	10.9	6.6	31.0	29.4	0.31	29.1	16.5	0.40	14	50	8	16.3	14.5	10.9	6.6	q
54	3.63		50	3	31	2.5	6.3	10.9	6.6	31.0	29.4	0.31	19.4	11.0	0.60	21	180	8	16.3	14.5	10.9	6.6	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			30	5	31	2.5	6.3	10.9	6.6	31.0	29.4	0.31	29.1	16.5	0.40	14	50	8	16.3	14.5	10.9	6.6	1
56	6.88		1	1	41	1.6	1.4	4.4	4.0	18.1	18.1	0.32	16.5	16.5	0.27	14	49	8	4.4	4.0	7.7	7.7	q
56	3.63		30	3	41	1.6	1.4	4.4	4.0	18.1	18.1	0.32	11.0	11.0	0.40	21	199	8	4.4	4.0	7.7	7.7	=
2.50			30	5	41	1.6	1.4	4.4	4.0	18.1	18.1	0.32	16.5	16.5	0.27	14	52	8	4.4	4.0	7.7	7.7	1
62	6.88		1	1	37	-2.0	-3.6	9.7	12.1	20.5	20.5	0.69	16.5	16.5	0.73	14	47	8	9.7	12.1	12.2	12.7	q
62	3.63		30	3	46	-0.1	-4.4	9.7	12.1	20.5	20.5	0.60	12.2	12.2	1.00	19	187	8	9.7	12.1	12.2	12.7	=
2.50			30	5	37	-2.0	-3.6	9.7	12.1	20.5	20.5	0.69	16.5	16.5	0.73	14	47	8	9.7	12.1	12.2	12.7	1
69	6.88		29	1	43	-0.5	-12.6	1.4	24.2	30.2	31.9	0.77	16.5	29.1	0.83	14	50	8	1.4	34.5	12.9	24.2	q
69	3.63		30	3	43	-0.5	-12.6	1.4	24.2	30.2	31.9	0.77	14.5	25.5	1.00	16	180	8	1.4	34.5	12.9	24.2	=
2.50			50	5	43	-0.5	-12.6	1.4	24.2	30.2	31.9	0.77	16.5	29.1	0.83	14	50	8	1.4	34.5	12.9	24.2	1
70	6.88		29	1	31	2.0	14.6	13.4	30.3	36.1	38.2	0.82	18.3	32.2	0.99	11	50	8	13.4	39.7	18.8	30.3	q
70	3.63		30	3	31	2.0	14.6	13.4	30.3	36.1	38.2	0.82	18.3	32.2	0.99	11	180	8	13.4	39.7	18.8	30.3	=
2.17			50	5	31	2.0	14.6	13.4	30.3	36.1	38.2	0.82	18.3	32.2	0.99	11	50	8	13.4	39.7	18.8	30.3	1
73	6.88		29	1	43	-1.1	-13.1	3.1	29.2	28.8	30.4	1.00	17.6	31.0	0.94	13	50	8	3.1	35.7	15.1	29.2	q
73	3.63		30	3	43	-1.1	-13.1	3.1	29.2	28.8	30.4	1.00	17.6	31.0	0.94	13	180	8	3.1	35.7	15.1	29.2	=
2.47			50	5	43	-1.1	-13.1	3.1	29.2	28.8	30.4	1.00	17.6	31.0	0.94	13	50	8	3.1	35.7	15.1	29.2	1
1	10.18		29	1	43	-2.8	-14.1	9.9	28.8	30.1	31.8	1.00	17.0	29.9	0.96	12	50	8	9.9	38.4	14.8	28.8	q
1	6.88		30	3	43	-2.8	-14.1	9.9	28.8	30.1	31.8	1.00	17.0	29.9	0.96	12	185	8	9.9	38.4	14.8	28.8	=
2.20			50	5	43	-2.8	-14.1	9.9	28.8	30.1	31.8	1.00	17.0	29.9	0.96	12	50	8	9.9	38.4	14.8	28.8	1
2	10.18		28	1	31	-5.1	9.7	14.1	7.8	31.4	29.7	0.45	29.1	16.5	0.48	14	57	8	20.9	26.3	14.1	7.8	q
2	6.88		50	3	31	-5.1	9.7	14.1	7.8	31.4	29.7	0.45	19.4	11.0	0.72	21	178	8	20.9	26.3	14.1	7.8	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			30	5	31	-5.1	9.7	14.1	7.8	31.4	29.7	0.45	29.1	16.5	0.48	14	50	8	20.9	26.3	14.1	7.8	1
5	11.87		28	1	25	4.0	0.4	6.7	4.1	33.3	31.5	0.13	29.1	16.5	0.25	14	99	8	10.2	4.1	6.7	4.1	q
5	6.88		50	3	25	4.0	0.4	6.7	4.1	33.3	31.5	0.13	19.4	11.0	0.37	21	286	8	10.2	4.1	6.7	4.1	=
2.50			30	5	25	4.0	0.4	6.7	4.1	33.3	31.5	0.13	29.1	16.5	0.25	14	61	8	10.2	4.1	6.7	4.1	1
6	11.87		28	1	23	3.7	-0.1	8.4	4.0	33.5	31.7	0.25	29.1	16.5	0.29	14	95	8	8.4	4.0	11.6	7.1	q
6	6.88		50	3	23	3.7	-0.1	8.4	4.0	33.5	31.7	0.25	19.4	11.0	0.43	21	292	8	8.4	4.0	11.6	7.1	=
2.50			30	5	23	3.7	-0.1	8.4	4.0	33.5	31.7	0.25	29.1	16.5	0.29	14	58	8	8.4	4.0	11.6	7.1	1
7	11.87		28	1	24	4.5	-0.6	6.5	4.0	32.8	31.1	0.13	29.1	16.5	0.24	14	95	8	11.6	4.1	6.5	4.0	q
7	6.88		50	3	24	4.5	-0.6	6.5	4.0	32.8	31.1	0.13	19.4	11.0	0.37	21	290	8	11.6	4.1	6.5	4.0	=
2.50			30	5	24	4.5	-0.6	6.5	4.0	32.8	31.1	0.13	29.1	16.5	0.24	14	61	8	11.6	4.1	6.5	4.0	1
9	10.18		28	1	43	-3.1	-10.1	13.5	8.0	31.1	29.5	0.37	29.1	16.5	0.48	14	58	8	22.6	26.7	13.5	8.0	q
9	6.88		50	3	43	-3.1	-10.1	13.5	8.0	31.1	29.5	0.37	19.4	11.0	0.72	21	177	8	22.6	26.7	13.5	8.0	=
2.50			30	5	43	-3.1	-10.1	13.5	8.0	31.1	29.5	0.37	29.1	16.5	0.48	14	50	8	22.6	26.7	13.5	8.0	1
17	10.24		28	1	30	9.1	-2.9	9.4	5.7	31.2	29.5	0.19	29.1	16.5	0.35	14	54	8	23.9	15.0	9.4	5.7	q
17	6.88		50	3	43	1.8	-6.0	9.4	5.7	31.2	29.5	0.25	19.4	11.0	0.52	21	187	8	23.9	15.0	9.4	5.7	=
2.50			30	5	30	9.1	-2.9	9.4	5.7	31.2	29.5	0.40	29.1	16.5	0.32	14	50	8	23.9	15.0	9.4	5.7	1
27	10.13		29	1	18	-2.4	7.2	6.9	22.9	29.6	31.3	0.81	16.5	29.1	0.79	14	50	8	6.9	23.4	12.7	22.9	q
27	6.88		30	3	34	-0.4	8.7	6.9	22.9	29.6	31.3	0.72	13.6	24.0	0.97	17	180	8	6.9	23.4	12.7	22.9	=
2.50			50	5	18	-2.4	7.2	6.9	22.9	29.6	31.3	0.81	16.5	29.1	0.79	14	50	8	6.9	23.4	12.7	22.9	1
31	10.13		29	1	36	-5.3	-8.3	13.2	21.6	28.8	30.4	0.89	16.5	29.1	0.74	14	50	8	15.3	21.6	13.2	22.5	q
31	6.88		30	3	20	-6.0	-7.0	13.2	21.6	28.8	30.4	0.44	13.6	24.0	0.99	17	180	8	15.3	21.6	13.2	22.5	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			50	5	36	-5.3	-8.3	13.2	21.6	28.8	30.4	0.89	16.5	29.1	0.74	14	50	8	15.3	21.6	13.2	22.5	1
33	10.13		28	1	20	-8.6	-0.4	20.6	2.7	31.2	29.5	0.67	29.1	16.5	0.71	14	53	8	22.9	2.7	20.6	11.5	q
33	6.88		50	3	20	-8.6	-0.4	20.6	2.7	31.2	29.5	0.67	21.5	12.2	0.96	19	177	8	22.9	2.7	20.6	11.5	=
2.50			30	5	20	-8.6	-0.4	20.6	2.7	31.2	29.5	0.67	29.1	16.5	0.71	14	50	8	22.9	2.7	20.6	11.5	1
34	10.13		4	1	20	-6.1	2.9	15.3	17.7	34.8	37.3	0.52	17.8	38.1	0.86	13	60	8	16.7	17.7	15.3	30.6	q
34	6.88		30	3	20	-6.1	2.9	15.3	17.7	34.8	37.3	0.52	15.4	33.0	0.99	15	160	8	16.7	17.7	15.3	30.6	=
2.50			60	5	20	-6.1	2.9	15.3	17.7	34.8	37.3	0.52	17.8	38.1	0.86	13	60	8	16.7	17.7	15.3	30.6	1
35	10.13		1	1	20	-2.0	0.7	5.2	1.7	17.3	17.3	0.34	16.5	16.5	0.31	14	51	8	5.2	1.7	7.9	7.9	q
35	6.88		30	3	20	-2.0	0.7	5.2	1.7	17.3	17.3	0.34	11.0	11.0	0.47	21	182	8	5.2	1.7	7.9	7.9	=
2.50			30	5	20	-2.0	0.7	5.2	1.7	17.3	17.3	0.34	16.5	16.5	0.31	14	47	8	5.2	1.7	7.9	7.9	1
37	10.13		29	1	46	-0.3	-9.9	6.0	25.4	30.8	32.6	0.79	16.5	29.1	0.87	14	50	8	6.0	25.8	14.1	25.4	q
37	6.88		30	3	46	-0.3	-9.9	6.0	25.4	30.8	32.6	0.79	14.5	25.5	1.00	16	180	8	6.0	25.8	14.1	25.4	=
2.50			50	5	46	-0.3	-9.9	6.0	25.4	30.8	32.6	0.79	16.5	29.1	0.87	14	50	8	6.0	25.8	14.1	25.4	1
38	10.13		1	1	24	2.5	-0.2	6.9	1.1	19.1	19.1	0.37	16.5	16.5	0.42	14	54	8	6.9	1.1	8.5	8.5	q
38	6.88		30	3	24	2.5	-0.2	6.9	1.1	19.1	19.1	0.37	11.0	11.0	0.63	21	198	8	6.9	1.1	8.5	8.5	=
2.50			30	5	24	2.5	-0.2	6.9	1.1	19.1	19.1	0.37	16.5	16.5	0.42	14	48	8	6.9	1.1	8.5	8.5	1
39	10.13		28	1	24	10.0	-0.2	24.7	2.6	33.6	31.8	0.74	29.1	16.5	0.85	14	51	8	26.6	2.6	24.7	13.2	q
39	6.88		50	3	24	10.0	-0.2	24.7	2.6	33.6	31.8	0.74	25.5	14.5	0.97	16	179	8	26.6	2.6	24.7	13.2	=
2.50			30	5	24	10.0	-0.2	24.7	2.6	33.6	31.8	0.74	29.1	16.5	0.85	14	50	8	26.6	2.6	24.7	13.2	1
40	10.13		29	1	30	4.3	-7.9	13.8	29.1	32.7	34.5	0.98	17.7	31.1	0.94	12	50	8	13.8	29.1	18.4	29.8	q
40	6.88		30	3	46	0.2	-10.8	13.8	29.1	32.7	34.5	0.42	17.7	31.1	0.97	12	180	8	13.8	29.1	18.4	29.8	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.29			50	5	30	4.3	-7.9	13.8	29.1	32.7	34.5	0.98	17.7	31.1	0.94	12	50	8	13.8	29.1	18.4	29.8	1
41	10.13		1	1	30	1.9	-1.1	6.4	3.9	18.0	18.0	0.42	16.5	16.5	0.39	14	51	8	6.4	3.9	9.5	9.5	q
41	6.88		30	3	23	2.4	-0.3	6.4	3.9	18.0	18.0	0.37	11.0	11.0	0.58	21	184	8	6.4	3.9	9.5	9.5	=
2.50			30	5	30	1.9	-1.1	6.4	3.9	18.0	18.0	0.42	16.5	16.5	0.39	14	45	8	6.4	3.9	9.5	9.5	1
43	10.13		29	1	34	0.2	9.0	5.6	24.2	30.9	32.6	0.75	16.5	29.1	0.83	14	50	8	5.6	24.2	13.2	24.7	q
43	6.88		30	3	34	0.2	9.0	5.6	24.2	30.9	32.6	0.75	14.5	25.5	0.95	16	180	8	5.6	24.2	13.2	24.7	=
2.50			50	5	34	0.2	9.0	5.6	24.2	30.9	32.6	0.75	16.5	29.1	0.83	14	50	8	5.6	24.2	13.2	24.7	1
44	10.13		1	1	25	2.4	-0.1	6.3	1.1	19.3	19.3	0.33	16.5	16.5	0.38	14	55	8	6.3	1.1	7.7	7.7	q
44	6.88		30	3	25	2.4	-0.1	6.3	1.1	19.3	19.3	0.33	11.0	11.0	0.57	21	197	8	6.3	1.1	7.7	7.7	=
2.50			30	5	25	2.4	-0.1	6.3	1.1	19.3	19.3	0.33	16.5	16.5	0.38	14	48	8	6.3	1.1	7.7	7.7	1
45	10.13		1	1	37	-1.5	-2.3	4.9	8.0	18.3	18.3	0.52	16.5	16.5	0.48	14	49	8	4.9	8.0	10.0	11.7	q
45	6.88		30	3	34	-0.3	2.9	4.9	8.0	18.3	18.3	0.45	11.0	11.0	0.72	21	184	8	4.9	8.0	10.0	11.7	=
2.50			30	5	37	-1.5	-2.3	4.9	8.0	18.3	18.3	0.52	16.5	16.5	0.48	14	46	8	4.9	8.0	10.0	11.7	1
48	10.13		29	1	15	-5.5	1.4	10.3	6.4	28.8	30.4	0.40	16.5	29.1	0.63	14	52	8	14.3	6.4	10.3	17.5	q
48	6.88		30	3	15	-5.5	1.4	10.3	6.4	28.8	30.4	0.40	11.0	19.4	0.94	21	178	8	14.3	6.4	10.3	17.5	=
2.50			50	5	15	-5.5	1.4	10.3	6.4	28.8	30.4	0.40	16.5	29.1	0.63	14	50	8	14.3	6.4	10.3	17.5	1
50	10.13		28	1	27	8.7	0.9	23.8	2.7	31.3	29.6	0.79	29.1	16.5	0.82	14	50	8	24.0	2.7	23.8	12.7	q
50	6.88		50	3	15	-8.7	-0.7	23.8	2.7	31.3	29.6	0.79	24.0	13.6	0.99	17	180	8	24.0	2.7	23.8	12.7	=
2.50			30	5	27	8.7	0.9	23.8	2.7	31.3	29.6	0.79	29.1	16.5	0.82	14	50	8	24.0	2.7	23.8	12.7	1
51	10.13		4	1	27	5.6	1.3	12.1	15.7	34.9	37.4	0.38	17.8	38.1	0.68	13	60	8	15.4	15.7	12.1	24.3	q
51	6.88		30	3	27	5.6	1.3	12.1	15.7	34.9	37.4	0.36	12.2	26.1	0.99	19	160	8	15.4	15.7	12.1	24.3	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			60	5	27	5.6	1.3	12.1	15.7	34.9	37.4	0.38	17.8	38.1	0.68	13	60	8	15.4	15.7	12.1	24.3	1
52	10.13		1	1	15	-1.8	-0.2	4.7	1.7	17.3	17.3	0.28	16.5	16.5	0.28	14	55	8	4.7	1.7	7.9	7.9	q
52	6.88		30	3	15	-1.8	-0.2	4.7	1.7	17.3	17.3	0.28	11.0	11.0	0.43	21	178	8	4.7	1.7	7.9	7.9	=
2.50			30	5	15	-1.8	-0.2	4.7	1.7	17.3	17.3	0.28	16.5	16.5	0.28	14	47	8	4.7	1.7	7.9	7.9	1
54	10.24		28	1	41	8.2	4.1	9.4	5.7	31.0	29.4	0.19	29.1	16.5	0.34	14	53	8	21.6	13.7	9.4	5.7	q
54	6.88		50	3	25	9.9	0.6	9.4	5.7	31.0	29.4	0.19	19.4	11.0	0.51	21	188	8	21.6	13.7	9.4	5.7	=
2.50			30	5	41	8.2	4.1	9.4	5.7	31.0	29.4	0.44	29.1	16.5	0.32	14	50	8	21.6	13.7	9.4	5.7	1
56	10.13		1	1	41	1.7	1.9	5.2	5.6	17.7	17.7	0.41	16.5	16.5	0.34	14	55	8	5.2	5.6	7.4	7.4	q
56	6.88		30	3	41	1.7	1.9	5.2	5.6	17.7	17.7	0.41	11.0	11.0	0.50	21	200	8	5.2	5.6	7.4	7.4	=
2.50			30	5	41	1.7	1.9	5.2	5.6	17.7	17.7	0.41	16.5	16.5	0.34	14	46	8	5.2	5.6	7.4	7.4	1
62	10.13		1	1	30	3.1	-3.0	10.2	12.5	19.2	19.2	0.65	16.5	16.5	0.76	14	48	8	10.2	12.7	12.1	12.5	q
62	6.88		30	3	46	0.0	-4.7	10.2	12.5	19.2	19.2	0.65	12.9	12.9	0.97	18	187	8	10.2	12.7	12.1	12.5	=
2.50			30	5	30	3.1	-3.0	10.2	12.5	19.2	19.2	0.65	16.5	16.5	0.76	14	46	8	10.2	12.7	12.1	12.5	1
69	10.24		29	1	31	-0.7	12.3	3.9	22.9	29.0	30.7	0.77	16.5	29.1	0.78	14	51	8	3.9	33.2	12.2	22.9	q
69	6.88		30	3	31	-0.7	12.3	3.9	22.9	29.0	30.7	0.76	13.6	24.0	1.00	17	190	8	3.9	33.2	12.2	22.9	=
2.50			50	5	31	-0.7	12.3	3.9	22.9	29.0	30.7	0.77	16.5	29.1	0.78	14	50	8	3.9	33.2	12.2	22.9	1
70	10.24		29	1	31	1.7	13.4	11.9	27.7	29.5	31.2	0.95	16.5	29.1	0.95	14	51	8	11.9	36.3	17.1	27.7	q
70	6.88		30	3	31	1.7	13.4	11.9	27.7	29.5	31.2	0.40	16.5	29.1	0.98	14	190	8	11.9	36.3	17.1	27.7	=
2.50			50	5	31	1.7	13.4	11.9	27.7	29.5	31.2	0.95	16.5	29.1	0.95	14	50	8	11.9	36.3	17.1	27.7	1
73	10.24		29	1	43	-1.7	-11.1	5.4	26.3	28.9	30.6	0.92	16.5	29.1	0.90	14	51	8	5.4	30.3	13.5	26.3	q
73	6.88		30	3	43	-1.7	-11.1	5.4	26.3	28.9	30.6	0.92	15.4	27.2	0.97	15	190	8	5.4	30.3	13.5	26.3	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			50	5	43	-1.7	-11.1	5.4	26.3	28.9	30.6	0.92	16.5	29.1	0.90	14	50	8	5.4	30.3	13.5	26.3	1
27	12.56		29	1	15	-2.0	5.0	4.8	14.3	29.1	30.7	0.53	16.5	29.1	0.49	14	50	8	4.8	14.3	14.6	25.2	q
27	10.13		30	3	31	-0.7	5.6	4.8	14.3	29.1	30.7	0.49	11.0	19.4	0.74	21	89	8	4.8	14.3	14.6	25.2	=
2.50			50	5	15	-2.0	5.0	4.8	14.3	29.1	30.7	0.53	16.5	29.1	0.49	14	50	8	4.8	14.3	14.6	25.2	1
33	11.48		28	1	24	13.1	-0.4	34.9	5.4	36.0	34.1	0.98	36.1	20.5	0.97	9	55	8	34.9	5.4	51.0	28.1	q
33	10.13		50	3	0	0.0	0.0	34.9	5.4	36.0	34.1	0.97	36.1	20.5	0.97	9	0	8	34.9	5.4	51.0	28.1	=
1.99			30	5	24	13.1	-0.4	34.9	5.4	36.0	34.1	0.98	36.1	20.5	0.97	9	55	8	34.9	5.4	51.0	28.1	1
35	11.48		1	1	40	3.7	2.8	11.7	8.6	17.3	17.3	0.84	16.5	16.5	0.71	14	45	8	11.7	8.6	18.9	18.9	q
35	10.13		30	3	24	4.4	0.2	11.7	8.6	17.3	17.3	0.69	12.2	12.2	0.96	19	20	8	11.7	8.6	18.9	18.9	=
2.50			30	5	40	3.7	2.8	11.7	8.6	17.3	17.3	0.84	16.5	16.5	0.71	14	45	8	11.7	8.6	18.9	18.9	1
37	12.56		29	1	46	-0.7	-6.7	2.9	16.8	29.6	31.3	0.56	16.5	29.1	0.57	14	50	8	2.9	16.8	14.7	25.3	q
37	10.13		30	3	46	-0.7	-6.7	2.9	16.8	29.6	31.3	0.56	11.0	19.4	0.86	21	89	8	2.9	16.8	14.7	25.3	=
2.50			50	5	46	-0.7	-6.7	2.9	16.8	29.6	31.3	0.56	16.5	29.1	0.57	14	50	8	2.9	16.8	14.7	25.3	1
38	12.56		1	1	20	-1.5	-0.1	4.2	1.1	18.0	18.0	0.24	16.5	16.5	0.25	14	45	8	4.2	1.1	10.0	10.0	q
38	10.13		30	3	20	-1.5	-0.1	4.2	1.1	18.0	18.0	0.24	11.0	11.0	0.38	21	127	8	4.2	1.1	10.0	10.0	=
2.50			30	5	20	-1.5	-0.1	4.2	1.1	18.0	18.0	0.24	16.5	16.5	0.25	14	46	8	4.2	1.1	10.0	10.0	1
39	13.88		28	1	37	0.9	0.4	2.8	1.4	31.5	29.9	0.10	29.1	16.5	0.10	14	65	8	2.8	1.4	14.6	8.5	q
39	10.13		50	3	19	1.1	0.0	2.8	1.4	31.5	29.9	0.09	19.4	11.0	0.15	21	173	8	2.8	1.4	14.6	8.5	=
2.50			30	5	37	0.9	0.4	2.8	1.4	31.5	29.9	0.10	29.1	16.5	0.10	14	91	8	2.8	1.4	14.6	8.5	1
40	13.88		29	1	46	0.4	-2.7	1.7	7.3	29.2	30.9	0.25	16.5	29.1	0.25	14	76	8	1.7	7.3	8.6	14.8	q
40	10.13		30	3	34	0.0	2.7	1.7	7.3	29.2	30.9	0.24	11.0	19.4	0.38	21	196	8	1.7	7.3	8.6	14.8	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	o	mb	Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			50	5	46	0.4	-2.7	1.7	7.3	29.2	30.9	0.25	16.5	29.1	0.25	14	50	8	1.7	7.3	8.6	14.8	1
41	13.88		1	1	23	-0.4	0.1	1.3	0.4	17.4	17.4	0.08	16.5	16.5	0.08	14	63	8	1.3	0.4	6.2	6.2	q
41	10.13		30	3	19	0.5	-0.1	1.3	0.4	17.4	17.4	0.08	11.0	11.0	0.11	21	191	8	1.3	0.4	6.2	6.2	=
2.50			30	5	23	-0.4	0.1	1.3	0.4	17.4	17.4	0.08	16.5	16.5	0.08	14	91	8	1.3	0.4	6.2	6.2	1
43	12.56		29	1	41	0.3	6.9	2.9	16.8	29.6	31.3	0.55	16.5	29.1	0.58	14	50	8	2.9	16.8	14.4	24.8	q
43	10.13		30	3	41	0.3	6.9	2.9	16.8	29.6	31.3	0.55	11.0	19.4	0.86	21	93	8	2.9	16.8	14.4	24.8	=
2.50			50	5	41	0.3	6.9	2.9	16.8	29.6	31.3	0.55	16.5	29.1	0.58	14	50	8	2.9	16.8	14.4	24.8	1
44	12.53		1	1	25	1.6	0.1	4.1	1.0	18.1	18.1	0.23	16.5	16.5	0.25	14	45	8	4.1	1.0	10.1	10.1	q
44	10.13		30	3	25	1.6	0.1	4.1	1.0	18.1	18.1	0.23	11.0	11.0	0.37	21	124	8	4.1	1.0	10.1	10.1	=
2.50			30	5	25	1.6	0.1	4.1	1.0	18.1	18.1	0.23	16.5	16.5	0.25	14	46	8	4.1	1.0	10.1	10.1	1
45	12.53		1	1	31	-0.8	3.5	3.8	9.2	17.6	17.6	0.57	16.5	16.5	0.56	14	45	8	3.8	9.2	12.6	14.1	q
45	10.13		30	3	31	-0.8	3.5	3.8	9.2	17.6	17.6	0.57	11.0	11.0	0.84	21	100	8	3.8	9.2	12.6	14.1	=
2.50			30	5	31	-0.8	3.5	3.8	9.2	17.6	17.6	0.57	16.5	16.5	0.56	14	45	8	3.8	9.2	12.6	14.1	1
50	11.48		28	1	25	12.3	-0.8	32.6	5.3	34.1	32.2	0.98	35.4	20.1	0.92	10	55	8	32.6	5.3	54.9	30.2	q
50	10.13		50	3	0	0.0	0.0	32.6	5.3	34.1	32.2	0.96	35.4	20.1	0.92	10	0	8	32.6	5.3	54.9	30.2	=
2.17			30	5	25	12.3	-0.8	32.6	5.3	34.1	32.2	0.98	35.4	20.1	0.92	10	55	8	32.6	5.3	54.9	30.2	1
52	11.48		1	1	21	-3.9	-3.3	11.3	8.8	17.3	17.3	0.84	16.5	16.5	0.68	14	45	8	11.3	8.8	18.9	18.9	q
52	10.13		30	3	21	-3.9	-3.3	11.3	8.8	17.3	17.3	0.84	11.6	11.6	0.97	20	20	8	11.3	8.8	18.9	18.9	=
2.50			30	5	21	-3.9	-3.3	11.3	8.8	17.3	17.3	0.84	16.5	16.5	0.68	14	45	8	11.3	8.8	18.9	18.9	1
62	13.88		1	1	31	-0.5	1.6	1.8	4.2	17.6	17.6	0.27	16.5	16.5	0.26	14	59	8	1.8	4.2	6.6	6.6	q
62	10.13		30	3	31	-0.5	1.6	1.8	4.2	17.6	17.6	0.27	11.0	11.0	0.38	21	216	8	1.8	4.2	6.6	6.6	=

VERIFICHE ASTE IN C.A. - PILASTRI																							
RIEPILOGO VERIFICHE A TAGLIO PILASTRI																							
Filo	Quota	T	Sez	C	Co	Tagli		Tagli		Tagli Resistenti			Tagli Resistenti			Staffe			Tagli con		Tagli Sovra		Li
Iniz	Iniz.	r	Bas	omb		Analisi		Progetto		Calcestruzzo			Staffe						q = 1		Resistenza		mi
Fin.	Final	a	Alt	n	in	Vx	Vy	Vx	Vy	V Rxd	V Ryd	Coef	V Rxd	V Ryd	Coef	Pas	Lun	Fi	Vx	Vy	Vx	Vy	te
Ctgθ		t	cm	c	az	(t)	(t)	(t)	(t)	(t)	(t)		(t)	(t)		cm	cm	mm	(t)	(t)	(t)	(t)	
2.50			30	5	31	-0.5	1.6	1.8	4.2	17.6	17.6	0.27	16.5	16.5	0.26	14	50	8	1.8	4.2	6.6	6.6	1

VERIFICHE DUTTILITA'												
VERIFICHE DUTTILITA' PILASTRI ED ELEMENTI SECONDARI												
filo	Pilas.	Quota	Alfa	Omega	Alfa*	Miu fi	Ni d	Eps syd	bc/b0	secondo	Stato della	
		Nodo			Omega					membro		
		Infer.								[7.4.29]		
1	62	0.00	0.54	0.21	0.115	7.47	0.271	0.0019	1.19	0.099	OK	
2	63	0.00	0.52	0.19	0.099	7.47	0.268	0.0019	1.19	0.098	OK	
5	64	0.00	0.62	0.43	0.265	7.47	0.497	0.0019	1.19	0.212	OK	
6	65	0.00	0.60	0.34	0.205	7.47	0.432	0.0019	1.19	0.180	OK	
7	66	0.00	0.60	0.34	0.205	7.47	0.471	0.0019	1.19	0.199	OK	
9	67	0.00	0.52	0.19	0.099	7.47	0.254	0.0019	1.19	0.091	OK	
17	68	0.00	0.58	0.29	0.165	7.47	0.362	0.0019	1.19	0.145	OK	
27	69	0.00	0.54	0.21	0.115	7.47	0.288	0.0019	1.19	0.108	OK	
31	407	10.13	0.43	0.12	0.052	7.47	0.010	0.0019	1.19	-0.030	OK	
31	70	0.00	0.43	0.12	0.052	7.47	0.153	0.0019	1.19	0.041	OK	
33	71	0.00	0.41	0.14	0.056	7.47	0.119	0.0019	1.19	0.024	OK	
34	409	10.13	0.40	0.11	0.046	7.47	0.010	0.0019	1.19	-0.030	OK	
34	72	0.00	0.41	0.12	0.050	7.47	0.140	0.0019	1.19	0.035	OK	
35	73	0.00	0.43	0.16	0.068	7.47	0.184	0.0019	1.19	0.057	OK	
37	74	0.00	0.56	0.25	0.136	7.47	0.307	0.0019	1.19	0.118	OK	
38	75	0.00	0.54	0.22	0.118	7.47	0.282	0.0019	1.19	0.105	OK	
39	76	0.00	0.52	0.19	0.099	7.47	0.254	0.0019	1.19	0.091	OK	
40	77	0.00	0.52	0.19	0.099	7.47	0.257	0.0019	1.19	0.093	OK	
41	78	0.00	0.51	0.20	0.102	7.47	0.265	0.0019	1.19	0.097	OK	
43	79	0.00	0.54	0.21	0.115	7.47	0.297	0.0019	1.19	0.113	OK	
44	80	0.00	0.54	0.22	0.118	7.47	0.279	0.0019	1.19	0.104	OK	
45	81	0.00	0.51	0.20	0.102	7.47	0.261	0.0019	1.19	0.095	OK	
48	419	10.13	0.43	0.12	0.052	7.47	0.011	0.0019	1.19	-0.030	OK	
48	82	0.00	0.48	0.16	0.075	7.47	0.214	0.0019	1.19	0.071	OK	
50	83	0.00	0.43	0.12	0.052	7.47	0.157	0.0019	1.19	0.043	OK	
51	421	10.13	0.40	0.11	0.046	7.47	0.011	0.0019	1.19	-0.030	OK	
51	84	0.00	0.41	0.12	0.050	7.47	0.154	0.0019	1.19	0.041	OK	
52	85	0.00	0.43	0.16	0.068	7.47	0.189	0.0019	1.19	0.059	OK	
54	86	0.00	0.58	0.29	0.165	7.47	0.360	0.0019	1.19	0.144	OK	
56	87	0.00	0.46	0.17	0.078	7.47	0.212	0.0019	1.19	0.070	OK	
62	88	0.00	0.59	0.28	0.162	7.47	0.383	0.0019	1.19	0.155	OK	
69	89	0.00	0.43	0.12	0.052	7.47	0.115	0.0019	1.19	0.022	OK	
70	90	0.00	0.56	0.25	0.136	7.47	0.316	0.0019	1.19	0.122	OK	
73	91	0.00	0.56	0.25	0.136	7.47	0.313	0.0019	1.19	0.120	OK	

VERIFICHE DI DUTTILITA' ASTE IN C.A. - GERARCHIA TRAVE/COLONNA													
VERIFICHE AGGIUNTIVE PER LA GERARCHIA TRAVE/COLONNA DI TELAI IN CLS SISMORESISTENTI													
Nodo3d	Filo	Quota	PilInf	PilSup	TravX+	TravX-	TravY+	TravY-	ΣMxc,pl,Rd	gΣMxb,pl,Rd	ΣMyc,pl,Rd	gΣMyb,pl,Rd	Flag
		(m)	Num3d	Num3d	Num3d	Num3d	Num3d	Num3d	kg*m	kg*m	kg*m	kg*m	Verifica
52	1	3.63	62	175		149	133	128	77734	55029	40117	25026	OK
53	2	3.63	63	176									OK
54	5	3.63	64	177									OK
55	6	3.63	65	178	149	148	147	146	47506	18275	100181	71236	OK
56	7	3.63	66	179									OK
57	9	3.63	67	180									OK
58	17	3.63	68	181									OK
59	27	3.63	69	182		118	106	107	55246	31691	30452	8834	OK
60	31	3.63	70	183			101	105	58713	27358	35479	23519	OK
61	33	3.63	71	184	101	102					96345	50967	OK
62	34	3.63	72	185	102	99		114	85706	20914	41130	31682	OK
63	35	3.63	73	186	99			97	20757	3127	20757	11940	OK
64	37	3.63	74	187	121		114	115	65108	39247	36039	7444	OK
65	38	3.63	75	188	118	121					23648	12083	OK
66	39	3.63	76	189	111	112					66821	33079	OK

VERIFICHE DI DUTTILITA' ASTE IN C.A. - GERARCHIA TRAVE/COLONNA

VERIFICHE AGGIUNTIVE PER LA GERARCHIA TRAVE/COLONNA DI TELAI IN CLS SISMORESISTENTI

Nodo3d	Filo	Quota (m)	PilInf Num3d	PilSup Num3d	TravX+ Num3d	TravX- Num3d	TravY+ Num3d	TravY- Num3d	ΣMxc,pl,Rd kg*m	gΣMxb,pl,Rd kg*m	ΣMyc,pl,Rd kg*m	gΣMyb,pl,Rd kg*m	Flag Verifica
67	40	3.63	77	190	112	113	115	116	76568	36165	47541	24369	OK
68	41	3.63	78	191	113		124	98	22658	7656	22658	9184	OK
69	43	3.63	79	192	123		116	117	63842	36165	34128	7444	OK
70	44	3.63	80	193	119	123					21618	12083	OK
71	45	3.63	81	194		119	172	109	29779	23879	26170	7444	OK
72	48	3.63	82	195		103	110		40074	11940	22364	21088	OK
73	50	3.63	83	196	103	104					57093	42229	OK
74	51	3.63	84	197	104	100	117		74720	20914	35145	27346	OK
75	52	3.63	85	198	100		125		16648	3127	16648	9184	OK
76	54	3.63	86	199									OK
77	56	3.63	87	200	167			159	20069	7329	20069	4534	OK
78	62	3.63	88	201	150	111	155	108	32302	23879	31089	19723	OK
79	69	3.63	89	202		168	136	173	61082	49018	32584	4534	OK
80	70	3.63	90	203	148	150	137	136	73627	49133	45482	42051	OK
81	73	3.63	91	204		152	138	137	62776	49018	33081	7329	OK
112	1	6.88	175	288		262	246	241	75163	55029	38746	34678	OK
113	2	6.88	176	289									OK
114	5	6.88	177	290									OK
115	6	6.88	178	291	262	261	260	259	37877	18275	72783	68229	OK
116	7	6.88	179	292									OK
117	9	6.88	180	293									OK
118	17	6.88	181	294									OK
119	27	6.88	182	295		231	219	220	55356	31691	30537	10237	OK
120	31	6.88	183	296		214		218	56719	23608	33800	23519	OK
121	33	6.88	184	297	214	215					71741	47127	OK
122	34	6.88	185	298	215	212		227	80813	21008	39274	31682	OK
123	35	6.88	186	299	212			210	19699	3127	19699	11940	OK
124	37	6.88	187	300	234		227	228	63602	39240	35178	7444	OK
125	38	6.88	188	301	231	234					23217	12083	OK
126	39	6.88	189	302	224	225					64077	33072	OK
127	40	6.88	190	303	225	226	228	229	74909	36165	46295	24369	OK
128	41	6.88	191	304	226		237	211	23243	7656	23243	9184	OK
129	43	6.88	192	305	236		229	230	62096	36174	33165	7444	OK
130	44	6.88	193	306	232	236					21177	12083	OK
131	45	6.88	194	307		232	285	222	29090	23879	25103	7444	OK
132	48	6.88	195	308		216	223		41223	11940	23097	21088	OK
133	50	6.88	196	309	216	217					58009	39240	OK
134	51	6.88	197	310	217	213	230		64277	18161	30944	27346	OK
135	52	6.88	198	311	213		238		17638	3127	17638	9184	OK
136	54	6.88	199	312									OK
137	56	6.88	200	313	280			272	19491	7338	19491	4534	OK
138	62	6.88	201	314	263	224	268	221	31987	23879	30819	19723	OK
139	69	6.88	202	315		281	249	286	59468	49018	31662	4534	OK
140	70	6.88	203	316	261	263	250	249	73036	55132	45108	38897	OK
141	73	6.88	204	317		265	251	250	66124	48987	34151	7329	OK
179	27	10.13	295	406		344	332	333	48818	27334	27216	7444	OK
181	33	10.13	297	408	327	328					50981	36321	OK
183	35	10.13	299	410	325			323	18313	3127	18313	9184	OK
184	37	10.13	300	411	347		340	341	52926	30350	29729	7444	OK
185	38	10.13	301	412	344	347					21285	12086	OK
186	39	10.13	302	413	337	338					53030	24334	OK
187	40	10.13	303	414	338	339	341	342	58216	30245	34917	21381	OK
188	41	10.13	304	415	339		350	324	21100	7656	21100	9184	OK
189	43	10.13	305	416	349		342	343	52080	30253	28667	7444	OK
190	44	10.13	306	417	345	349					20336	12086	OK
191	45	10.13	307	418		345	398	335	26043	21381	23052	7444	OK
193	50	10.13	309	420	329	330					57014	33327	OK
195	52	10.13	311	422	326		351		18291	3127	18291	9184	OK
198	62	10.13	314	423	376	337	381	334	25400	18369	24832	16734	OK

2.9 Risultati dell'analisi modale

Di seguito si riportano le caratteristiche che identificano il comportamento dinamico della struttura:

PULSAZIONI E MODI DI VIBRAZIONE													
Modo N.ro	Pulsazione (rad/sec)	Periodo (sec)	Smorz Mod(%)	Sd/g SLO	Sd/g SLD	Sd/g SLV X	Sd/g SLV Y	Sd/g SLC X	Sd/g SLC Y	Piano N.ro	X (m)	Y (m)	Rot (rad)
1	12.554	0.50050	5.0		0.216	0.217	0.217			1	0.000708	-0.16099	-0.000370
										2	0.001406	-0.033450	-0.000772
										3	0.002377	-0.049145	-0.001075
										4	0.002981	-0.055924	-0.001158
										5	0.002606	-0.057119	-0.001077
										6	0.008728	-0.061736	-0.000976
										7	0.001382	-0.051861	-0.001228
2	14.544	0.43202	5.0		0.241	0.236	0.236			1	0.011691	0.002250	-0.000030
										2	0.024204	0.004789	-0.000061
										3	0.036396	0.007118	-0.000119
										4	0.041264	0.008386	-0.000139
										5	0.044642	0.009380	-0.000115
										6	0.069473	0.032085	0.001503
										7	0.036363	0.008268	-0.000043
3	15.632	0.40196	5.0		0.241	0.236	0.236			1	-0.009112	-0.016109	-0.001489
										2	-0.018974	-0.033955	-0.003112
										3	-0.027966	-0.049427	-0.004575
										4	-0.030236	-0.050378	-0.004924
										5	-0.035554	-0.046524	-0.004586
										6	-0.019160	-0.044430	-0.004544
										7	-0.026998	-0.049651	-0.004402
4	40.330	0.15579	5.0		0.241	0.236	0.236			1	0.002806	-0.006033	-0.000366
										2	0.004599	-0.006319	-0.000415
										3	0.003992	0.002863	0.000078
										4	0.005971	0.006768	0.000211
										5	0.004464	0.004364	0.000070
										6	-0.967805	-1.110527	-0.084887
										7	0.004369	0.003058	0.000076
5	50.315	0.12488	5.0		0.217	0.240	0.240			1	-0.009582	-0.044802	-0.002381
										2	-0.009048	-0.040870	-0.002136
										3	-0.000377	0.008096	0.000447
										4	-0.000543	0.021591	0.001237
										5	0.006444	0.019181	0.000523
										6	0.158069	0.244130	0.016643
										7	0.007751	0.070931	0.001928
6	60.186	0.10440	5.0		0.197	0.243	0.243			1	0.018149	0.003555	0.001456
										2	0.019237	0.005309	0.001819
										3	-0.000686	0.006541	0.000750
										4	-0.016467	0.112875	0.001757
										5	-0.009774	0.013332	0.000584
										6	0.072411	0.132210	0.008418
										7	-0.002844	-0.008349	0.000399
7	64.820	0.09693	5.0		0.190	0.245	0.245			1	-0.020448	-0.002336	0.000185
										2	-0.018762	-0.003717	0.000332
										3	0.005111	-0.008145	-0.000021
										4	0.076319	0.048953	0.000546
										5	0.017310	-0.005077	0.000103
										6	-0.123849	-0.201010	-0.014325
										7	0.008052	0.011684	0.000465
8	74.685	0.08413	5.0		0.178	0.247	0.247			1	-0.010301	-0.028086	-0.001975
										2	-0.003127	-0.000087	-0.000445
										3	0.018530	0.072374	0.003959
										4	0.093790	0.264088	0.014280
										5	0.034918	0.085033	0.004123
										6	0.158336	0.334799	0.020506
										7	0.005204	-0.036357	0.001648
9	82.908	0.07579	5.0		0.170	0.248	0.248			1	0.019157	0.002340	0.001468
										2	0.008169	0.004931	0.001057
										3	-0.018958	0.012564	-0.000592
										4	0.014783	-0.143981	-0.006010
										5	-0.034467	0.030239	-0.000765
										6	0.085335	0.256424	0.011512
										7	-0.032594	-0.010652	-0.001664
10	88.566	0.07094	5.0		0.165	0.249	0.249			1	0.017373	0.007029	-0.000579
										2	0.004159	-0.002190	-0.000836
										3	-0.024377	-0.023343	-0.000340
										4	0.054119	0.050458	0.001782
										5	-0.043049	-0.045432	-0.000413
										6	0.137652	0.118468	0.016291
										7	-0.033558	0.010515	0.000636
11	103.401	0.06077	5.0		0.156	0.250	0.250			1	-0.017574	-0.048385	-0.003406
										2	0.008385	0.030678	0.001682
										3	0.017174	0.044023	0.003202
										4	-0.068441	-0.224372	-0.012722
										5	0.026431	0.039254	0.003249
										6	0.064233	0.100847	0.008518

PULSAZIONI E MODI DI VIBRAZIONE													
Modo N.ro	Pulsazione (rad/sec)	Periodo (sec)	Smorz Mod(%)	Sd/g SLO	Sd/g SLD	Sd/g SLV X	Sd/g SLV Y	Sd/g SLC X	Sd/g SLC Y	Piano N.ro	X (m)	Y (m)	Rot (rad)
12	117.527	0.05346	5.0		0.149	0.251	0.251			7	0.021870	-0.003429	0.003931
										1	-0.003525	0.034196	0.000834
										2	-0.003855	-0.029073	-0.001764
										3	0.014246	0.028616	0.002726
										4	-0.029566	-0.096999	-0.005749
										5	0.028937	0.029333	0.002894
										6	0.224850	0.535323	0.031309
										7	0.025104	0.008211	0.004137

FATTORI E FORZE DI PIANO MODALI S.L.D.										
SISMA DIREZIONE: 0°										
Massa eccitata (t): 1225.9 Massa totale (t): 1248.13 Rapporto:.98										
Modo N.ro	Fattore Modale	Fmod/Fmax (%)	Massa Mod Eff. (t)	Mmod/Mtot %	Piano N.ro	FX (t)	FY (t)	Mt (t*m)	Mom.Ecc. 5% (t*m)	
1	7.078	22.49	50.09	4.01	1	1.66	-7.27	-32.17	26.87	
					2	3.66	-16.33	-76.21	54.68	
					3	2.82	-10.90	11.53	41.96	
					4	1.12	-4.18	9.08	18.62	
					5	0.03	-0.46	-0.08	1.59	
					6	0.38	-1.04	0.41	3.58	
					7	1.13	-7.05	-75.16	19.88	
2	31.468	100.00	990.24	79.34	1	35.85	7.82	6.56		
					2	79.66	17.73	18.64		
					3	62.61	15.24	-55.81		
					4	25.28	6.60	-25.89		
					5	2.34	0.57	7.24		
					6	5.88	1.32	11.98		
					7	26.54	6.09	62.66		
3	2.560	8.13	6.55	0.52	1	0.24	-0.17	23.93		
					2	0.55	-0.08	53.38		
					3	0.40	-3.23	28.22		
					4	0.17	-2.00	12.42		
					5	0.15	-0.06	0.46		
					6	-0.19	-0.13	-0.22		
					7	0.25	2.15	28.60		
4	3.747	11.91	14.04	1.13	1	1.73	-0.68	-10.64		
					2	2.65	-0.68	-12.73		
					3	0.72	0.33	-0.38		
					4	0.35	0.20	-0.28		
					5	0.03	0.02	0.09		
					6	-2.44	-0.04	-9.12		
					7	0.34	0.24	2.66		
5	1.158	3.68	1.34	0.11	1	0.34	-1.80	-20.13		
					2	0.27	-1.87	-19.96		
					3	-0.16	0.05	0.75		
					4	-0.14	-0.03	0.74		
					5	0.01	0.02	0.04		
					6	0.02	0.09	0.31		
					7	-0.05	1.57	16.93		
6	4.363	13.86	19.03	1.52	1	3.51	-4.43	22.46		
					2	3.46	-5.44	29.10		
					3	-0.92	-1.04	7.39		
					4	-1.78	5.49	-13.59		
					5	-0.06	0.03	-0.16		
					6	-0.05	0.27	0.38		
					7	-0.41	-0.79	-7.01		
7	9.643	30.64	92.99	7.45	1	15.72	3.24	-3.96		
					2	16.18	5.80	-4.93		
					3	-2.14	3.20	-6.37		
					4	-10.69	-5.66	16.81		
					5	-0.22	0.08	-0.64		
					6	-0.17	0.36	1.30		
					7	-0.99	-1.81	-20.40		
8	0.011	0.04	0.00	0.00	1	0.00	0.00	0.12		
					2	0.00	0.00	0.01		
					3	0.00	0.00	-0.05		
					4	0.00	0.00	-0.06		
					5	0.00	0.00	0.00		
					6	0.00	0.00	0.00		
					7	0.00	0.01	0.07		
9	2.954	9.39	8.73	0.70	1	2.24	-2.86	12.60		
					2	0.53	-1.44	11.01		
					3	-1.76	2.47	-7.34		
					4	1.89	-1.30	-2.49		
					5	-0.12	0.14	-0.32		
					6	-0.14	0.74	0.23		
					7	-1.15	-0.27	-5.02		
10	6.456	20.51	41.67	3.34	1	8.76	5.78	-4.35		
					2	3.98	3.21	-17.37		
					3	-5.37	-4.27	8.14		

FATTORI E FORZE DI PIANO MODALI S.L.D.

SISMA DIREZIONE: 0°									
Massa eccitata (t): 1225.9					Massa totale (t): 1248.13		Rapporto: 98		
Modo N.ro	Fattore Modale	Fmod/Fmax (%)	Massa Mod Eff. (t)	Mmod/Mtot %	Piano N.ro	FX (t)	FY (t)	Mt (t*m)	Mom.Ecc. 5% (t*m)
11	0.195	0.62	0.04	0.00	4	3.77	1.48	-1.13	
					5	-0.32	-0.30	-1.06	
					6	-0.16	-1.40	0.46	
					7	-3.77	0.88	10.19	
					1	0.01	-0.12	-3.02	
					2	-0.01	0.16	1.84	
					3	0.00	-0.05	0.83	
12	1.086	3.45	1.18	0.09	4	0.00	0.03	-0.88	
					5	0.01	0.00	0.02	
					6	-0.01	0.00	0.00	
					7	0.00	-0.04	-0.13	
					1	0.52	-1.60	-7.38	
					2	-0.40	0.67	9.80	
					3	0.02	0.53	-4.50	
					4	-0.02	-0.12	2.30	
					5	-0.03	0.01	-0.10	
					6	0.14	-0.29	-0.10	
					7	-0.06	0.06	-1.10	

FATTORI E FORZE DI PIANO MODALI S.L.V.

SISMA DIREZIONE: 0°									
Massa eccitata (t): 1225.9					Massa totale (t): 1248.13		Rapporto: 98		
Modo N.ro	Fattore Modale	Fmod/Fmax (%)	Massa Mod Eff. (t)	Mmod/Mtot %	Piano N.ro	FX (t)	FY (t)	Mt (t*m)	Mom.Ecc. 5% (t*m)
1	7.078	22.49	50.09	4.01	1	1.67	-7.32	-32.41	27.07
					2	3.69	-16.46	-76.78	55.09
					3	2.84	-10.98	11.61	42.28
					4	1.13	-4.21	9.15	18.76
					5	0.03	-0.46	-0.08	1.60
					6	0.38	-1.05	0.42	3.61
					7	1.14	-7.10	-75.72	20.03
2	31.468	100.00	990.24	79.34	1	35.17	7.67	6.43	
					2	78.16	17.39	18.29	
					3	61.42	14.95	-54.75	
					4	24.80	6.47	-25.40	
					5	2.30	0.56	7.10	
					6	5.77	1.29	11.75	
					7	26.04	5.98	61.47	
3	2.560	8.13	6.55	0.52	1	0.24	-0.17	23.48	
					2	0.54	-0.08	52.37	
					3	0.39	-3.17	27.69	
					4	0.17	-1.97	12.19	
					5	0.15	-0.06	0.45	
					6	-0.19	-0.12	-0.21	
					7	0.24	2.11	28.06	
4	3.747	11.91	14.04	1.13	1	1.70	-0.67	-10.44	
					2	2.60	-0.67	-12.48	
					3	0.70	0.32	-0.37	
					4	0.34	0.20	-0.28	
					5	0.03	0.02	0.09	
					6	-2.39	-0.04	-8.94	
					7	0.34	0.24	2.60	
5	1.158	3.68	1.34	0.11	1	0.38	-1.99	-22.31	
					2	0.30	-2.07	-22.11	
					3	-0.18	0.06	0.84	
					4	-0.16	-0.03	0.83	
					5	0.01	0.02	0.05	
					6	0.02	0.11	0.34	
					7	-0.06	1.74	18.76	
6	4.363	13.86	19.03	1.52	1	4.33	-5.47	27.71	
					2	4.27	-6.71	35.90	
					3	-1.14	-1.29	9.12	
					4	-2.20	6.78	-16.76	
					5	-0.07	0.04	-0.20	
					6	-0.06	0.33	0.47	
					7	-0.50	-0.97	-8.65	
7	9.643	30.64	92.99	7.45	1	20.23	4.17	-5.09	
					2	20.81	7.46	-6.35	
					3	-2.75	4.11	-8.19	
					4	-13.75	-7.28	21.63	
					5	-0.28	0.11	-0.82	
					6	-0.22	0.47	1.68	
					7	-1.28	-2.33	-26.24	
8	0.011	0.04	0.00	0.00	1	0.00	0.01	0.16	
					2	0.00	-0.01	0.02	
					3	0.00	-0.01	-0.07	
					4	0.00	0.00	-0.08	
					5	0.00	0.00	0.00	

FATTORI E FORZE DI PIANO MODALI S.L.V.

SISMA DIREZIONE: 0°									
Massa eccitata (t): 1225.9					Massa totale (t): 1248.13		Rapporto:.98		
Modo N.ro	Fattore Modale	Fmod/Fmax (%)	Massa Mod Eff. (t)	Mmod/Mtot %	Piano N.ro	FX (t)	FY (t)	Mt (t*m)	Mom.Ecc. 5% (t*m)
9	2.954	9.39	8.73	0.70	6	0.00	0.00	0.00	
					7	0.00	0.01	0.10	
					1	3.26	-4.16	18.37	
					2	0.77	-2.11	16.06	
					3	-2.57	3.60	-10.71	
					4	2.76	-1.89	-3.63	
					5	-0.17	0.20	-0.46	
10	6.456	20.51	41.67	3.34	6	-0.20	1.08	0.33	
					7	-1.68	-0.40	-7.32	
					1	13.17	8.70	-6.55	
					2	5.98	4.83	-26.11	
					3	-8.07	-6.42	12.24	
					4	5.67	2.22	-1.70	
					5	-0.48	-0.45	-1.59	
11	0.195	0.62	0.04	0.00	6	-0.24	-2.10	0.68	
					7	-5.67	1.32	15.33	
					1	0.02	-0.19	-4.86	
					2	-0.02	0.25	2.96	
					3	0.00	-0.08	1.34	
					4	0.00	0.04	-1.42	
					5	0.01	0.00	0.03	
12	1.086	3.45	1.18	0.09	6	-0.01	-0.01	0.01	
					7	0.01	-0.07	-0.21	
					1	0.88	-2.70	-12.47	
					2	-0.67	1.13	16.56	
					3	0.04	0.90	-7.61	
					4	-0.04	-0.21	3.89	
					5	-0.05	0.02	-0.16	
					6	0.23	-0.48	-0.17	
					7	-0.10	0.11	-1.87	

FATTORI E FORZE DI PIANO MODALI S.L.D.

SISMA DIREZIONE: 90°									
Massa eccitata (t): 1233.66					Massa totale (t): 1248.13		Rapporto: 98		
Modo N.ro	Fattore Modale	Fmod/Fmax (%)	Massa Mod Eff. (t)	Mmod/Mtot %	Piano N.ro	FX (t)	FY (t)	Mt (t*m)	Mom.Ecc. 5% (t*m)
1	30.951	100.00	957.94	76.75	1	-7.27	31.78	140.68	41.11
					2	-16.01	71.43	333.29	83.65
					3	-12.31	47.68	-50.41	64.19
					4	-4.92	18.26	-39.72	28.48
					5	-0.13	1.99	0.33	2.43
					6	-1.64	4.56	-1.81	5.48
					7	-4.95	30.81	328.70	30.41
2	7.314	23.63	53.50	4.29	1	8.33	1.82	1.52	
					2	18.52	4.12	4.33	
					3	14.55	3.54	-12.97	
					4	5.88	1.53	-6.02	
					5	0.55	0.13	1.68	
					6	1.37	0.31	2.78	
					7	6.17	1.42	14.56	
3	5.726	18.50	32.78	2.63	1	-0.55	0.39	-53.53	
					2	-1.24	0.18	-119.40	
					3	-0.90	7.23	-63.13	
					4	-0.38	4.48	-27.79	
					5	-0.33	0.13	-1.02	
					6	0.43	0.28	0.49	
					7	-0.56	-4.81	-63.97	
4	0.674	2.18	0.45	0.04	1	-0.31	0.12	1.91	
					2	-0.48	0.12	2.29	
					3	-0.13	-0.06	0.07	
					4	-0.06	-0.04	0.05	
					5	-0.01	0.00	-0.02	
					6	0.44	0.01	1.64	
					7	-0.06	-0.04	-0.48	
5	7.788	25.16	60.65	4.86	1	-2.30	12.10	135.41	
					2	-1.84	12.58	134.21	
					3	1.06	-0.37	-5.07	
					4	0.98	0.18	-5.01	
					5	-0.07	-0.14	-0.28	
					6	-0.15	-0.64	-2.07	
					7	0.36	-10.55	-113.85	
6	6.856	22.15	47.01	3.77	1	-5.52	6.97	-35.30	
					2	-5.44	8.55	-45.73	
					3	1.45	1.64	-11.61	
					4	2.80	-8.63	21.35	
					5	0.09	-0.05	0.25	
					6	0.08	-0.42	-0.60	
					7	0.64	1.24	11.02	

FATTORI E FORZE DI PIANO MODALI S.L.D.									
SISMA DIREZIONE: 90°									
Massa eccitata (t): 1233.66					Massa totale (t): 1248.13		Rapporto: 98		
Modo N.ro	Fattore Modale	Fmod/Fmax (%)	Massa Mod Eff. (t)	Mmod/Mtot %	Piano N.ro	FX (t)	FY (t)	Mt (t*m)	Mom.Ecc. 5% (t*m)
7	2.844	9.19	8.09	0.65	1	4.64	0.96	-1.17	
					2	4.77	1.71	-1.46	
					3	-0.63	0.94	-1.88	
					4	-3.15	-1.67	4.96	
					5	-0.06	0.02	-0.19	
					6	-0.05	0.11	0.38	
					7	-0.29	-0.53	-6.02	
8	1.044	3.37	1.09	0.09	1	-0.03	0.43	10.75	
					2	0.06	-0.38	1.31	
					3	0.13	-0.38	-4.67	
					4	-0.24	0.01	-5.48	
					5	-0.04	-0.04	-0.15	
					6	0.07	-0.17	-0.12	
					7	0.06	0.74	6.55	
9	5.014	16.20	25.14	2.01	1	-3.80	4.85	-21.39	
					2	-0.89	2.45	-18.69	
					3	2.99	-4.19	12.46	
					4	-3.21	2.20	4.22	
					5	0.20	-0.24	0.54	
					6	0.23	-1.26	-0.39	
					7	1.96	0.46	8.53	
10	5.047	16.31	25.48	2.04	1	6.85	4.52	-3.40	
					2	3.11	2.51	-13.58	
					3	-4.20	-3.34	6.37	
					4	2.95	1.15	-0.88	
					5	-0.25	-0.23	-0.83	
					6	-0.13	-1.09	0.36	
					7	-2.95	0.69	7.97	
11	1.023	3.30	1.05	0.08	1	-0.06	0.63	15.89	
					2	0.05	-0.83	-9.67	
					3	0.01	0.25	-4.38	
					4	-0.01	-0.15	4.64	
					5	-0.03	0.00	-0.09	
					6	0.03	0.02	-0.02	
					7	-0.02	0.23	0.68	
12	4.526	14.62	20.48	1.64	1	-2.17	6.66	30.73	
					2	1.65	-2.78	-40.81	
					3	-0.10	-2.23	18.74	
					4	0.09	0.51	-9.59	
					5	0.13	-0.04	0.41	
					6	-0.57	1.19	0.41	
					7	0.24	-0.27	4.60	

FATTORI E FORZE DI PIANO MODALI S.L.V.									
SISMA DIREZIONE: 90°									
Massa eccitata (t): 1233.66					Massa totale (t): 1248.13		Rapporto: 98		
Modo N.ro	Fattore Modale	Fmod/Fmax (%)	Massa Mod Eff. (t)	Mmod/Mtot %	Piano N.ro	FX (t)	FY (t)	Mt (t*m)	Mom.Ecc. 5% (t*m)
1	30.951	100.00	957.94	76.75	1	-7.32	32.01	141.73	41.41
					2	-16.13	71.97	335.77	84.27
					3	-12.40	48.03	-50.78	64.67
					4	-4.95	18.40	-40.01	28.69
					5	-0.13	2.00	0.33	2.45
					6	-1.65	4.59	-1.82	5.52
					7	-4.99	31.04	331.14	30.63
2	7.314	23.63	53.50	4.29	1	8.17	1.78	1.50	
					2	18.17	4.04	4.25	
					3	14.28	3.48	-12.73	
					4	5.76	1.50	-5.90	
					5	0.53	0.13	1.65	
					6	1.34	0.30	2.73	
					7	6.05	1.39	14.29	
3	5.726	18.50	32.78	2.63	1	-0.54	0.38	-52.51	
					2	-1.22	0.18	-117.14	
					3	-0.88	7.09	-61.94	
					4	-0.37	4.40	-27.27	
					5	-0.33	0.13	-1.00	
					6	0.42	0.28	0.48	
					7	-0.55	-4.72	-62.76	
4	0.674	2.18	0.45	0.04	1	-0.31	0.12	1.88	
					2	-0.47	0.12	2.25	
					3	-0.13	-0.06	0.07	
					4	-0.06	-0.04	0.05	
					5	0.00	0.00	-0.02	
					6	0.43	0.01	1.61	
					7	-0.06	-0.04	-0.47	
5	7.788	25.16	60.65	4.86	1	-2.54	13.40	150.03	
					2	-2.04	13.94	148.71	

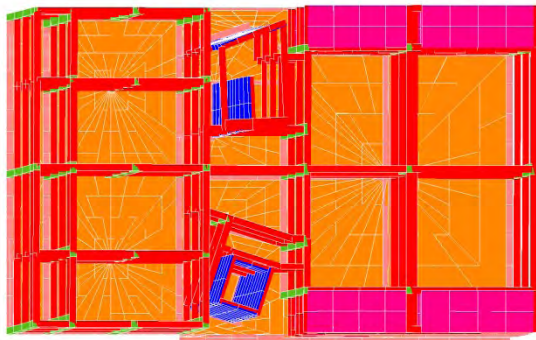
FATTORI E FORZE DI PIANO MODALI S.L.V.

SISMA DIREZIONE: 90°									
Massa eccitata (t): 1233.66					Massa totale (t): 1248.13		Rapporto: 98		
Modo N.ro	Fattore Modale	Fmod/Fmax (%)	Massa Mod Eff. (t)	Mmod/Mtot %	Piano N.ro	FX (t)	FY (t)	Mt (t*m)	Mom.Ecc. 5% (t*m)
6	6.856	22.15	47.01	3.77	3	1.18	-0.41	-5.62	
					4	1.08	0.20	-5.55	
					5	-0.08	-0.16	-0.31	
					6	-0.16	-0.71	-2.29	
					7	0.40	-11.69	-126.15	
					1	-6.81	8.59	-43.56	
					2	-6.71	10.55	-56.42	
7	2.844	9.19	8.09	0.65	3	1.79	2.02	-14.33	
					4	3.45	-10.65	26.35	
					5	0.11	-0.07	0.31	
					6	0.10	-0.52	-0.74	
					7	0.79	1.53	13.59	
					1	5.97	1.23	-1.50	
					2	6.14	2.20	-1.87	
8	1.044	3.37	1.09	0.09	3	-0.81	1.21	-2.42	
					4	-4.06	-2.15	6.38	
					5	-0.08	0.03	-0.24	
					6	-0.07	0.14	0.49	
					7	-0.38	-0.69	-7.74	
					1	-0.05	0.60	14.90	
					2	0.08	-0.53	1.81	
9	5.014	16.20	25.14	2.01	3	0.18	-0.53	-6.47	
					4	-0.33	0.02	-7.60	
					5	-0.06	-0.06	-0.21	
					6	0.10	-0.24	-0.17	
					7	0.08	1.02	9.07	
					1	-5.54	7.07	-31.19	
					2	-1.30	3.57	-27.26	
10	5.047	16.31	25.48	2.04	3	4.36	-6.11	18.18	
					4	-4.69	3.21	6.15	
					5	0.30	-0.35	0.79	
					6	0.34	-1.84	-0.57	
					7	2.86	0.67	12.43	
					1	10.29	6.80	-5.12	
					2	4.68	3.77	-20.42	
11	1.023	3.30	1.05	0.08	3	-6.31	-5.02	9.57	
					4	4.43	1.74	-1.33	
					5	-0.37	-0.35	-1.24	
					6	-0.19	-1.64	0.54	
					7	-4.43	1.04	11.98	
					1	-0.10	1.02	25.54	
					2	0.08	-1.33	-15.55	
12	4.526	14.62	20.48	1.64	3	0.02	0.40	-7.04	
					4	-0.01	-0.24	7.46	
					5	-0.05	0.01	-0.14	
					6	0.05	0.04	-0.03	
					7	-0.04	0.37	1.09	
					1	-3.67	11.26	51.96	
					2	2.79	-4.71	-69.00	
					3	-0.17	-3.77	31.68	
					4	0.15	0.87	-16.21	
					5	0.22	-0.07	0.69	
					6	-0.96	2.01	0.70	
					7	0.40	-0.46	7.78	

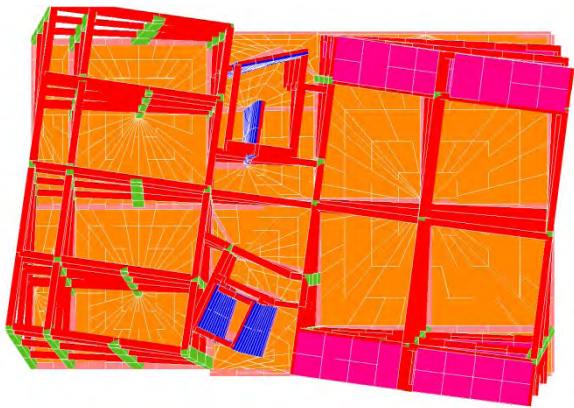
Modo n.1



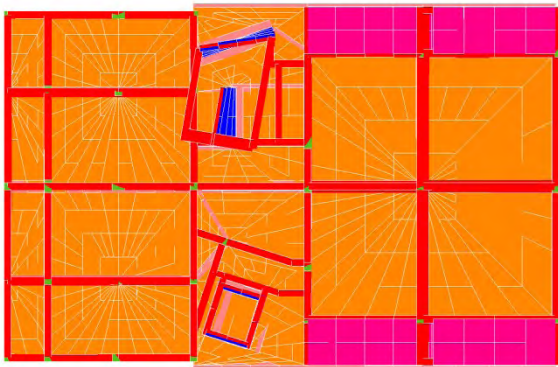
Modo n.2



Modo n.3

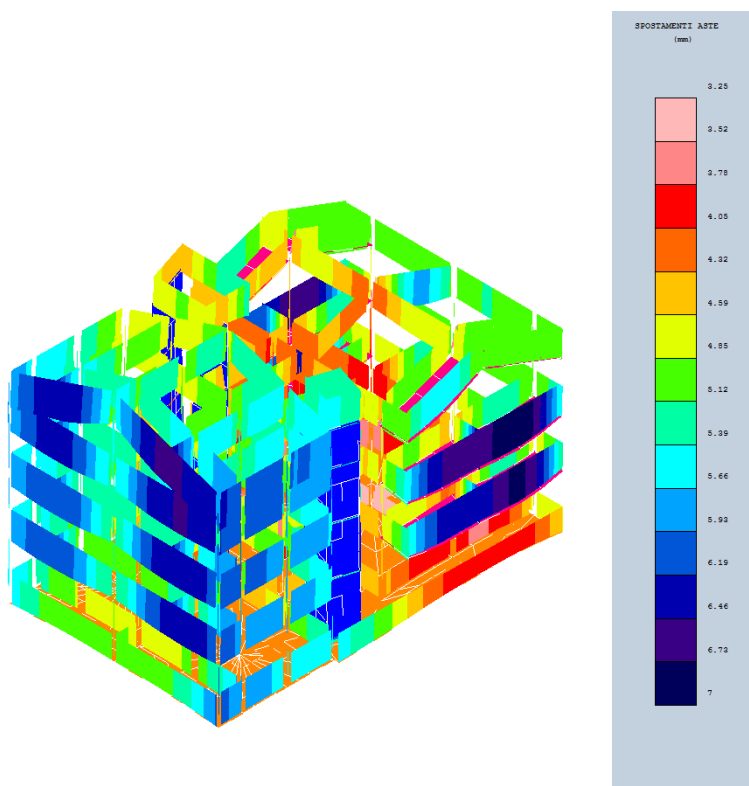


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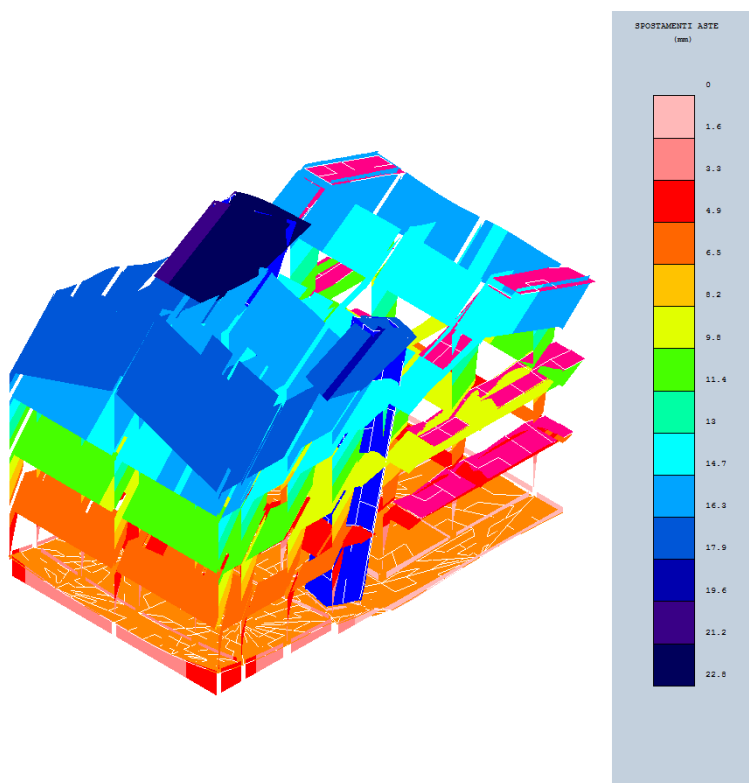


2.10 Deformate e sollecitazioni per condizioni di carico inviluppo delle sollecitazioni maggiormente significative

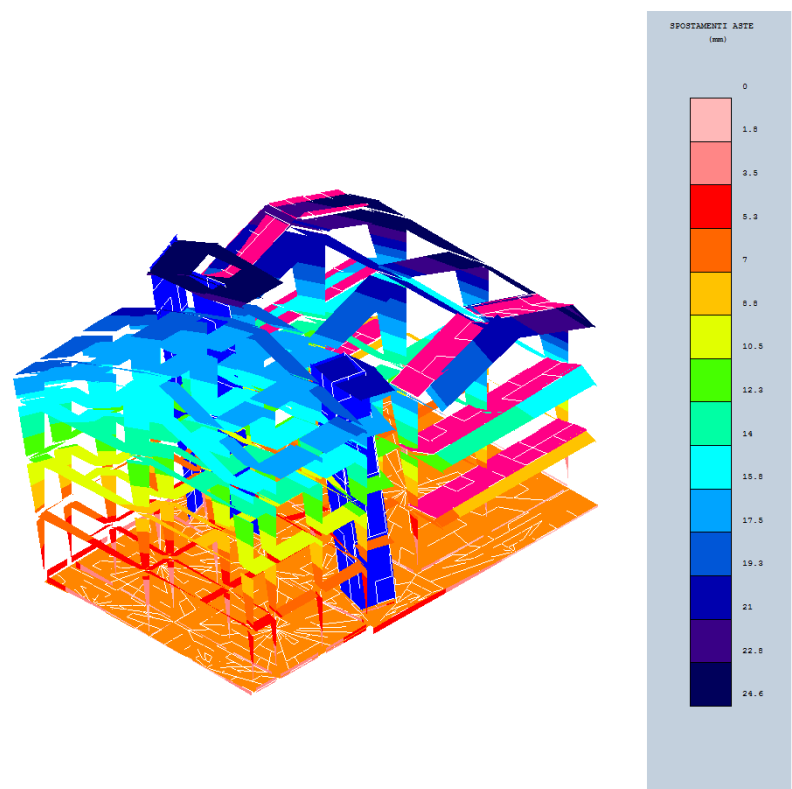
Deformata - Condizione Statica



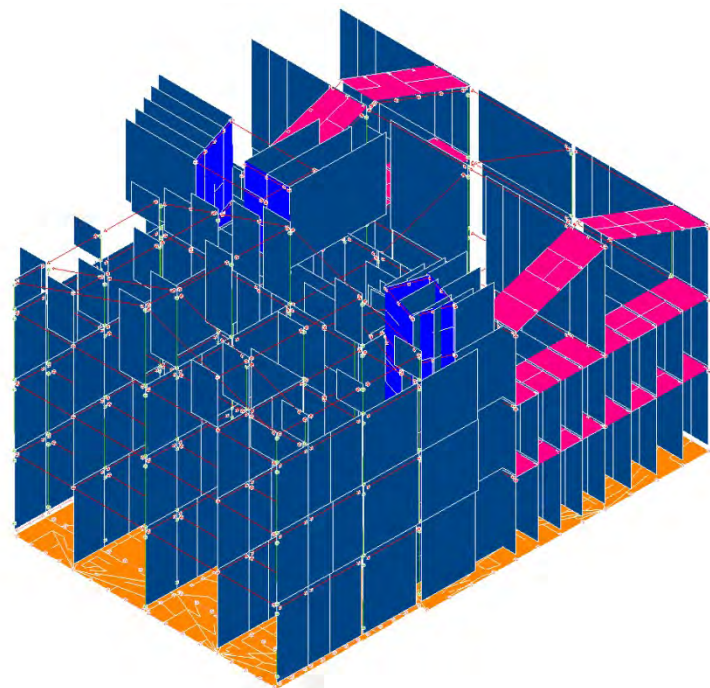
Deformata - Condizione Sismica Dir1



Deformata - Condizione Sismica Dir2



Di seguito si riportano le considerazioni svolte per la verifica allo SLD della struttura:



SPOSTAMENTI SISMICI RELATIVI													
IDENTIFICATIVO					INVILUPPO S.L.D.				INVILUPPO S.L.O.				Stringa di Controllo Verifica
Filo N.ro	Quota inf. (m)	Quota sup. (m)	Nodo inf. N.ro	Nodo sup. N.ro	Sis ma N.ro	Com bin N.ro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	Sis ma N.ro	Com bin N.ro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	
1	0.00	3.63	23	52	2	43	8.939	18.150					VERIFICATO
1	3.63	6.88	52	112	2	43	9.569	16.250					VERIFICATO

SPOSTAMENTI SISMICI RELATIVI

IDENTIFICATIVO					INVILUPPO S.L.D.				INVILUPPO S.L.O.				Stringa di Controllo Verifica
Filo N.ro	Quota inf. (m)	Quota sup. (m)	Nodo inf. N.ro	Nodo sup. N.ro	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	
1	6.88	10.18	112	172	2	43	9.930	16.500					VERIFICATO
2	0.00	3.63	27	53	2	43	8.961	18.150					VERIFICATO
2	3.63	6.88	53	113	2	43	9.587	16.250					VERIFICATO
2	6.88	10.18	113	173	2	43	10.463	16.500					VERIFICATO
3	0.00	3.63	34	97	2	43	8.971	18.150					VERIFICATO
3	3.63	6.88	97	157	2	43	10.331	16.250					VERIFICATO
3	6.88	10.18	157	217	2	43	10.603	16.500					VERIFICATO
4	0.00	3.63	39	103	2	43	7.520	18.150					VERIFICATO
4	3.63	6.88	103	163	2	43	8.911	16.250					VERIFICATO
4	6.88	11.87	163	225	2	43	9.094	24.950					VERIFICATO
5	0.00	3.63	25	54	2	43	7.508	18.150					VERIFICATO
5	3.63	6.88	54	114	2	43	8.036	16.250					VERIFICATO
5	6.88	11.87	114	174	2	43	8.930	24.950					VERIFICATO
6	0.00	3.63	31	55	2	43	7.482	18.150					VERIFICATO
6	3.63	6.88	55	115	2	43	8.014	16.250					VERIFICATO
6	6.88	11.87	115	175	2	43	8.299	24.950					VERIFICATO
7	0.00	3.63	19	56	2	43	7.602	18.150					VERIFICATO
7	3.63	6.88	56	116	2	43	8.151	16.250					VERIFICATO
7	6.88	11.87	116	176	2	43	8.432	24.950					VERIFICATO
8	0.00	3.63	33	102	2	36	7.820	18.150					VERIFICATO
8	3.63	6.88	102	162	2	40	8.452	16.250					VERIFICATO
8	6.88	11.87	162	224	2	43	8.536	24.950					VERIFICATO
9	0.00	3.63	22	57	2	43	9.040	18.150					VERIFICATO
9	3.63	6.88	57	117	2	43	9.683	16.250					VERIFICATO
9	6.88	10.18	117	177	2	43	10.041	16.500					VERIFICATO
10	0.00	3.63	32	96	2	43	9.121	18.150					VERIFICATO
10	3.63	6.88	96	156	2	43	9.772	16.250					VERIFICATO
10	6.88	10.18	156	216	2	43	10.129	16.500					VERIFICATO
11	0.00	3.63	37	101	2	40	7.035	18.150					VERIFICATO
11	3.63	6.88	101	161	2	40	7.607	16.250					VERIFICATO
11	6.88	10.24	161	223	2	40	7.116	16.800					VERIFICATO
12	0.00	3.63	42	83	2	40	6.650	18.150					VERIFICATO
12	3.63	6.88	83	143	2	40	7.177	16.250					VERIFICATO
12	6.88	10.13	143	203	2	40	6.758	16.250					VERIFICATO
12	10.13	13.88	203	256	2	40	7.948	18.750					VERIFICATO
13	0.00	3.63	911	1043	1	27	5.603	18.150					VERIFICATO
13	3.63	6.88	1043	1122	1	27	5.938	16.250					VERIFICATO
13	6.88	10.13	1122	259	1	27	5.823	16.250					VERIFICATO
13	10.13	12.38	259	263	1	27	4.051	11.250					VERIFICATO
14	3.63	6.88	106	166	2	40	6.863	16.250					VERIFICATO
14	6.88	10.13	166	231	2	40	6.494	16.250					VERIFICATO
15	3.63	6.88	105	165	2	40	6.915	16.250					VERIFICATO
15	6.88	10.13	165	230	2	40	6.537	16.250					VERIFICATO
16	3.63	6.88	100	160	2	40	7.122	16.250					VERIFICATO
16	6.88	10.24	160	222	2	40	6.705	16.800					VERIFICATO
17	0.00	3.63	18	58	2	40	6.670	18.150					VERIFICATO
17	3.63	6.88	58	118	2	40	7.208	16.250					VERIFICATO
17	6.88	10.24	118	178	2	40	6.778	16.800					VERIFICATO
19	0.00	3.63	951	1050	2	43	5.781	18.150					VERIFICATO
19	3.63	6.88	1050	1129	2	43	6.184	16.250					VERIFICATO
19	6.88	10.13	1129	266	2	43	5.997	16.250					VERIFICATO
19	10.13	12.38	266	270	1	27	4.058	11.250					VERIFICATO
20	0.00	3.63	920	1053	1	27	5.709	18.150					VERIFICATO
20	3.63	6.88	1053	1132	1	27	6.046	16.250					VERIFICATO
20	6.88	10.13	1132	273	1	27	5.903	16.250					VERIFICATO
20	10.13	12.38	273	275	1	27	4.057	11.250					VERIFICATO
21	3.63	6.88	104	164	2	43	6.396	16.250					VERIFICATO
21	6.88	10.13	164	229	2	43	6.153	16.250					VERIFICATO
23	0.00	3.63	45	85	2	40	5.964	18.150					VERIFICATO
23	3.63	6.88	85	145	2	40	6.416	16.250					VERIFICATO
23	6.88	10.13	145	205	2	40	6.117	16.250					VERIFICATO
23	10.13	13.88	205	258	1	25	7.868	18.750					VERIFICATO
24	0.00	10.13	973	276	2	43	17.610	50.650					VERIFICATO
24	10.13	12.38	276	278	1	27	4.051	11.250					VERIFICATO
25	0.00	3.63	44	84	2	43	5.562	18.150					VERIFICATO
25	3.63	6.88	84	144	2	43	5.963	16.250					VERIFICATO
25	6.88	10.13	144	204	2	43	5.821	16.250					VERIFICATO
25	10.13	13.88	204	257	1	21	10.158	18.750					VERIFICATO
26	0.00	3.63	12	93	1	24	5.419	18.150					VERIFICATO
26	3.63	6.88	93	153	2	46	5.755	16.250					VERIFICATO

SPOSTAMENTI SISMICI RELATIVI

IDENTIFICATIVO					INVILUPPO S.L.D.				INVILUPPO S.L.O.				Stringa di Controllo Verifica
Filo N.ro	Quota inf. (m)	Quota sup. (m)	Nodo inf. N.ro	Nodo sup. N.ro	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	
26	6.88	10.13	153	213	1	30	5.698	16.250					VERIFICATO
26	10.13	13.32	213	279	2	43	2.878	15.950					VERIFICATO
27	0.00	3.63	13	59	1	24	5.757	18.150					VERIFICATO
27	3.63	6.88	59	119	2	40	6.143	16.250					VERIFICATO
27	6.88	10.13	119	179	1	24	5.992	16.250					VERIFICATO
27	10.13	12.56	179	237	2	43	2.884	12.150					VERIFICATO
29	0.00	3.63	14	92	2	40	6.011	18.150					VERIFICATO
29	3.63	6.88	92	152	2	40	6.461	16.250					VERIFICATO
29	6.88	10.13	152	212	1	24	6.224	16.250					VERIFICATO
29	10.13	12.07	212	281	2	43	2.892	9.700					VERIFICATO
30	0.00	3.63	41	82	2	40	6.079	18.150					VERIFICATO
30	3.63	6.88	82	142	2	40	6.537	16.250					VERIFICATO
30	6.88	10.13	142	202	1	24	6.240	16.250					VERIFICATO
30	10.13	13.88	202	255	2	37	7.505	18.750					VERIFICATO
31	0.00	3.63	9	60	2	40	6.375	18.150					VERIFICATO
31	3.63	6.88	60	120	2	40	6.861	16.250					VERIFICATO
31	6.88	10.13	120	180	1	24	6.506	16.250					VERIFICATO
31	10.13	11.48	180	238	2	40	2.962	6.750					VERIFICATO
33	0.00	3.63	7	61	1	24	6.281	18.150					VERIFICATO
33	3.63	6.88	61	121	1	24	6.714	16.250					VERIFICATO
33	6.88	10.13	121	181	1	24	6.550	16.250					VERIFICATO
33	10.13	11.48	181	239	2	40	2.822	6.750					VERIFICATO
34	0.00	3.63	1	62	1	24	6.327	18.150					VERIFICATO
34	3.63	6.88	62	122	1	24	6.767	16.250					VERIFICATO
34	6.88	10.13	122	182	1	24	6.606	16.250					VERIFICATO
34	10.13	11.48	182	240	2	46	2.795	6.750					VERIFICATO
35	0.00	3.63	15	63	1	24	6.358	18.150					VERIFICATO
35	3.63	6.88	63	123	1	24	6.804	16.250					VERIFICATO
35	6.88	10.13	123	183	1	24	6.645	16.250					VERIFICATO
35	10.13	11.48	183	241	1	30	2.817	6.750					VERIFICATO
36	0.00	3.63	17	90	1	24	5.878	18.150					VERIFICATO
36	3.63	6.88	90	150	1	24	6.265	16.250					VERIFICATO
36	6.88	10.13	150	210	1	24	6.142	16.250					VERIFICATO
36	10.13	12.56	210	283	2	46	2.811	12.150					VERIFICATO
37	0.00	3.63	2	64	1	24	5.844	18.150					VERIFICATO
37	3.63	6.88	64	124	1	24	6.225	16.250					VERIFICATO
37	6.88	10.13	124	184	1	24	6.100	16.250					VERIFICATO
37	10.13	12.56	184	242	2	46	2.795	12.150					VERIFICATO
38	0.00	3.63	50	65	1	24	5.794	18.150					VERIFICATO
38	3.63	6.88	65	125	1	24	6.167	16.250					VERIFICATO
38	6.88	10.13	125	185	1	24	6.039	16.250					VERIFICATO
38	10.13	12.56	185	243	2	46	2.769	12.150					VERIFICATO
39	0.00	3.63	40	66	1	30	5.365	18.150					VERIFICATO
39	3.63	6.88	66	126	1	30	5.700	16.250					VERIFICATO
39	6.88	10.13	126	186	1	30	5.718	16.250					VERIFICATO
39	10.13	13.88	186	244	2	46	2.769	18.750					VERIFICATO
40	0.00	3.63	3	67	1	30	5.411	18.150					VERIFICATO
40	3.63	6.88	67	127	1	30	5.762	16.250					VERIFICATO
40	6.88	10.13	127	187	1	30	5.823	16.250					VERIFICATO
40	10.13	13.88	187	245	2	46	2.794	18.750					VERIFICATO
41	0.00	3.63	20	68	1	30	5.444	18.150					VERIFICATO
41	3.63	6.88	68	128	1	30	5.804	16.250					VERIFICATO
41	6.88	10.13	128	188	1	30	5.889	16.250					VERIFICATO
41	10.13	13.88	188	246	2	46	2.811	18.750					VERIFICATO
42	0.00	3.63	21	91	1	25	5.355	18.150					VERIFICATO
42	3.63	6.88	91	151	1	30	5.687	16.250					VERIFICATO
42	6.88	10.13	151	211	1	30	5.738	16.250					VERIFICATO
42	10.13	12.56	211	284	2	46	2.811	12.150					VERIFICATO
43	0.00	3.63	4	69	1	25	5.357	18.150					VERIFICATO
43	3.63	6.88	69	129	1	25	5.649	16.250					VERIFICATO
43	6.88	10.13	129	189	1	30	5.670	16.250					VERIFICATO
43	10.13	12.56	189	247	2	46	2.794	12.150					VERIFICATO
44	0.00	3.63	51	70	1	25	5.362	18.150					VERIFICATO
44	3.63	6.88	70	130	1	25	5.653	16.250					VERIFICATO
44	6.88	10.13	130	190	2	46	5.618	16.250					VERIFICATO
44	10.13	12.53	190	248	2	46	2.769	12.000					VERIFICATO
45	0.00	3.63	10	71	1	27	5.484	18.150					VERIFICATO
45	3.63	6.88	71	131	1	27	5.816	16.250					VERIFICATO
45	6.88	10.13	131	191	1	27	5.734	16.250					VERIFICATO
45	10.13	12.53	191	249	2	43	2.884	12.000					VERIFICATO

SPOSTAMENTI SISMICI RELATIVI

IDENTIFICATIVO					INVILUPPO S.L.D.				INVILUPPO S.L.O.				Stringa di Controllo Verifica
Filo N.ro	Quota inf. (m)	Quota sup. (m)	Nodo inf. N.ro	Nodo sup. N.ro	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	
46	3.63	6.88	95	155	1	27	5.941	16.250					VERIFICATO
46	6.88	10.13	155	215	1	27	5.828	16.250					VERIFICATO
47	0.00	3.63	47	87	1	27	5.643	18.150					VERIFICATO
47	3.63	6.88	87	147	1	27	5.977	16.250					VERIFICATO
47	6.88	10.13	147	207	1	27	5.854	16.250					VERIFICATO
47	10.13	12.38	207	265	1	27	4.054	11.250					VERIFICATO
48	0.00	3.63	8	72	1	27	5.665	18.150					VERIFICATO
48	3.63	6.88	72	132	1	27	5.998	16.250					VERIFICATO
48	6.88	10.13	132	192	1	27	5.871	16.250					VERIFICATO
48	10.13	11.48	192	250	2	43	2.893	6.750					VERIFICATO
50	0.00	3.63	6	73	1	25	5.571	18.150					VERIFICATO
50	3.63	6.88	73	133	1	25	5.868	16.250					VERIFICATO
50	6.88	10.13	133	193	1	27	5.747	16.250					VERIFICATO
50	10.13	11.48	193	251	2	46	2.771	6.750					VERIFICATO
51	0.00	3.63	5	74	1	25	5.567	18.150					VERIFICATO
51	3.63	6.88	74	134	1	25	5.864	16.250					VERIFICATO
51	6.88	10.13	134	194	1	25	5.691	16.250					VERIFICATO
51	10.13	11.48	194	252	2	46	2.797	6.750					VERIFICATO
52	0.00	3.63	16	75	1	25	5.565	18.150					VERIFICATO
52	3.63	6.88	75	135	1	25	5.862	16.250					VERIFICATO
52	6.88	10.13	135	195	1	25	5.690	16.250					VERIFICATO
52	10.13	11.48	195	253	2	46	2.813	6.750					VERIFICATO
53	0.00	3.63	36	98	2	43	6.290	18.150					VERIFICATO
53	3.63	6.88	98	158	2	43	7.744	16.250					VERIFICATO
53	6.88	10.24	158	220	2	43	6.408	16.800					VERIFICATO
54	0.00	3.63	24	76	2	43	6.275	18.150					VERIFICATO
54	3.63	6.88	76	136	2	43	6.719	16.250					VERIFICATO
54	6.88	10.24	136	196	2	43	6.397	16.800					VERIFICATO
56	0.00	3.63	43	77	2	43	5.504	18.150					VERIFICATO
56	3.63	6.88	77	137	2	43	5.895	16.250					VERIFICATO
56	6.88	10.13	137	197	2	43	5.776	16.250					VERIFICATO
58	3.63	6.88	107	167	1	27	5.844	16.250					VERIFICATO
58	6.88	10.13	167	232	1	27	5.754	16.250					VERIFICATO
59	3.63	6.88	110	170	1	27	5.883	16.250					VERIFICATO
59	6.88	10.13	170	235	1	27	5.781	16.250					VERIFICATO
60	0.00	3.63	46	86	1	27	5.559	18.150					VERIFICATO
60	3.63	6.88	86	146	1	27	5.895	16.250					VERIFICATO
60	6.88	10.13	146	206	1	27	5.790	16.250					VERIFICATO
60	10.13	12.38	206	262	1	27	4.048	11.250					VERIFICATO
61	0.00	3.63	49	89	1	27	5.776	18.150					VERIFICATO
61	3.63	6.88	89	149	1	27	6.116	16.250					VERIFICATO
61	6.88	10.13	149	209	1	27	5.954	16.250					VERIFICATO
61	10.13	12.38	209	272	1	27	4.061	11.250					VERIFICATO
62	0.00	3.63	11	78	2	46	5.403	18.150					VERIFICATO
62	3.63	6.88	78	138	2	46	5.752	16.250					VERIFICATO
62	6.88	10.13	138	198	2	46	5.668	16.250					VERIFICATO
62	10.13	13.88	198	254	2	43	2.877	18.750					VERIFICATO
63	0.00	3.63	48	88	2	43	5.844	18.150					VERIFICATO
63	3.63	6.88	88	148	2	43	6.253	16.250					VERIFICATO
63	6.88	10.13	148	208	2	43	6.050	16.250					VERIFICATO
63	10.13	12.38	208	269	1	27	4.055	11.250					VERIFICATO
64	3.63	6.88	109	169	2	43	6.271	16.250					VERIFICATO
64	6.88	10.13	169	234	2	43	6.064	16.250					VERIFICATO
65	3.63	6.88	108	168	2	43	6.393	16.250					VERIFICATO
65	6.88	10.13	168	233	2	43	6.158	16.250					VERIFICATO
66	3.63	6.88	99	159	2	43	6.708	16.250					VERIFICATO
66	6.88	10.24	159	221	2	43	6.388	16.800					VERIFICATO
67	3.63	6.88	111	171	2	43	6.514	16.250					VERIFICATO
67	6.88	10.13	171	236	2	43	6.244	16.250					VERIFICATO
69	0.00	3.63	26	79	2	43	6.254	18.150					VERIFICATO
69	3.63	6.88	79	139	2	43	6.700	16.250					VERIFICATO
69	6.88	10.24	139	199	2	43	6.382	16.800					VERIFICATO
70	0.00	3.63	30	80	2	43	6.242	18.150					VERIFICATO
70	3.63	6.88	80	140	2	43	6.692	16.250					VERIFICATO
70	6.88	10.24	140	200	2	43	6.375	16.800					VERIFICATO
73	0.00	3.63	28	81	2	43	6.259	18.150					VERIFICATO
73	3.63	6.88	81	141	2	43	6.713	16.250					VERIFICATO
73	6.88	10.24	141	201	2	43	6.386	16.800					VERIFICATO
74	3.63	6.88	94	154	2	46	5.752	16.250					VERIFICATO
74	6.88	10.13	154	214	2	46	5.669	16.250					VERIFICATO

SPOSTAMENTI SISMICI RELATIVI

I D E N T I F I C A T I V O					I N V I L U P P O S . L . D .				I N V I L U P P O S . L . O .				Stringa di Controllo Verifica
Filo N.ro	Quota inf. (m)	Quota sup. (m)	Nodo inf. N.ro	Nodo sup. N.ro	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	
388	0.00	3.63	598	1067	2	43	8.678	18.150					VERIFICATO
388	3.63	6.88	1067	1146	2	43	9.298	16.250					VERIFICATO
389	0.00	3.63	599	1066	2	43	8.317	18.150					VERIFICATO
389	3.63	6.88	1066	1145	2	43	8.914	16.250					VERIFICATO
390	0.00	3.63	600	1065	2	43	7.958	18.150					VERIFICATO
390	3.63	6.88	1065	1144	2	43	8.531	16.250					VERIFICATO
436	0.00	3.63	646	1083	2	43	7.869	18.150					VERIFICATO
436	3.63	6.88	1083	1162	2	43	8.422	16.250					VERIFICATO
437	0.00	3.63	647	1084	2	43	8.231	18.150					VERIFICATO
437	3.63	6.88	1084	1163	2	43	8.809	16.250					VERIFICATO
438	0.00	3.63	648	1085	2	43	8.596	18.150					VERIFICATO
438	3.63	6.88	1085	1164	2	43	9.197	16.250					VERIFICATO
451	0.00	3.63	661	1093	2	43	6.581	18.150					VERIFICATO
451	3.63	6.88	1093	1172	2	43	7.046	16.250					VERIFICATO
452	0.00	3.63	662	1094	2	43	6.889	18.150					VERIFICATO
452	3.63	6.88	1094	1173	2	43	7.374	16.250					VERIFICATO
453	0.00	3.63	663	1095	2	43	7.197	18.150					VERIFICATO
453	3.63	6.88	1095	1174	2	43	7.705	16.250					VERIFICATO
466	0.00	3.63	676	1056	2	43	7.295	18.150					VERIFICATO
466	3.63	6.88	1056	1135	2	40	7.864	16.250					VERIFICATO
467	0.00	3.63	677	1055	2	36	7.057	18.150					VERIFICATO
467	3.63	6.88	1055	1134	2	40	7.639	16.250					VERIFICATO
468	0.00	3.63	678	1054	2	40	6.858	18.150					VERIFICATO
468	3.63	6.88	1054	1133	2	40	7.420	16.250					VERIFICATO
537	0.00	3.63	747	1029	2	40	6.506	18.150					VERIFICATO
537	3.63	6.88	1029	1108	2	40	7.015	16.250					VERIFICATO
537	6.88	10.13	1108	1187	2	40	6.622	16.250					VERIFICATO
537	10.13	13.88	1187	1265	2	40	7.754	18.750					VERIFICATO
538	0.00	3.63	748	1028	2	40	6.362	18.150					VERIFICATO
538	3.63	6.88	1028	1107	2	40	6.854	16.250					VERIFICATO
538	6.88	10.13	1107	1186	2	40	6.486	16.250					VERIFICATO
538	10.13	13.88	1186	1264	2	40	7.558	18.750					VERIFICATO
539	0.00	3.63	749	1027	2	40	6.220	18.150					VERIFICATO
539	3.63	6.88	1027	1106	2	40	6.694	16.250					VERIFICATO
539	6.88	10.13	1106	1185	2	40	6.351	16.250					VERIFICATO
539	10.13	13.88	1185	1263	2	36	7.460	18.750					VERIFICATO
557	0.00	3.63	767	1036	2	40	5.740	18.150					VERIFICATO
557	3.63	6.88	1036	1115	2	40	6.171	16.250					VERIFICATO
557	6.88	10.13	1115	1194	2	40	5.910	16.250					VERIFICATO
557	10.13	13.88	1194	1272	1	25	8.855	18.750					VERIFICATO
625	0.00	3.63	835	1071	2	43	9.077	18.150					VERIFICATO
625	3.63	6.88	1071	1150	2	43	9.725	16.250					VERIFICATO
625	6.88	10.18	1150	1230	2	43	10.082	16.500					VERIFICATO
628	0.00	3.63	838	1074	2	43	8.762	18.150					VERIFICATO
628	3.63	6.88	1074	1153	2	43	9.390	16.250					VERIFICATO
629	0.00	3.63	839	1069	2	43	8.358	18.150					VERIFICATO
629	3.63	6.88	1069	1148	2	43	8.958	16.250					VERIFICATO
631	0.00	3.63	841	1073	2	43	8.405	18.150					VERIFICATO
631	3.63	6.88	1073	1152	2	43	9.010	16.250					VERIFICATO
634	0.00	3.63	844	1072	2	36	8.088	18.150					VERIFICATO
634	3.63	6.88	1072	1151	2	40	8.714	16.250					VERIFICATO
639	0.00	3.63	849	1061	2	36	7.670	18.150					VERIFICATO
639	3.63	6.88	1061	1140	2	40	8.270	16.250					VERIFICATO
639	6.88	11.87	1140	1219	2	43	8.480	24.950					VERIFICATO
641	0.00	3.63	851	1068	2	43	8.001	18.150					VERIFICATO
641	3.63	6.88	1068	1147	2	43	8.578	16.250					VERIFICATO
651	0.00	3.63	861	1059	2	40	7.223	18.150					VERIFICATO
651	3.63	6.88	1059	1138	2	40	7.825	16.250					VERIFICATO
653	0.00	3.63	863	1060	2	36	7.438	18.150					VERIFICATO
653	3.63	6.88	1060	1139	2	40	8.045	16.250					VERIFICATO
659	0.00	3.63	869	1057	2	40	6.850	18.150					VERIFICATO
659	3.63	6.88	1057	1136	2	40	7.405	16.250					VERIFICATO
659	6.88	10.24	1136	1209	2	40	6.945	16.800					VERIFICATO
660	0.00	3.63	870	1062	2	40	7.214	18.150					VERIFICATO
660	3.63	6.88	1062	1141	2	40	7.809	16.250					VERIFICATO
662	0.00	3.63	872	1063	2	40	7.398	18.150					VERIFICATO
662	3.63	6.88	1063	1142	2	40	8.017	16.250					VERIFICATO
664	0.00	3.63	874	1064	2	36	7.593	18.150					VERIFICATO
664	3.63	6.88	1064	1143	2	40	8.232	16.250					VERIFICATO
728	0.00	3.63	940	1089	2	43	6.283	18.150					VERIFICATO

SPOSTAMENTI SISMICI RELATIVI													
IDENTIFICATIVO				INVILUPPO S.L.D.				INVILUPPO S.L.O.					
Filo N.ro	Quota inf. (m)	Quota sup. (m)	Nodo inf. N.ro	Nodo sup. N.ro	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	Sis ma Nro	Com bin Nro	Spostam. Calcolo (mm)	Spostam. Limite (mm)	Stringa di Controllo Verifica
728	3.63	6.88	1089	1168	2	43	6.726	16.250					VERIFICATO
728	6.88	10.24	1168	1231	2	43	6.403	16.800					VERIFICATO
768	0.00	3.63	982	1078	2	43	7.514	18.150					VERIFICATO
768	3.63	6.88	1078	1157	2	43	8.042	16.250					VERIFICATO
768	6.88	11.87	1157	1241	2	43	9.007	24.950					VERIFICATO
770	0.00	3.63	984	1092	2	43	7.204	18.150					VERIFICATO
770	3.63	6.88	1092	1171	2	43	7.711	16.250					VERIFICATO
772	0.00	3.63	986	1091	2	43	6.896	18.150					VERIFICATO
772	3.63	6.88	1091	1170	2	43	7.381	16.250					VERIFICATO
779	0.00	3.63	993	1086	2	43	6.595	18.150					VERIFICATO
779	3.63	6.88	1086	1165	2	43	8.029	16.250					VERIFICATO
781	0.00	3.63	995	1087	2	43	6.902	18.150					VERIFICATO
781	3.63	6.88	1087	1166	2	43	8.319	16.250					VERIFICATO
783	0.00	3.63	997	1088	2	43	7.210	18.150					VERIFICATO
783	3.63	6.88	1088	1167	2	43	8.613	16.250					VERIFICATO
788	0.00	3.63	1002	1080	2	43	8.237	18.150					VERIFICATO
788	3.63	6.88	1080	1159	2	43	8.814	16.250					VERIFICATO
790	0.00	3.63	1004	1079	2	43	7.875	18.150					VERIFICATO
790	3.63	6.88	1079	1158	2	43	8.427	16.250					VERIFICATO
796	0.00	3.63	1010	1082	2	43	8.966	18.150					VERIFICATO
796	3.63	6.88	1082	1161	2	43	9.592	16.250					VERIFICATO
796	6.88	10.18	1161	1252	2	43	10.528	16.500					VERIFICATO
797	0.00	3.63	1011	1077	2	43	8.606	18.150					VERIFICATO
797	3.63	6.88	1077	1156	2	43	9.971	16.250					VERIFICATO
799	0.00	3.63	1013	1076	2	43	8.243	18.150					VERIFICATO
799	3.63	6.88	1076	1155	2	43	9.613	16.250					VERIFICATO
801	0.00	3.63	1015	1075	2	43	7.881	18.150					VERIFICATO
801	3.63	6.88	1075	1154	2	43	9.260	16.250					VERIFICATO
803	3.63	6.88	1058	1137	2	40	7.612	16.250					VERIFICATO
804	3.63	6.88	1070	1149	2	43	9.341	16.250					VERIFICATO
805	3.63	6.88	1081	1160	2	43	9.203	16.250					VERIFICATO
806	3.63	6.88	1090	1169	2	43	7.053	16.250					VERIFICATO

Di seguito si riportano anche le verifiche condotte in termini di spostamenti allo SLV per dimensionare il giunto sismico fra i due corpi, divisi da uno spazio di 15 cm:

SPOSTAMENTI S.L.V. PER GIUNTI SISMICI (NTC 7.3.3.3)												
Sisma Direzione X $\mu d=2.88$ - Direzione Y $\mu d=2.76$												
IDENTIFICATIVO			SPOSTAMENTI S.L.U.			IDENTIFICATIVO			SPOSTAMENTI S.L.U.			
Filo N.ro	Quota (m)	Nodo3D N.ro	SpMax X (mm)	SpMax Y (mm)	SpMax R (mm)	Filo N.ro	Quota (m)	Nodo3D N.ro	SpMax X (mm)	SpMax Y (mm)	SpMax R (mm)	
1	3.63	52	13.53	23.98	24.01	2	3.63	53	14.17	23.98	23.99	
5	3.63	54	14.17	20.02	20.03	6	3.63	55	13.53	20.02	20.05	
7	3.63	56	15.84	20.02	20.76	9	3.63	57	15.84	23.98	24.42	
17	3.63	58	15.84	16.65	18.39	27	3.63	59	15.12	14.38	15.60	
31	3.63	60	16.57	14.38	17.35	33	3.63	61	16.57	13.93	16.69	
34	3.63	62	16.57	13.59	16.82	35	3.63	63	16.57	13.43	16.90	
37	3.63	64	15.12	13.59	15.39	38	3.63	65	15.12	13.93	15.26	
39	3.63	66	13.53	13.93	13.98	40	3.63	67	13.53	13.59	14.12	
41	3.63	68	13.53	13.43	14.24	43	3.63	69	13.92	13.59	13.93	
44	3.63	70	13.92	13.93	13.98	45	3.63	71	13.92	14.38	14.43	
48	3.63	72	14.46	14.38	14.67	50	3.63	73	14.46	13.93	14.47	
51	3.63	74	14.46	13.59	14.47	52	3.63	75	14.46	13.43	14.46	
54	3.63	76	14.17	16.65	16.67	56	3.63	77	13.71	14.63	14.64	
62	3.63	78	13.53	14.38	14.42	69	3.63	79	13.82	16.65	16.65	
70	3.63	80	13.53	16.65	16.69	73	3.63	81	14.19	16.65	16.80	
30	3.63	82	15.83	14.44	16.57	12	3.63	83	16.28	15.74	18.26	
25	3.63	84	14.12	14.76	15.18	23	3.63	85	15.20	14.76	16.33	
60	3.63	86	13.93	14.57	14.62	47	3.63	87	14.28	14.46	14.62	
63	3.63	88	14.01	15.50	15.51	61	3.63	89	14.38	15.10	15.13	
36	3.63	90	15.12	13.43	15.49	42	3.63	91	13.92	13.43	13.92	
29	3.63	92	15.78	14.38	16.37	26	3.63	93	14.12	14.38	14.49	
74	3.63	94	13.66	14.38	14.42	46	3.63	95	14.26	14.38	14.52	
10	3.63	96	16.71	23.98	24.69	3	3.63	97	14.52	23.98	24.01	
53	3.63	98	14.52	16.65	16.69	66	3.63	99	14.00	16.65	16.65	
16	3.63	100	15.65	16.65	18.18	11	3.63	101	16.71	16.65	19.37	
8	3.63	102	16.71	20.02	21.63	4	3.63	103	14.52	20.02	20.05	
21	3.63	104	14.19	15.86	16.11	15	3.63	105	15.65	15.86	17.63	
14	3.63	106	15.65	15.66	17.49	58	3.63	107	13.87	14.51	14.56	
65	3.63	108	14.00	15.86	15.87	64	3.63	109	13.97	15.55	15.56	
59	3.63	110	13.89	14.58	14.63	67	3.63	111	13.82	16.18	16.18	
1	6.88	112	27.97	49.97	50.03	2	6.88	113	29.31	49.97	50.00	
5	6.88	114	29.31	41.70	41.74	6	6.88	115	27.97	41.70	41.77	
7	6.88	116	32.82	41.70	43.13	9	6.88	117	32.82	49.97	50.88	

SPOSTAMENTI S.L.V. PER GIUNTI SISMICI (NTC 7.3.3.3)											
Sisma Direzione X $\mu d=2.88$ - Direzione Y $\mu d=2.76$											
IDENTIFICATIVO			SPOSTAMENTI S.L.U.			IDENTIFICATIVO			SPOSTAMENTI S.L.U.		
Filo N.ro	Quota (m)	Nodo3D N.ro	SpMax X (mm)	SpMax Y (mm)	SpMax R (mm)	Filo N.ro	Quota (m)	Nodo3D N.ro	SpMax X (mm)	SpMax Y (mm)	SpMax R (mm)
17	6.88	118	32.82	34.67	38.19	27	6.88	119	31.31	29.79	32.35
31	6.88	120	34.34	29.79	36.01	33	6.88	121	34.34	28.86	34.60
34	6.88	122	34.34	28.14	34.86	35	6.88	123	34.34	27.81	35.04
37	6.88	124	31.31	28.14	31.88	38	6.88	125	31.31	28.86	31.60
39	6.88	126	27.97	28.86	28.95	40	6.88	127	27.97	28.14	29.29
41	6.88	128	27.97	27.81	29.52	43	6.88	129	28.79	28.14	28.81
44	6.88	130	28.79	28.86	28.96	45	6.88	131	28.79	29.79	29.89
48	6.88	132	29.92	29.79	30.48	50	6.88	133	29.92	28.86	29.95
51	6.88	134	29.92	28.14	29.94	52	6.88	135	29.92	27.81	29.93
54	6.88	136	29.31	34.68	34.71	56	6.88	137	28.35	30.42	30.42
62	6.88	138	27.97	29.79	29.87	69	6.88	139	28.58	34.67	34.67
70	6.88	140	27.97	34.67	34.75	73	6.88	141	29.36	34.67	34.97
30	6.88	142	32.79	29.90	34.38	12	6.88	143	33.73	32.74	37.91
25	6.88	144	29.23	30.69	31.49	23	6.88	145	31.48	30.69	33.89
60	6.88	146	28.82	30.18	30.27	47	6.88	147	29.55	29.94	30.37
63	6.88	148	28.99	32.25	32.26	61	6.88	149	29.76	31.41	31.48
36	6.88	150	31.31	27.81	32.09	42	6.88	151	28.79	27.81	28.87
29	6.88	152	32.68	29.79	33.96	26	6.88	153	29.23	29.79	30.03
74	6.88	154	28.24	29.79	29.87	46	6.88	155	29.50	29.79	30.17
10	6.88	156	34.63	49.97	51.44	3	6.88	157	30.06	49.97	53.42
53	6.88	158	30.06	34.68	39.48	66	6.88	159	28.95	34.66	34.68
16	6.88	160	32.42	34.67	37.76	11	6.88	161	34.63	34.67	40.22
8	6.88	162	34.63	41.70	44.94	4	6.88	163	30.06	41.70	45.78
21	6.88	164	29.36	33.00	33.43	15	6.88	165	32.42	33.00	36.60
14	6.88	166	32.42	32.59	36.30	58	6.88	167	28.69	30.05	30.14
65	6.88	168	28.95	33.00	33.02	64	6.88	169	28.90	32.36	32.37
59	6.88	170	28.73	30.29	30.30	67	6.88	171	28.57	33.68	33.68
1	10.18	172	41.60	76.81	76.88	2	10.18	173	43.61	76.81	76.86
5	11.87	174	43.61	64.09	64.16	6	11.87	175	41.60	64.09	64.18
7	11.87	176	48.54	64.09	65.66	9	10.18	177	48.54	76.81	78.12
17	10.24	178	49.30	51.83	56.73	27	10.13	179	47.07	44.96	48.37
31	10.13	180	51.54	44.96	53.59	33	10.13	181	51.54	43.86	51.96
34	10.13	182	51.54	43.05	52.36	35	10.13	183	51.54	42.69	52.65
37	10.13	184	47.07	43.05	47.97	38	10.13	185	47.07	43.86	47.54
39	10.13	186	42.13	43.86	43.98	40	10.13	187	42.13	43.05	44.58
41	10.13	188	42.13	42.69	44.99	43	10.13	189	43.31	43.05	43.49
44	10.13	190	43.31	43.86	44.02	45	10.13	191	43.31	44.96	45.11
48	10.13	192	44.90	44.96	45.97	50	10.13	193	44.90	43.86	44.96
51	10.13	194	44.90	43.05	44.94	52	10.13	195	44.90	42.69	44.94
54	10.24	196	44.05	51.84	51.89	56	10.13	197	42.68	45.88	45.89
62	10.13	198	42.13	44.96	45.07	69	10.24	199	43.00	51.83	51.83
70	10.24	200	42.13	51.83	51.94	73	10.24	201	44.19	51.83	52.23
30	10.13	202	49.26	45.09	51.27	12	10.13	203	50.65	49.15	56.33
25	10.13	204	43.99	46.27	47.15	23	10.13	205	47.32	46.27	50.58
60	10.13	206	43.35	45.54	45.57	47	10.13	207	44.39	45.14	45.80
63	10.13	208	43.59	48.45	48.47	61	10.13	209	44.68	47.27	47.37
36	10.13	210	47.07	42.69	48.28	42	10.13	211	43.31	42.69	43.92
29	10.13	212	49.09	44.96	50.67	26	10.13	213	43.99	44.96	45.12
74	10.13	214	42.52	44.96	45.07	46	10.13	215	44.32	44.96	45.53
10	10.18	216	51.15	76.81	78.94	3	10.18	217	45.09	76.81	81.84
78	12.01	218	48.54	65.03	66.57	76	12.01	219	43.61	65.03	65.09
53	10.24	220	45.08	51.84	51.95	66	10.24	221	43.54	51.82	51.84
16	10.24	222	48.70	51.83	56.11	11	10.24	223	51.98	51.83	59.64
8	11.87	224	51.15	64.09	67.91	4	11.87	225	45.09	64.09	70.04
79	12.01	226	51.15	65.03	68.56	80	12.01	227	45.09	65.03	70.90
77	12.01	228	41.60	65.03	65.11	21	10.13	229	44.18	49.50	49.93
15	10.13	230	48.70	49.50	54.46	14	10.13	231	48.70	48.93	54.04
58	10.13	232	43.16	45.27	45.41	65	10.13	233	43.54	49.51	49.53
64	10.13	234	43.46	48.60	48.62	59	10.13	235	43.23	45.70	45.70
67	10.13	236	43.00	50.43	50.43	27	12.56	237	53.26	52.29	55.67
31	11.48	238	58.20	52.29	61.26	33	11.48	239	58.20	51.24	58.68
34	11.48	240	58.20	50.46	59.12	35	11.48	241	58.20	50.12	59.44
37	12.56	242	53.26	50.46	54.27	38	12.56	243	53.26	51.24	53.79
39	13.88	244	47.81	51.24	51.36	40	13.88	245	47.81	50.46	51.22
41	13.88	246	47.81	50.12	51.71	43	12.56	247	49.12	50.46	50.63
44	12.53	248	49.12	51.24	51.41	45	12.53	249	49.12	52.29	52.46
48	11.48	250	50.85	52.29	52.87	50	11.48	251	50.85	51.24	51.60
51	11.48	252	50.85	50.46	50.92	52	11.48	253	50.85	50.12	50.90
62	13.88	254	47.81	52.29	52.41	30	13.88	255	68.99	63.94	71.42
12	13.88	256	69.46	69.98	77.81	25	13.88	257	69.77	64.77	69.91
23	13.88	258	68.40	64.77	71.18	13	10.13	259	43.84	45.28	45.50
13	11.26	260	48.92	50.52	50.85	47	11.26	261	49.48	50.39	51.16
60	12.38	262	53.47	56.14	56.17	13	12.38	263	54.00	55.79	56.21
60	11.26	264	48.40	50.82	50.84	47	12.38	265	54.57	55.66	56.52
19	10.13	266	44.11	47.86	47.92	19	11.26	267	49.19	53.18	53.25
61	11.26	268	49.78	52.59	52.70	63	12.38	269	53.73	59.06	59.10
19	12.38	270	54.28	58.46	58.55	63	11.26	271	48.65	53.76	53.79
61	12.38	272	54.87	57.87	58.00	20	10.13	273	44.53	45.82	46.32
20	11.26	274	49.63	51.12	51.68	20	12.38	275	54.72	56.42	57.05
24	10.13	276	43.47	46.99	47.01	24	11.26	277	48.53	52.28	52.31
24	12.38	278	53.60	57.59	57.63	26	13.32	279	49.85	52.29	52.46
75	13.88	280	69.77	63.94	69.80	29	12.07	281	55.50	52.29	58.14

SPOSTAMENTI S.L.V. PER GIUNTI SISMICI (NTC 7.3.3.3)											
Sisma Direzione X $\mu d=2.88$						- Direzione Y $\mu d=2.76$					
IDENTIFICATIVO			SPOSTAMENTI S.L.U.			IDENTIFICATIVO			SPOSTAMENTI S.L.U.		
Filo N.ro	Quota (m)	Nodo3D N.ro	SpMax X (mm)	SpMax Y (mm)	SpMax R (mm)	Filo N.ro	Quota (m)	Nodo3D N.ro	SpMax X (mm)	SpMax Y (mm)	SpMax R (mm)
22	13.88	282	69.43	69.59	70.59	36	12.56	283	53.26	50.12	54.62
42	12.56	284	49.12	50.12	50.47	30	1.21	1017	4.33	3.31	4.45
539	1.21	1018	4.24	3.40	4.35	538	1.21	1019	4.23	3.45	4.35
537	1.21	1020	4.21	3.48	4.36	12	1.21	1021	4.29	3.49	4.48
30	2.42	1022	9.77	8.48	9.83	539	2.42	1023	9.81	8.58	9.87
538	2.42	1024	9.83	8.67	10.09	537	2.42	1025	9.91	8.86	10.33
12	2.42	1026	10.03	9.09	10.56	539	3.63	1027	15.94	14.55	16.99
538	3.63	1028	16.06	14.89	17.41	537	3.63	1029	16.17	15.31	17.83
25	1.21	1030	3.02	4.02	4.03	557	1.21	1031	3.26	3.85	3.88
23	1.21	1032	3.36	4.04	4.08	25	2.42	1033	8.51	9.04	9.16
557	2.42	1034	8.66	8.99	9.38	23	2.42	1035	8.85	9.05	9.68
557	3.63	1036	14.66	14.76	15.74	60	1.21	1037	3.82	4.39	4.40
13	1.21	1038	4.02	4.32	4.34	47	1.21	1039	4.26	4.37	4.40
60	2.42	1040	8.74	9.31	9.34	13	2.42	1041	8.90	9.23	9.27
47	2.42	1042	9.07	9.21	9.28	13	3.63	1043	14.10	14.51	14.57
63	1.21	1044	3.73	4.71	4.71	19	1.21	1045	3.97	4.57	4.57
61	1.21	1046	4.22	4.59	4.60	63	2.42	1047	8.76	9.95	9.95
19	2.42	1048	8.92	9.74	9.75	61	2.42	1049	9.06	9.63	9.65
19	3.63	1050	14.19	15.30	15.32	20	1.21	1051	4.17	4.46	4.49
20	2.42	1052	9.04	9.33	9.39	20	3.63	1053	14.33	14.60	14.80
468	3.63	1054	15.84	17.49	18.96	467	3.63	1055	15.84	18.33	19.55
466	3.63	1056	15.84	19.17	20.14	659	3.63	1057	16.28	16.65	18.87
803	3.63	1058	16.28	17.49	19.43	651	3.63	1059	16.28	18.33	20.00
653	3.63	1060	16.28	19.17	20.58	639	3.63	1061	16.28	20.02	21.18
660	3.63	1062	16.71	17.49	19.91	662	3.63	1063	16.71	18.33	20.47
664	3.63	1064	16.71	19.17	21.04	390	3.63	1065	15.84	21.01	21.51
389	3.63	1066	15.84	21.99	22.47	388	3.63	1067	15.84	22.99	23.45
641	3.63	1068	16.28	21.01	21.89	629	3.63	1069	16.28	21.99	22.61
804	3.63	1070	16.28	22.99	23.58	625	3.63	1071	16.28	23.98	24.55
634	3.63	1072	16.71	21.01	22.32	631	3.63	1073	16.71	21.99	23.03
628	3.63	1074	16.71	22.99	23.75	801	3.63	1075	14.52	21.01	21.03
799	3.63	1076	14.52	21.99	22.02	797	3.63	1077	14.52	22.99	23.01
768	3.63	1078	14.34	20.02	20.04	790	3.63	1079	14.34	21.01	21.03
788	3.63	1080	14.34	21.99	22.01	805	3.63	1081	14.34	22.99	23.01
796	3.63	1082	14.34	23.98	24.00	436	3.63	1083	14.17	21.01	21.02
437	3.63	1084	14.17	21.99	22.01	438	3.63	1085	14.17	22.99	23.00
779	3.63	1086	14.52	17.49	17.52	781	3.63	1087	14.52	18.33	18.36
783	3.63	1088	14.52	19.17	19.20	728	3.63	1089	14.34	16.65	16.68
806	3.63	1090	14.34	17.49	17.51	772	3.63	1091	14.34	18.33	18.35
770	3.63	1092	14.34	19.17	19.20	451	3.63	1093	14.17	17.49	17.50
452	3.63	1094	14.17	18.33	18.34	453	3.63	1095	14.17	19.17	19.19
30	4.71	1096	21.46	19.71	22.70	539	4.71	1097	21.56	19.86	23.25
538	4.71	1098	21.74	20.41	23.84	537	4.71	1099	21.91	20.99	24.42
12	4.71	1100	22.09	21.57	25.00	30	5.80	1101	27.12	24.88	28.64
539	5.80	1102	27.34	25.07	29.36	538	5.80	1103	27.52	25.76	30.08
537	5.80	1104	27.72	26.51	30.84	12	5.80	1105	27.95	27.29	31.62
539	6.88	1106	33.03	30.15	35.25	538	6.88	1107	33.26	30.97	36.13
537	6.88	1108	33.50	31.85	37.02	25	4.71	1109	19.06	19.99	20.56
557	4.71	1110	19.98	19.97	21.40	23	4.71	1111	20.80	19.99	22.27
25	5.80	1112	24.51	25.32	26.19	557	5.80	1113	25.29	25.32	27.10
23	5.80	1114	26.21	25.32	28.13	557	6.88	1115	30.35	30.69	32.65
60	4.71	1116	18.70	19.66	19.72	13	4.71	1117	19.00	19.55	19.63
47	4.71	1118	19.26	19.49	19.76	60	5.80	1119	23.81	24.91	24.99
13	5.80	1120	24.09	24.80	24.90	47	5.80	1121	24.38	24.69	25.04
13	6.88	1122	29.17	30.06	30.18	63	4.71	1123	18.83	20.93	20.94
19	4.71	1124	19.11	20.64	20.67	61	4.71	1125	19.36	20.40	20.44
63	5.80	1126	23.97	26.59	26.60	19	5.80	1127	24.24	26.22	26.25
61	5.80	1128	24.52	25.87	25.93	19	6.88	1129	29.36	31.83	31.87
20	4.71	1130	19.30	19.73	19.97	20	5.80	1131	24.45	25.04	25.33
20	6.88	1132	29.66	30.38	30.74	468	6.88	1133	32.82	36.42	39.38
467	6.88	1134	32.82	38.17	40.60	466	6.88	1135	32.82	39.93	41.86
659	6.88	1136	33.72	34.67	39.19	803	6.88	1137	33.72	36.42	40.35
651	6.88	1138	33.72	38.17	41.55	653	6.88	1139	33.72	39.93	42.77
639	6.88	1140	33.72	41.70	44.02	660	6.88	1141	34.63	36.42	41.36
662	6.88	1142	34.63	38.17	42.52	664	6.88	1143	34.63	39.93	43.72
390	6.88	1144	32.82	43.76	44.80	389	6.88	1145	32.82	45.82	46.81
388	6.88	1146	32.82	47.90	48.84	641	6.88	1147	33.72	43.76	45.50
629	6.88	1148	33.72	45.82	47.10	804	6.88	1149	33.72	47.90	49.12
625	6.88	1150	33.72	49.97	51.15	634	6.88	1151	34.63	43.76	46.39
631	6.88	1152	34.63	45.82	47.87	628	6.88	1153	34.63	47.90	49.43
801	6.88	1154	30.06	43.76	47.66	799	6.88	1155	30.06	45.82	49.56
797	6.88	1156	30.06	47.90	51.48	768	6.88	1157	29.67	41.70	41.75
790	6.88	1158	29.67	43.76	43.81	788	6.88	1159	29.67	45.82	45.87
805	6.88	1160	29.67	47.90	47.94	796	6.88	1161	29.67	49.97	50.01
436	6.88	1162	29.31	43.76	43.79	437	6.88	1163	29.31	45.82	45.85
438	6.88	1164	29.31	47.90	47.92	779	6.88	1165	30.06	36.42	41.02
781	6.88	1166	30.06	38.18	42.59	783	6.88	1167	30.06	39.94	44.17
728	6.88	1168	29.67	34.68	34.73	806	6.88	1169	29.67	36.42	36.48
772	6.88	1170	29.67	38.18	38.23	770	6.88	1171	29.67	39.94	39.99
451	6.88	1172	29.31	36.42	36.46	452	6.88	1173	29.31	38.18	38.21
453	6.88	1174	29.31	39.94	39.97	30	7.96	1175	38.26	34.90	39.97
539	7.96	1176	38.52	35.18	40.98	538	7.96	1177	38.82	36.15	42.00

SPOSTAMENTI S.L.V. PER GIUNTI SISMICI (NTC 7.3.3.3)											
Sisma Direzione X $\mu d=2.88$						- Direzione Y $\mu d=2.76$					
IDENTIFICATIVO			SPOSTAMENTI S.L.U.			IDENTIFICATIVO			SPOSTAMENTI S.L.U.		
Filo N.ro	Quota (m)	Nodo3D N.ro	SpMax X (mm)	SpMax Y (mm)	SpMax R (mm)	Filo N.ro	Quota (m)	Nodo3D N.ro	SpMax X (mm)	SpMax Y (mm)	SpMax R (mm)
537	7.96	1178	39.11	37.14	43.01	12	7.96	1179	39.38	38.13	44.01
30	9.05	1180	43.74	39.96	45.61	539	9.05	1181	44.09	40.28	46.76
538	9.05	1182	44.41	41.37	47.90	537	9.05	1183	44.74	42.48	49.06
12	9.05	1184	45.08	43.61	50.24	539	10.13	1185	49.61	45.42	52.52
538	10.13	1186	49.95	46.65	53.78	537	10.13	1187	50.30	47.90	55.05
25	7.96	1188	33.82	35.89	36.61	557	7.96	1189	35.30	35.90	38.02
23	7.96	1190	36.67	35.89	39.46	25	9.05	1191	39.06	41.07	41.97
557	9.05	1192	40.43	41.07	43.41	23	9.05	1193	41.91	41.07	44.99
557	10.13	1194	45.65	46.27	48.82	60	7.96	1195	33.66	35.27	35.37
13	7.96	1196	34.09	35.14	35.29	47	7.96	1197	34.51	35.02	35.53
60	9.05	1198	38.51	40.45	40.49	13	9.05	1199	38.96	40.22	40.39
47	9.05	1200	39.45	40.08	40.66	63	7.96	1201	33.85	37.67	37.70
19	7.96	1202	34.29	37.23	37.28	61	7.96	1203	34.73	36.76	36.84
63	9.05	1204	38.72	43.14	43.16	19	9.05	1205	39.20	42.60	42.65
61	9.05	1206	39.71	42.05	42.14	20	7.96	1207	34.62	35.57	35.95
20	9.05	1208	39.58	40.70	41.14	659	10.24	1209	50.64	51.83	58.16
660	10.65	1210	52.05	54.90	61.81	803	10.65	1211	50.89	54.91	60.44
468	10.65	1212	49.78	54.92	59.14	662	11.06	1213	51.80	57.99	63.84
651	11.06	1214	50.54	58.00	62.47	467	11.06	1215	49.34	58.00	61.16
664	11.46	1216	51.42	61.06	65.84	653	11.46	1217	50.06	61.07	64.45
466	11.46	1218	48.72	61.07	63.12	639	11.87	1219	49.84	64.09	66.55
807	12.01	1220	49.84	65.03	67.21	808	11.55	1221	51.15	67.96	70.64
809	11.55	1222	49.84	67.96	69.87	810	11.55	1223	48.54	67.96	69.44
811	11.10	1224	51.15	70.90	73.21	812	11.10	1225	49.84	70.90	72.74
813	11.10	1226	48.54	70.90	72.32	814	10.64	1227	51.15	73.85	76.07
815	10.64	1228	49.84	73.85	75.62	816	10.64	1229	48.54	73.85	75.21
625	10.18	1230	49.84	76.81	78.50	728	10.24	1231	44.54	51.84	51.92
451	10.65	1232	44.52	54.99	55.04	806	10.65	1233	44.84	54.97	55.06
779	10.65	1234	45.23	54.96	55.07	452	11.06	1235	44.18	58.06	58.12
772	11.06	1236	44.60	58.06	58.15	781	11.06	1237	45.23	58.06	64.57
453	11.46	1238	43.69	61.10	61.16	770	11.46	1239	44.27	61.11	61.20
783	11.46	1240	45.12	61.10	67.31	768	11.87	1241	44.15	64.09	64.18
817	12.01	1242	44.15	65.03	65.11	818	11.55	1243	43.61	67.96	68.02
819	11.55	1244	44.15	67.96	68.04	820	11.55	1245	45.09	67.96	73.60
821	11.10	1246	43.61	70.90	70.96	822	11.10	1247	44.15	70.90	70.98
823	11.10	1248	45.09	70.90	76.32	824	10.64	1249	43.61	73.85	73.91
825	10.64	1250	44.15	73.85	73.93	826	10.64	1251	45.09	73.85	79.07
796	10.18	1252	44.15	76.81	76.88	30	11.38	1253	55.79	51.35	57.97
539	11.38	1254	56.04	51.51	59.32	538	11.38	1255	56.32	52.88	60.68
537	11.38	1256	56.61	54.41	62.04	12	11.38	1257	56.88	55.95	63.39
30	12.63	1258	62.40	57.77	64.78	539	12.63	1259	62.58	57.74	66.22
538	12.63	1260	62.76	59.21	67.67	537	12.63	1261	62.96	61.12	69.16
12	12.63	1262	63.15	63.07	70.67	539	13.88	1263	69.10	63.81	73.02
538	13.88	1264	69.21	65.47	74.61	537	13.88	1265	69.33	67.72	76.21
25	11.38	1266	50.58	52.39	53.48	557	11.38	1267	52.29	52.38	55.33
23	11.38	1268	53.78	52.39	57.21	25	12.63	1269	59.36	58.56	60.43
557	12.63	1270	59.87	58.56	62.23	23	12.63	1271	60.86	58.56	64.10
557	13.88	1272	67.96	64.77	69.34						

2.11 Reazioni vincolari

Di seguito si riportano le reazioni vincolari delle combinazioni ritenute più significative:

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
1	-0.816	5.043				-0.115
2	-0.767	2.572				0.006
3	-0.355	0.566				0.006
4	-0.633	-1.886				0.069
5	-0.291	-4.858				0.051
6	-0.245	-0.950				0.006

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
7	-3.061	1.312				0.010
8	-0.498	-0.973				0.056
9	-1.192	2.232				-0.113
10	-0.242	-0.431				0.002
11	0.238	0.060				0.002
12	0.000	0.000				0.000
13	-0.667	0.964				0.006
14	0.000	0.000				0.000
15	-0.534	0.218				0.002
16	-0.344	-0.218				0.002
17	0.000	0.000				0.000
18	2.480	1.899				0.196
19	2.705	3.588				0.006
20	-0.356	0.069				0.002
21	0.000	0.000				0.000
22	2.690	2.024				-0.197
23	0.751	0.856				0.006
24	1.714	-1.586				-0.153
25	2.486	-3.121				0.006
26	-0.907	-0.908				-0.085
27	3.117	-1.276				0.134
28	-0.860	0.530				0.006
29	0.000	0.000				0.000
30	0.873	0.174				0.006
31	2.177	0.211				0.005
32	0.000	0.000				0.000
33	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
34	0.000	0.000				0.000
35	0.000	0.000				0.000
36	0.000	0.000				0.000
37	0.000	0.000				0.000
38	0.000	0.000				0.000
39	0.000	0.000				0.000
40	-0.049	0.056				0.005
41	5.593	1.890				0.098
42	-1.296	-0.664				-0.007
43	0.061	-0.353				0.049
44	0.119	9.527				-0.009
45	-0.128	3.667				-0.036
46	-3.135	-9.611				0.010
47	3.430	-4.294				-0.056
48	-3.379	-10.610				-0.004
49	-4.470	4.027				0.021
50	-0.069	0.190				0.002
51	0.150	-0.142				0.002
285	0.000	0.000				0.000
286	0.000	0.000				0.000
287	0.000	0.000				0.000
288	0.000	0.000				0.000
289	0.000	0.000				0.000
290	0.000	0.000				0.000
291	0.000	0.000				0.000
292	0.000	0.000				0.000
293	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
294	0.000	0.000				0.000
295	0.000	0.000				0.000
296	0.000	0.000				0.000
297	0.000	0.000				0.000
298	0.000	0.000				0.000
299	0.000	0.000				0.000
300	0.000	0.000				0.000
301	0.000	0.000				0.000
302	0.000	0.000				0.000
303	0.000	0.000				0.000
304	0.000	0.000				0.000
305	0.000	0.000				0.000
306	0.000	0.000				0.000
307	0.000	0.000				0.000
308	0.000	0.000				0.000
309	0.000	0.000				0.000
310	0.000	0.000				0.000
311	0.000	0.000				0.000
312	0.000	0.000				0.000
313	0.000	0.000				0.000
314	0.000	0.000				0.000
315	0.000	0.000				0.000
316	0.000	0.000				0.000
317	0.000	0.000				0.000
318	0.000	0.000				0.000
319	0.000	0.000				0.000
320	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
321	0.000	0.000				0.000
322	0.000	0.000				0.000
323	0.000	0.000				0.000
324	0.000	0.000				0.000
325	0.000	0.000				0.000
326	0.000	0.000				0.000
327	0.000	0.000				0.000
328	0.000	0.000				0.000
329	0.000	0.000				0.000
330	0.000	0.000				0.000
331	0.000	0.000				0.000
332	0.000	0.000				0.000
333	0.000	0.000				0.000
334	0.000	0.000				0.000
335	0.000	0.000				0.000
336	0.000	0.000				0.000
337	0.000	0.000				0.000
338	0.000	0.000				0.000
339	0.000	0.000				0.000
340	0.000	0.000				0.000
341	0.000	0.000				0.000
342	0.000	0.000				0.000
343	0.000	0.000				0.000
344	0.000	0.000				0.000
345	0.000	0.000				0.000
346	0.000	0.000				0.000
347	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
348	0.000	0.000				0.000
349	0.000	0.000				0.000
350	0.000	0.000				0.000
351	0.000	0.000				0.000
352	0.000	0.000				0.000
353	0.000	0.000				0.000
354	0.000	0.000				0.000
355	0.000	0.000				0.000
356	0.000	0.000				0.000
357	0.000	0.000				0.000
358	0.000	0.000				0.000
359	0.000	0.000				0.000
360	0.000	0.000				0.000
361	0.000	0.000				0.000
362	0.000	0.000				0.000
363	0.000	0.000				0.000
364	0.000	0.000				0.000
365	0.000	0.000				0.000
366	0.000	0.000				0.000
367	0.000	0.000				0.000
368	0.000	0.000				0.000
369	0.000	0.000				0.000
370	0.000	0.000				0.000
371	0.000	0.000				0.000
372	0.000	0.000				0.000
373	0.000	0.000				0.000
374	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
375	0.000	0.000				0.000
376	0.000	0.000				0.000
377	0.000	0.000				0.000
378	0.000	0.000				0.000
379	0.000	0.000				0.000
380	0.000	0.000				0.000
381	0.000	0.000				0.000
382	0.000	0.000				0.000
383	0.000	0.000				0.000
384	0.000	0.000				0.000
385	0.000	0.000				0.000
386	0.000	0.000				0.000
387	0.000	0.000				0.000
388	0.000	0.000				0.000
389	0.000	0.000				0.000
390	0.000	0.000				0.000
391	0.000	0.000				0.000
392	0.000	0.000				0.000
393	0.000	0.000				0.000
394	0.000	0.000				0.000
395	0.000	0.000				0.000
396	0.000	0.000				0.000
397	0.000	0.000				0.000
398	0.000	0.000				0.000
399	0.000	0.000				0.000
400	0.000	0.000				0.000
401	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
402	0.000	0.000				0.000
403	0.000	0.000				0.000
404	0.000	0.000				0.000
405	0.000	0.000				0.000
406	0.000	0.000				0.000
407	0.000	0.000				0.000
408	0.000	0.000				0.000
409	0.000	0.000				0.000
410	0.000	0.000				0.000
411	0.000	0.000				0.000
412	0.000	0.000				0.000
413	0.000	0.000				0.000
414	0.000	0.000				0.000
415	0.000	0.000				0.000
416	0.000	0.000				0.000
417	0.000	0.000				0.000
418	0.000	0.000				0.000
419	0.000	0.000				0.000
420	0.000	0.000				0.000
421	0.000	0.000				0.000
422	0.000	0.000				0.000
423	0.000	0.000				0.000
424	0.000	0.000				0.000
425	0.000	0.000				0.000
426	0.000	0.000				0.000
427	0.000	0.000				0.000
428	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
429	0.000	0.000				0.000
430	0.000	0.000				0.000
431	0.000	0.000				0.000
432	0.000	0.000				0.000
433	0.000	0.000				0.000
434	0.000	0.000				0.000
435	0.000	0.000				0.000
436	0.000	0.000				0.000
437	0.000	0.000				0.000
438	0.000	0.000				0.000
439	0.000	0.000				0.000
440	0.000	0.000				0.000
441	0.000	0.000				0.000
442	0.000	0.000				0.000
443	0.000	0.000				0.000
444	0.000	0.000				0.000
445	0.000	0.000				0.000
446	0.000	0.000				0.000
447	0.000	0.000				0.000
448	0.000	0.000				0.000
449	0.000	0.000				0.000
450	0.000	0.000				0.000
451	0.000	0.000				0.000
452	0.000	0.000				0.000
453	0.000	0.000				0.000
454	0.000	0.000				0.000
455	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
456	0.000	0.000				0.000
457	0.000	0.000				0.000
458	0.000	0.000				0.000
459	0.000	0.000				0.000
460	0.000	0.000				0.000
461	0.000	0.000				0.000
462	0.000	0.000				0.000
463	0.000	0.000				0.000
464	0.000	0.000				0.000
465	0.000	0.000				0.000
466	0.000	0.000				0.000
467	0.000	0.000				0.000
468	0.000	0.000				0.000
469	0.000	0.000				0.000
470	0.000	0.000				0.000
471	0.000	0.000				0.000
472	0.000	0.000				0.000
473	0.000	0.000				0.000
474	0.000	0.000				0.000
475	0.000	0.000				0.000
476	0.000	0.000				0.000
477	0.000	0.000				0.000
478	0.000	0.000				0.000
479	0.000	0.000				0.000
480	0.000	0.000				0.000
481	0.000	0.000				0.000
482	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
483	0.000	0.000				0.000
484	0.000	0.000				0.000
485	0.000	0.000				0.000
486	0.000	0.000				0.000
487	0.000	0.000				0.000
488	0.000	0.000				0.000
489	0.000	0.000				0.000
490	0.000	0.000				0.000
491	0.000	0.000				0.000
492	0.000	0.000				0.000
493	0.000	0.000				0.000
494	0.000	0.000				0.000
495	0.000	0.000				0.000
496	0.000	0.000				0.000
497	0.000	0.000				0.000
498	0.000	0.000				0.000
499	0.000	0.000				0.000
500	0.000	0.000				0.000
501	0.000	0.000				0.000
502	0.000	0.000				0.000
503	0.000	0.000				0.000
504	0.000	0.000				0.000
505	0.000	0.000				0.000
506	0.000	0.000				0.000
507	0.000	0.000				0.000
508	0.000	0.000				0.000
509	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
510	0.000	0.000				0.000
511	0.000	0.000				0.000
512	0.000	0.000				0.000
513	0.000	0.000				0.000
514	0.000	0.000				0.000
515	0.000	0.000				0.000
516	0.000	0.000				0.000
517	0.000	0.000				0.000
518	0.000	0.000				0.000
519	0.000	0.000				0.000
520	0.000	0.000				0.000
521	0.000	0.000				0.000
522	0.000	0.000				0.000
523	0.000	0.000				0.000
524	0.000	0.000				0.000
525	0.000	0.000				0.000
526	0.000	0.000				0.000
527	0.000	0.000				0.000
528	0.000	0.000				0.000
529	0.000	0.000				0.000
530	0.000	0.000				0.000
531	0.000	0.000				0.000
532	0.000	0.000				0.000
533	0.000	0.000				0.000
534	0.000	0.000				0.000
535	0.000	0.000				0.000
536	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
537	0.000	0.000				0.000
538	0.000	0.000				0.000
539	0.000	0.000				0.000
540	0.000	0.000				0.000
541	0.000	0.000				0.000
542	0.000	0.000				0.000
543	0.000	0.000				0.000
544	0.000	0.000				0.000
545	0.000	0.000				0.000
546	0.000	0.000				0.000
547	0.000	0.000				0.000
548	0.000	0.000				0.000
549	0.000	0.000				0.000
550	0.000	0.000				0.000
551	0.000	0.000				0.000
552	0.000	0.000				0.000
553	0.000	0.000				0.000
554	0.000	0.000				0.000
555	0.000	0.000				0.000
556	0.000	0.000				0.000
557	0.000	0.000				0.000
558	0.000	0.000				0.000
559	0.000	0.000				0.000
560	0.000	0.000				0.000
561	0.000	0.000				0.000
562	0.000	0.000				0.000
563	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
564	0.000	0.000				0.000
565	0.000	0.000				0.000
566	0.000	0.000				0.000
567	0.000	0.000				0.000
568	0.000	0.000				0.000
569	0.000	0.000				0.000
570	0.000	0.000				0.000
571	0.000	0.000				0.000
572	0.000	0.000				0.000
573	0.000	0.000				0.000
574	0.000	0.000				0.000
575	0.000	0.000				0.000
576	0.000	0.000				0.000
577	0.000	0.000				0.000
578	0.000	0.000				0.000
579	0.000	0.000				0.000
580	0.000	0.000				0.000
581	0.000	0.000				0.000
582	0.000	0.000				0.000
583	0.000	0.000				0.000
584	0.000	0.000				0.000
585	0.000	0.000				0.000
586	0.000	0.000				0.000
587	0.000	0.000				0.000
588	0.000	0.000				0.000
589	0.000	0.000				0.000
590	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
591	0.000	0.000				0.000
592	0.000	0.000				0.000
593	0.000	0.000				0.000
594	0.000	0.000				0.000
595	0.000	0.000				0.000
596	0.000	0.000				0.000
597	0.000	0.000				0.000
598	0.000	0.000				0.000
599	0.000	0.000				0.000
600	0.000	0.000				0.000
601	0.000	0.000				0.000
602	0.000	0.000				0.000
603	0.000	0.000				0.000
604	0.000	0.000				0.000
605	0.000	0.000				0.000
606	0.000	0.000				0.000
607	0.000	0.000				0.000
608	0.000	0.000				0.000
609	0.000	0.000				0.000
610	0.000	0.000				0.000
611	0.000	0.000				0.000
612	0.000	0.000				0.000
613	0.000	0.000				0.000
614	0.000	0.000				0.000
615	0.000	0.000				0.000
616	0.000	0.000				0.000
617	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
618	0.000	0.000				0.000
619	0.000	0.000				0.000
620	0.000	0.000				0.000
621	0.000	0.000				0.000
622	0.000	0.000				0.000
623	0.000	0.000				0.000
624	0.000	0.000				0.000
625	0.000	0.000				0.000
626	0.000	0.000				0.000
627	0.000	0.000				0.000
628	0.000	0.000				0.000
629	0.000	0.000				0.000
630	0.000	0.000				0.000
631	0.000	0.000				0.000
632	0.000	0.000				0.000
633	0.000	0.000				0.000
634	0.000	0.000				0.000
635	0.000	0.000				0.000
636	0.000	0.000				0.000
637	0.000	0.000				0.000
638	0.000	0.000				0.000
639	0.000	0.000				0.000
640	0.000	0.000				0.000
641	0.000	0.000				0.000
642	0.000	0.000				0.000
643	0.000	0.000				0.000
644	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
645	0.000	0.000				0.000
646	0.000	0.000				0.000
647	0.000	0.000				0.000
648	0.000	0.000				0.000
649	0.000	0.000				0.000
650	0.000	0.000				0.000
651	0.000	0.000				0.000
652	0.000	0.000				0.000
653	0.000	0.000				0.000
654	0.000	0.000				0.000
655	0.000	0.000				0.000
656	0.000	0.000				0.000
657	0.000	0.000				0.000
658	0.000	0.000				0.000
659	0.000	0.000				0.000
660	0.000	0.000				0.000
661	0.000	0.000				0.000
662	0.000	0.000				0.000
663	0.000	0.000				0.000
664	0.000	0.000				0.000
665	0.000	0.000				0.000
666	0.000	0.000				0.000
667	0.000	0.000				0.000
668	0.000	0.000				0.000
669	0.000	0.000				0.000
670	0.000	0.000				0.000
671	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
672	0.000	0.000				0.000
673	0.000	0.000				0.000
674	0.000	0.000				0.000
675	0.000	0.000				0.000
676	0.000	0.000				0.000
677	0.000	0.000				0.000
678	0.000	0.000				0.000
679	0.000	0.000				0.000
680	0.000	0.000				0.000
681	0.000	0.000				0.000
682	0.000	0.000				0.000
683	0.000	0.000				0.000
684	0.000	0.000				0.000
685	0.000	0.000				0.000
686	0.000	0.000				0.000
687	0.000	0.000				0.000
688	0.000	0.000				0.000
689	0.000	0.000				0.000
690	0.000	0.000				0.000
691	0.000	0.000				0.000
692	0.000	0.000				0.000
693	0.000	0.000				0.000
694	0.000	0.000				0.000
695	0.000	0.000				0.000
696	0.000	0.000				0.000
697	0.000	0.000				0.000
698	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
699	0.000	0.000				0.000
700	0.000	0.000				0.000
701	0.000	0.000				0.000
702	0.000	0.000				0.000
703	0.000	0.000				0.000
704	0.000	0.000				0.000
705	0.000	0.000				0.000
706	0.000	0.000				0.000
707	0.000	0.000				0.000
708	0.000	0.000				0.000
709	0.000	0.000				0.000
710	0.000	0.000				0.000
711	0.000	0.000				0.000
712	0.000	0.000				0.000
713	0.000	0.000				0.000
714	0.000	0.000				0.000
715	0.000	0.000				0.000
716	0.000	0.000				0.000
717	0.000	0.000				0.000
718	0.000	0.000				0.000
719	0.000	0.000				0.000
720	0.000	0.000				0.000
721	0.000	0.000				0.000
722	0.000	0.000				0.000
723	0.000	0.000				0.000
724	0.000	0.000				0.000
725	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
726	0.000	0.000				0.000
727	0.000	0.000				0.000
728	0.000	0.000				0.000
729	0.000	0.000				0.000
730	0.000	0.000				0.000
731	0.000	0.000				0.000
732	0.000	0.000				0.000
733	0.000	0.000				0.000
734	0.000	0.000				0.000
735	0.000	0.000				0.000
736	0.000	0.000				0.000
737	0.000	0.000				0.000
738	0.000	0.000				0.000
739	0.000	0.000				0.000
740	0.000	0.000				0.000
741	0.000	0.000				0.000
742	0.000	0.000				0.000
743	0.000	0.000				0.000
744	0.000	0.000				0.000
745	0.000	0.000				0.000
746	0.000	0.000				0.000
747	-1.878	-0.445				0.014
748	-2.003	-0.276				0.013
749	-0.441	0.382				0.002
750	0.000	0.000				0.000
751	0.000	0.000				0.000
752	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
753	0.000	0.000				0.000
754	0.000	0.000				0.000
755	0.000	0.000				0.000
756	0.000	0.000				0.000
757	0.000	0.000				0.000
758	0.000	0.000				0.000
759	0.000	0.000				0.000
760	0.000	0.000				0.000
761	0.000	0.000				0.000
762	0.000	0.000				0.000
763	0.000	0.000				0.000
764	0.000	0.000				0.000
765	0.000	0.000				0.000
766	0.000	0.000				0.000
767	-0.043	-1.208				0.003
768	0.000	0.000				0.000
769	0.000	0.000				0.000
770	0.000	0.000				0.000
771	0.000	0.000				0.000
772	0.000	0.000				0.000
773	0.000	0.000				0.000
774	0.000	0.000				0.000
775	0.000	0.000				0.000
776	0.000	0.000				0.000
777	0.000	0.000				0.000
778	0.000	0.000				0.000
779	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
780	0.000	0.000				0.000
781	0.000	0.000				0.000
782	0.000	0.000				0.000
783	0.000	0.000				0.000
784	0.000	0.000				0.000
785	0.000	0.000				0.000
786	0.000	0.000				0.000
787	0.000	0.000				0.000
788	0.000	0.000				0.000
789	0.000	0.000				0.000
790	0.000	0.000				0.000
791	0.000	0.000				0.000
792	0.000	0.000				0.000
793	0.000	0.000				0.000
794	0.000	0.000				0.000
795	0.000	0.000				0.000
796	0.000	0.000				0.000
797	0.000	0.000				0.000
798	0.000	0.000				0.000
799	0.000	0.000				0.000
800	0.000	0.000				0.000
801	0.000	0.000				0.000
802	0.000	0.000				0.000
803	0.000	0.000				0.000
804	0.000	0.000				0.000
805	0.000	0.000				0.000
806	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
807	0.000	0.000				0.000
808	0.000	0.000				0.000
809	0.000	0.000				0.000
810	0.000	0.000				0.000
811	0.000	0.000				0.000
812	0.000	0.000				0.000
813	0.000	0.000				0.000
814	0.000	0.000				0.000
815	0.000	0.000				0.000
816	0.000	0.000				0.000
817	0.000	0.000				0.000
818	0.000	0.000				0.000
819	0.000	0.000				0.000
820	0.000	0.000				0.000
821	0.000	0.000				0.000
822	0.000	0.000				0.000
823	0.000	0.000				0.000
824	0.000	0.000				0.000
825	0.000	0.000				0.000
826	0.000	0.000				0.000
827	0.000	0.000				0.000
828	0.000	0.000				0.000
829	0.000	0.000				0.000
830	0.000	0.000				0.000
831	0.000	0.000				0.000
832	0.000	0.000				0.000
833	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
834	0.000	0.000				0.000
835	0.000	0.000				0.000
836	0.000	0.000				0.000
837	0.000	0.000				0.000
838	0.000	0.000				0.000
839	0.000	0.000				0.000
840	0.000	0.000				0.000
841	0.000	0.000				0.000
842	0.000	0.000				0.000
843	0.000	0.000				0.000
844	0.000	0.000				0.000
845	0.000	0.000				0.000
846	0.000	0.000				0.000
847	0.000	0.000				0.000
848	0.000	0.000				0.000
849	0.000	0.000				0.000
850	0.000	0.000				0.000
851	0.000	0.000				0.000
852	0.000	0.000				0.000
853	0.000	0.000				0.000
854	0.000	0.000				0.000
855	0.000	0.000				0.000
856	0.000	0.000				0.000
857	0.000	0.000				0.000
858	0.000	0.000				0.000
859	0.000	0.000				0.000
860	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
861	0.000	0.000				0.000
862	0.000	0.000				0.000
863	0.000	0.000				0.000
864	0.000	0.000				0.000
865	0.000	0.000				0.000
866	0.000	0.000				0.000
867	0.000	0.000				0.000
868	0.000	0.000				0.000
869	0.000	0.000				0.000
870	0.000	0.000				0.000
871	0.000	0.000				0.000
872	0.000	0.000				0.000
873	0.000	0.000				0.000
874	0.000	0.000				0.000
875	0.000	0.000				0.000
876	0.000	0.000				0.000
877	0.000	0.000				0.000
878	0.000	0.000				0.000
879	0.000	0.000				0.000
880	0.000	0.000				0.000
881	0.000	0.000				0.000
882	0.000	0.000				0.000
883	0.000	0.000				0.000
884	0.000	0.000				0.000
885	0.000	0.000				0.000
886	0.000	0.000				0.000
887	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
888	0.000	0.000				0.000
889	0.000	0.000				0.000
890	0.000	0.000				0.000
891	0.000	0.000				0.000
892	0.000	0.000				0.000
893	0.000	0.000				0.000
894	0.000	0.000				0.000
895	0.000	0.000				0.000
896	0.000	0.000				0.000
897	0.000	0.000				0.000
898	0.000	0.000				0.000
899	0.000	0.000				0.000
900	0.000	0.000				0.000
901	0.000	0.000				0.000
902	0.000	0.000				0.000
903	0.000	0.000				0.000
904	0.000	0.000				0.000
905	0.000	0.000				0.000
906	0.000	0.000				0.000
907	0.000	0.000				0.000
908	0.000	0.000				0.000
909	0.000	0.000				0.000
910	0.000	0.000				0.000
911	0.871	0.876				0.015
912	0.000	0.000				0.000
913	0.000	0.000				0.000
914	0.000	0.000				0.000

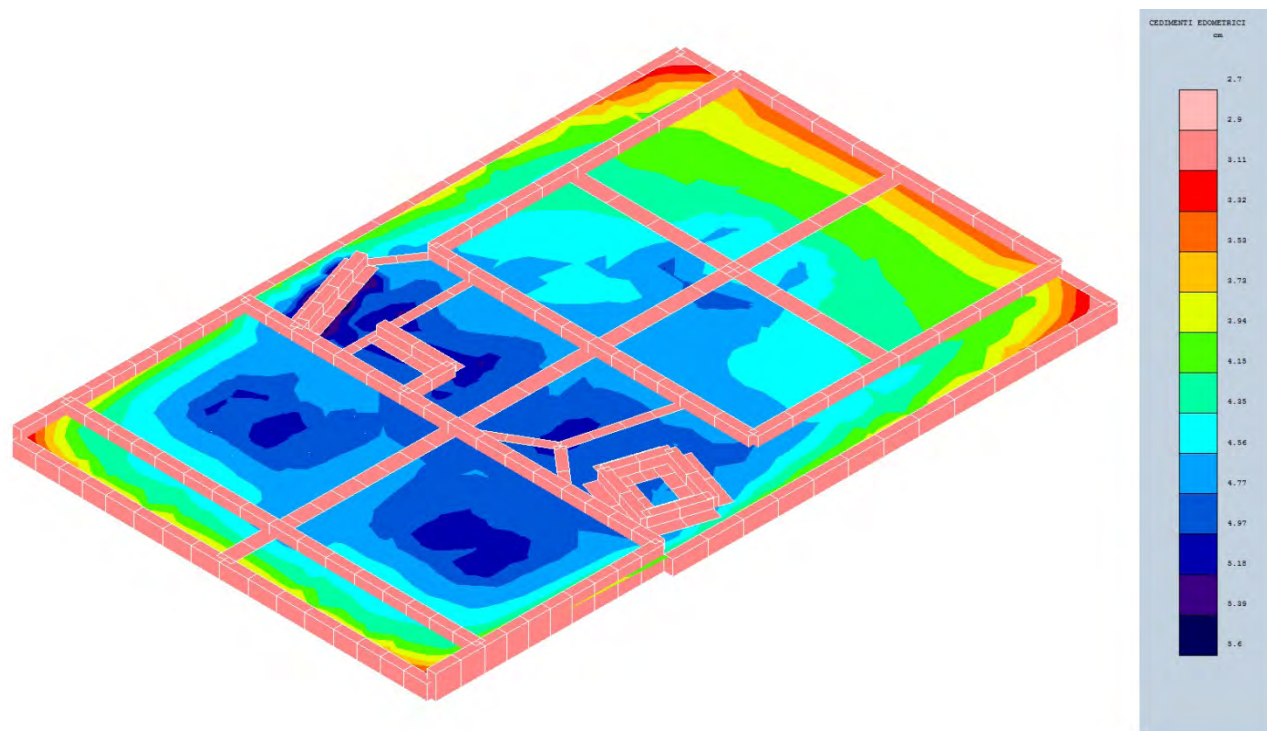
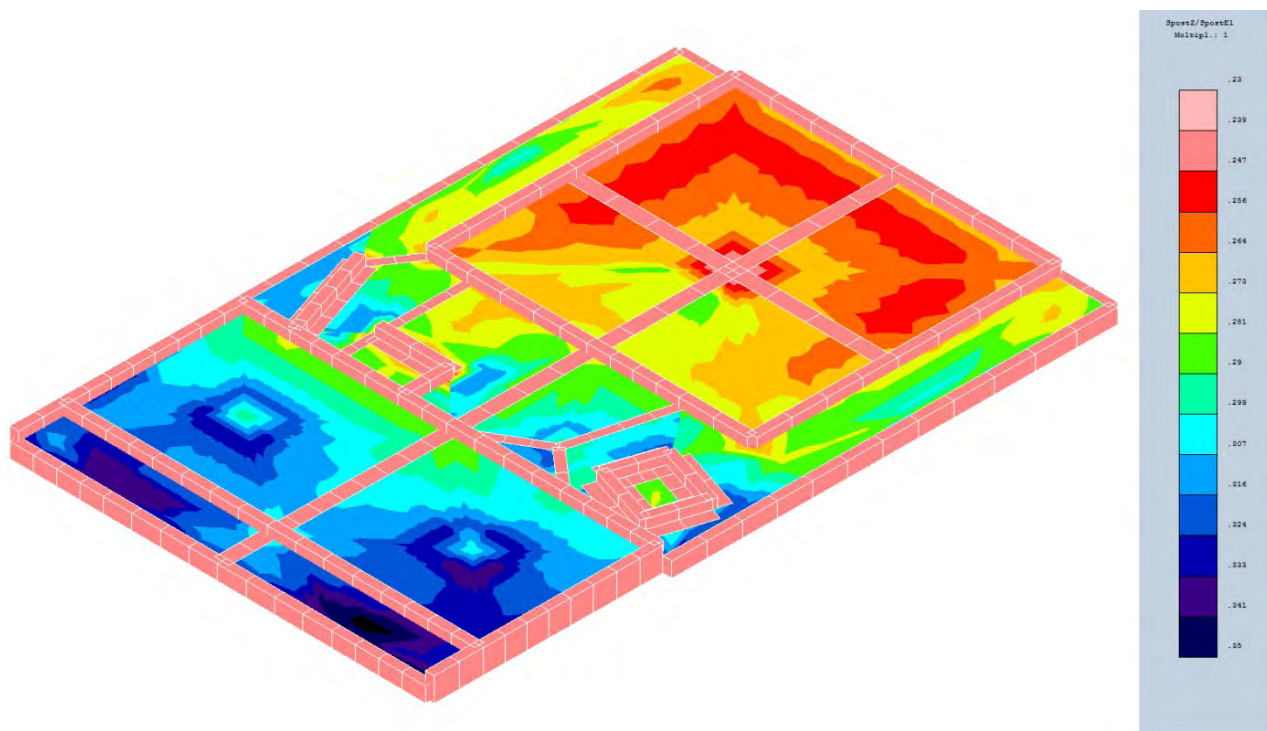
REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
915	0.000	0.000				0.000
916	0.000	0.000				0.000
917	0.000	0.000				0.000
918	0.000	0.000				0.000
919	0.000	0.000				0.000
920	-0.810	0.179				-0.011
921	0.000	0.000				0.000
922	0.000	0.000				0.000
923	0.000	0.000				0.000
924	0.000	0.000				0.000
925	0.000	0.000				0.000
926	0.000	0.000				0.000
927	0.000	0.000				0.000
928	0.000	0.000				0.000
929	0.000	0.000				0.000
930	0.000	0.000				0.000
931	0.000	0.000				0.000
932	0.000	0.000				0.000
933	0.000	0.000				0.000
934	0.000	0.000				0.000
935	0.000	0.000				0.000
936	0.000	0.000				0.000
937	0.000	0.000				0.000
938	0.000	0.000				0.000
939	0.000	0.000				0.000
940	0.000	0.000				0.000
941	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
942	0.000	0.000				0.000
943	0.000	0.000				0.000
944	0.000	0.000				0.000
945	0.000	0.000				0.000
946	0.000	0.000				0.000
947	0.000	0.000				0.000
948	0.000	0.000				0.000
949	0.000	0.000				0.000
950	0.000	0.000				0.000
951	0.014	0.700				-0.001
952	0.000	0.000				0.000
953	0.000	0.000				0.000
954	0.000	0.000				0.000
955	0.000	0.000				0.000
956	0.000	0.000				0.000
957	0.000	0.000				0.000
958	0.000	0.000				0.000
959	0.000	0.000				0.000
960	0.000	0.000				0.000
961	0.000	0.000				0.000
962	0.000	0.000				0.000
963	0.000	0.000				0.000
964	0.000	0.000				0.000
965	0.000	0.000				0.000
966	0.000	0.000				0.000
967	0.000	0.000				0.000
968	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
969	0.000	0.000				0.000
970	0.000	0.000				0.000
971	0.000	0.000				0.000
972	0.000	0.000				0.000
973	0.000	0.000				0.000
974	0.000	0.000				0.000
975	0.000	0.000				0.000
976	0.000	0.000				0.000
977	0.000	0.000				0.000
978	0.000	0.000				0.000
979	0.000	0.000				0.000
980	0.000	0.000				0.000
981	0.000	0.000				0.000
982	0.000	0.000				0.000
983	0.000	0.000				0.000
984	0.000	0.000				0.000
985	0.000	0.000				0.000
986	0.000	0.000				0.000
987	0.000	0.000				0.000
988	0.000	0.000				0.000
989	0.000	0.000				0.000
990	0.000	0.000				0.000
991	0.000	0.000				0.000
992	0.000	0.000				0.000
993	0.000	0.000				0.000
994	0.000	0.000				0.000
995	0.000	0.000				0.000

REAZIONI VINCOLARI COMBINAZIONE 1- S.L.V.						
Nodo	Fx	Fy	Fz	Mx	My	Mz
3D	(t)	(t)	(t)	(t*m)	(t*m)	(t*m)
996	0.000	0.000				0.000
997	0.000	0.000				0.000
998	0.000	0.000				0.000
999	0.000	0.000				0.000
1000	0.000	0.000				0.000
1001	0.000	0.000				0.000
1002	0.000	0.000				0.000
1003	0.000	0.000				0.000
1004	0.000	0.000				0.000
1005	0.000	0.000				0.000
1006	0.000	0.000				0.000
1007	0.000	0.000				0.000
1008	0.000	0.000				0.000
1009	0.000	0.000				0.000
1010	0.000	0.000				0.000
1011	0.000	0.000				0.000
1012	0.000	0.000				0.000
1013	0.000	0.000				0.000
1014	0.000	0.000				0.000
1015	0.000	0.000				0.000
1016	0.000	0.000				0.000

Di seguito si riportano le verifiche geotecniche dell'edificio di nuova costruzione:



PORTANZA GLOBALE PIASTRE - MOLTIPLICATORI DI COLLASSO - SLU											
Comb	DRENATE				NON DRENATE				RISULTATI		
	Risult	Resist	Moltip.	%Pl.	Risult	Resist	Moltip.	%Pl.	Moltip.	STATUS	
N.ro	(t)	(t)	Collasso	Moll	(t)	(t)	Collasso	Moll	Minimo	(m)	
A1 / 1	2716	2716	1.000	0					1.000	OK	
A1 / 2	2585	2585	1.000	0						OK	

PORTANZA GLOBALE PIASTRE - MOLTIPLICATORI DI COLLASSO - SLU										
	DRENATE				NON DRENATE				RISULTATI	
Comb	Risult	Resist	Moltip.	%Pl.	Risult	Resist	Moltip.	%Pl.	Moltip.	STATUS
N.ro	(t)	(t)	Collasso	Moll	(t)	(t)	Collasso	Moll	Minimo	(m)
A1 / 3	2714	2714	1.000	0						OK
A1 / 4	2583	2583	1.000	0						OK
A1 / 5	2560	2560	1.000	0						OK
A1 / 6	2716	2716	1.000	0						OK
A1 / 7	2585	2585	1.000	0						OK
A1 / 8	2563	2563	1.000	0						OK
A1 / 9	2718	2718	1.000	0						OK
A1 / 10	2587	2587	1.000	0						OK
A1 / 11	2566	2566	1.000	0						OK
A1 / 12	2716	2716	1.000	0						OK
A1 / 13	2585	2585	1.000	0						OK
A1 / 14	2563	2563	1.000	0						OK
A1 / 15	1824	1824	1.000	0						OK
A1 / 16	1824	1824	1.000	0						OK
A1 / 17	1824	1824	1.000	0						OK
A1 / 18	1824	1824	1.000	0						OK
A1 / 19	1813	1813	1.000	0						OK
A1 / 20	1813	1813	1.000	0						OK
A1 / 21	1813	1813	1.000	0						OK
A1 / 22	1813	1813	1.000	0						OK
A1 / 23	1792	1792	1.000	0						OK
A1 / 24	1792	1792	1.000	0						OK
A1 / 25	1792	1792	1.000	0						OK
A1 / 26	1792	1792	1.000	0						OK
A1 / 27	1781	1781	1.000	0						OK
A1 / 28	1781	1781	1.000	0						OK

PORTANZA GLOBALE PIASTRE - MOLTIPLICATORI DI COLLASSO - SLU										
	DRENATE				NON DRENATE				RISULTATI	
Comb	Risult	Resist	Moltip.	%Pl.	Risult	Resist	Moltip.	%Pl.	Moltip.	STATUS
N.ro	(t)	(t)	Collasso	Moll	(t)	(t)	Collasso	Moll	Minimo	(m)
A1 / 29	1781	1781	1.000	0						OK
A1 / 30	1781	1781	1.000	0						OK
A1 / 31	1826	1826	1.000	0						OK
A1 / 32	1826	1826	1.000	0						OK
A1 / 33	1826	1826	1.000	0						OK
A1 / 34	1826	1826	1.000	0						OK
A1 / 35	1789	1789	1.000	0						OK
A1 / 36	1789	1789	1.000	0						OK
A1 / 37	1789	1789	1.000	0						OK
A1 / 38	1789	1789	1.000	0						OK
A1 / 39	1816	1816	1.000	0						OK
A1 / 40	1816	1816	1.000	0						OK
A1 / 41	1816	1816	1.000	0						OK
A1 / 42	1816	1816	1.000	0						OK
A1 / 43	1779	1779	1.000	0						OK
A1 / 44	1779	1779	1.000	0						OK
A1 / 45	1779	1779	1.000	0						OK
A1 / 46	1779	1779	1.000	0						OK

PORTANZA GLOBALE PIASTRE - ABBASSAMENTI COMBINAZ.: A1/1														
	DRENATE		NON DRENATE			DRENATE		NON DRENATE			DRENATE		NON DRENATE	
Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEl	SpostZ (cm)	SpostZ/ SpostEl	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEl	SpostZ (cm)	SpostZ/ SpostEl	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEl	SpostZ (cm)	SpostZ/ SpostEl
1	-0.888	ELAST.			2	-0.892	ELAST.			3	-0.891	ELAST.		
4	-0.913	ELAST.			5	-0.921	ELAST.			6	-0.884	ELAST.		
7	-0.862	ELAST.			8	-0.848	ELAST.			9	-0.821	ELAST.		
10	-0.841	ELAST.			11	-0.829	ELAST.			12	-0.825	ELAST.		
13	-0.819	ELAST.			14	-0.817	ELAST.			15	-0.890	ELAST.		
16	-0.925	ELAST.			17	-0.894	ELAST.			18	-0.804	ELAST.		
19	-0.776	ELAST.			20	-0.895	ELAST.			21	-0.921	ELAST.		
22	-0.780	ELAST.			23	-0.778	ELAST.			24	-0.827	ELAST.		
25	-0.796	ELAST.			26	-0.822	ELAST.			27	-0.800	ELAST.		
28	-0.803	ELAST.			29	-0.803	ELAST.			30	-0.806	ELAST.		
31	-0.767	ELAST.			32	-0.780	ELAST.			33	-0.783	ELAST.		
34	-0.803	ELAST.			35	-0.847	ELAST.			36	-0.820	ELAST.		
37	-0.812	ELAST.			38	-0.822	ELAST.			39	-0.794	ELAST.		
40	-0.862	ELAST.			41	-0.817	ELAST.			42	-0.813	ELAST.		
43	-0.831	ELAST.			44	-0.822	ELAST.			45	-0.816	ELAST.		
46	-0.837	ELAST.			47	-0.846	ELAST.			48	-0.836	ELAST.		

PORTANZA GLOBALE PIASTRE - ABBASSAMENTI COMBINAZ.: A1/1

DRENATE			NON DRENATE		DRENATE			NON DRENATE		DRENATE			NON DRENATE	
Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI
49	-0.842	ELAST.			50	-0.858	ELAST.			51	-0.881	ELAST.		
285	-0.889	ELAST.			286	-0.889	ELAST.			287	-0.890	ELAST.		
288	-0.891	ELAST.			289	-0.891	ELAST.			290	-0.891	ELAST.		
291	-0.892	ELAST.			292	-0.893	ELAST.			293	-0.893	ELAST.		
294	-0.893	ELAST.			295	-0.891	ELAST.			296	-0.889	ELAST.		
297	-0.888	ELAST.			298	-0.892	ELAST.			299	-0.892	ELAST.		
300	-0.891	ELAST.			301	-0.890	ELAST.			302	-0.893	ELAST.		
303	-0.893	ELAST.			304	-0.892	ELAST.			305	-0.891	ELAST.		
306	-0.894	ELAST.			307	-0.894	ELAST.			308	-0.893	ELAST.		
309	-0.893	ELAST.			310	-0.893	ELAST.			311	-0.895	ELAST.		
312	-0.894	ELAST.			313	-0.893	ELAST.			314	-0.894	ELAST.		
315	-0.894	ELAST.			316	-0.894	ELAST.			317	-0.895	ELAST.		
318	-0.894	ELAST.			319	-0.894	ELAST.			320	-0.893	ELAST.		
321	-0.893	ELAST.			322	-0.893	ELAST.			323	-0.893	ELAST.		
324	-0.893	ELAST.			325	-0.893	ELAST.			326	-0.894	ELAST.		
327	-0.894	ELAST.			328	-0.893	ELAST.			329	-0.894	ELAST.		
330	-0.894	ELAST.			331	-0.894	ELAST.			332	-0.894	ELAST.		
333	-0.897	ELAST.			334	-0.900	ELAST.			335	-0.903	ELAST.		
336	-0.905	ELAST.			337	-0.907	ELAST.			338	-0.913	ELAST.		
339	-0.914	ELAST.			340	-0.915	ELAST.			341	-0.906	ELAST.		
342	-0.898	ELAST.			343	-0.893	ELAST.			344	-0.915	ELAST.		
345	-0.910	ELAST.			346	-0.904	ELAST.			347	-0.899	ELAST.		
348	-0.917	ELAST.			349	-0.914	ELAST.			350	-0.911	ELAST.		
351	-0.907	ELAST.			352	-0.919	ELAST.			353	-0.918	ELAST.		
354	-0.916	ELAST.			355	-0.915	ELAST.			356	-0.922	ELAST.		
357	-0.921	ELAST.			358	-0.918	ELAST.			359	-0.923	ELAST.		
360	-0.923	ELAST.			361	-0.921	ELAST.			362	-0.919	ELAST.		
363	-0.924	ELAST.			364	-0.923	ELAST.			365	-0.921	ELAST.		
366	-0.920	ELAST.			367	-0.923	ELAST.			368	-0.922	ELAST.		
369	-0.921	ELAST.			370	-0.920	ELAST.			371	-0.924	ELAST.		
372	-0.926	ELAST.			373	-0.925	ELAST.			374	-0.926	ELAST.		
375	-0.925	ELAST.			376	-0.924	ELAST.			377	-0.924	ELAST.		
378	-0.873	ELAST.			379	-0.881	ELAST.			380	-0.886	ELAST.		
381	-0.855	ELAST.			382	-0.864	ELAST.			383	-0.873	ELAST.		
384	-0.879	ELAST.			385	-0.885	ELAST.			386	-0.853	ELAST.		
387	-0.860	ELAST.			388	-0.866	ELAST.			389	-0.872	ELAST.		
390	-0.877	ELAST.			391	-0.855	ELAST.			392	-0.858	ELAST.		
393	-0.861	ELAST.			394	-0.864	ELAST.			395	-0.868	ELAST.		
396	-0.885	ELAST.			397	-0.886	ELAST.			398	-0.887	ELAST.		
399	-0.888	ELAST.			400	-0.878	ELAST.			401	-0.878	ELAST.		
402	-0.879	ELAST.			403	-0.881	ELAST.			404	-0.868	ELAST.		
405	-0.869	ELAST.			406	-0.869	ELAST.			407	-0.870	ELAST.		
408	-0.890	ELAST.			409	-0.891	ELAST.			410	-0.891	ELAST.		
411	-0.891	ELAST.			412	-0.882	ELAST.			413	-0.883	ELAST.		
414	-0.885	ELAST.			415	-0.886	ELAST.			416	-0.871	ELAST.		
417	-0.872	ELAST.			418	-0.873	ELAST.			419	-0.874	ELAST.		
420	-0.827	ELAST.			421	-0.838	ELAST.			422	-0.850	ELAST.		
423	-0.821	ELAST.			424	-0.828	ELAST.			425	-0.836	ELAST.		
426	-0.845	ELAST.			427	-0.828	ELAST.			428	-0.834	ELAST.		
429	-0.840	ELAST.			430	-0.847	ELAST.			431	-0.841	ELAST.		
432	-0.844	ELAST.			433	-0.848	ELAST.			434	-0.851	ELAST.		
435	-0.888	ELAST.			436	-0.881	ELAST.			437	-0.872	ELAST.		
438	-0.888	ELAST.			439	-0.882	ELAST.			440	-0.875	ELAST.		
441	-0.868	ELAST.			442	-0.882	ELAST.			443	-0.877	ELAST.		
444	-0.872	ELAST.			445	-0.866	ELAST.			446	-0.871	ELAST.		
447	-0.868	ELAST.			448	-0.865	ELAST.			449	-0.862	ELAST.		
450	-0.851	ELAST.			451	-0.841	ELAST.			452	-0.833	ELAST.		
453	-0.859	ELAST.			454	-0.850	ELAST.			455	-0.841	ELAST.		
456	-0.834	ELAST.			457	-0.860	ELAST.			458	-0.854	ELAST.		
459	-0.847	ELAST.			460	-0.841	ELAST.			461	-0.859	ELAST.		
462	-0.856	ELAST.			463	-0.852	ELAST.			464	-0.849	ELAST.		
465	-0.828	ELAST.			466	-0.832	ELAST.			467	-0.830	ELAST.		
468	-0.839	ELAST.			469	-0.837	ELAST.			470	-0.848	ELAST.		
471	-0.847	ELAST.			472	-0.822	ELAST.			473	-0.827	ELAST.		
474	-0.824	ELAST.			475	-0.835	ELAST.			476	-0.832	ELAST.		
477	-0.846	ELAST.			478	-0.844	ELAST.			479	-0.818	ELAST.		
480	-0.822	ELAST.			481	-0.821	ELAST.			482	-0.831	ELAST.		
483	-0.830	ELAST.			484	-0.844	ELAST.			485	-0.843	ELAST.		
486	-0.819	ELAST.			487	-0.820	ELAST.			488	-0.829	ELAST.		
489	-0.842	ELAST.			490	-0.857	ELAST.			491	-0.865	ELAST.		
492	-0.873	ELAST.			493	-0.880	ELAST.			494	-0.887	ELAST.		
495	-0.862	ELAST.			496	-0.867	ELAST.			497	-0.873	ELAST.		
498	-0.878	ELAST.			499	-0.883	ELAST.			500	-0.871	ELAST.		
501	-0.874	ELAST.			502	-0.876	ELAST.			503	-0.879	ELAST.		
504	-0.882	ELAST.			505	-0.890	ELAST.			506	-0.895	ELAST.		
507	-0.901	ELAST.			508	-0.907	ELAST.			509	-0.887	ELAST.		

PORTANZA GLOBALE PIASTRE - ABBASSAMENTI COMBINAZ.: A1/1

DRENATE					NON DRENATE					DRENATE					NON DRENATE				
Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI
510	-0.891	ELAST.			511	-0.896	ELAST.			512	-0.900	ELAST.			513	-0.884	ELAST.		
513	-0.884	ELAST.			514	-0.887	ELAST.			515	-0.889	ELAST.			516	-0.892	ELAST.		
516	-0.892	ELAST.			517	-0.912	ELAST.			518	-0.916	ELAST.			519	-0.919	ELAST.		
519	-0.919	ELAST.			520	-0.920	ELAST.			521	-0.904	ELAST.			522	-0.908	ELAST.		
522	-0.908	ELAST.			523	-0.911	ELAST.			524	-0.913	ELAST.			525	-0.894	ELAST.		
525	-0.894	ELAST.			526	-0.896	ELAST.			527	-0.898	ELAST.			528	-0.900	ELAST.		
528	-0.900	ELAST.			529	-0.916	ELAST.			530	-0.908	ELAST.			531	-0.897	ELAST.		
531	-0.897	ELAST.			532	-0.915	ELAST.			533	-0.909	ELAST.			534	-0.901	ELAST.		
534	-0.901	ELAST.			535	-0.892	ELAST.			536	-0.909	ELAST.			537	-0.904	ELAST.		
537	-0.904	ELAST.			538	-0.899	ELAST.			539	-0.893	ELAST.			540	-0.897	ELAST.		
540	-0.897	ELAST.			541	-0.894	ELAST.			542	-0.891	ELAST.			543	-0.888	ELAST.		
543	-0.888	ELAST.			544	-0.832	ELAST.			545	-0.837	ELAST.			546	-0.842	ELAST.		
546	-0.842	ELAST.			547	-0.849	ELAST.			548	-0.842	ELAST.			549	-0.847	ELAST.		
549	-0.847	ELAST.			550	-0.851	ELAST.			551	-0.857	ELAST.			552	-0.860	ELAST.		
552	-0.860	ELAST.			553	-0.862	ELAST.			554	-0.865	ELAST.			555	-0.868	ELAST.		
555	-0.868	ELAST.			556	-0.871	ELAST.			557	-0.859	ELAST.			558	-0.851	ELAST.		
558	-0.851	ELAST.			559	-0.882	ELAST.			560	-0.872	ELAST.			561	-0.862	ELAST.		
561	-0.862	ELAST.			562	-0.854	ELAST.			563	-0.886	ELAST.			564	-0.879	ELAST.		
564	-0.879	ELAST.			565	-0.872	ELAST.			566	-0.865	ELAST.			567	-0.885	ELAST.		
567	-0.885	ELAST.			568	-0.882	ELAST.			569	-0.878	ELAST.			570	-0.875	ELAST.		
570	-0.875	ELAST.			571	-0.837	ELAST.			572	-0.833	ELAST.			573	-0.830	ELAST.		
573	-0.830	ELAST.			574	-0.847	ELAST.			575	-0.843	ELAST.			576	-0.839	ELAST.		
576	-0.839	ELAST.			577	-0.835	ELAST.			578	-0.857	ELAST.			579	-0.853	ELAST.		
579	-0.853	ELAST.			580	-0.849	ELAST.			581	-0.846	ELAST.			582	-0.869	ELAST.		
582	-0.869	ELAST.			583	-0.867	ELAST.			584	-0.864	ELAST.			585	-0.862	ELAST.		
585	-0.862	ELAST.			586	-0.848	ELAST.			587	-0.846	ELAST.			588	-0.844	ELAST.		
588	-0.844	ELAST.			589	-0.853	ELAST.			590	-0.852	ELAST.			591	-0.849	ELAST.		
591	-0.849	ELAST.			592	-0.864	ELAST.			593	-0.862	ELAST.			594	-0.859	ELAST.		
594	-0.859	ELAST.			595	-0.874	ELAST.			596	-0.872	ELAST.			597	-0.870	ELAST.		
597	-0.870	ELAST.			598	-0.778	ELAST.			599	-0.775	ELAST.			600	-0.774	ELAST.		
600	-0.774	ELAST.			601	-0.777	ELAST.			602	-0.774	ELAST.			603	-0.772	ELAST.		
603	-0.772	ELAST.			604	-0.771	ELAST.			605	-0.771	ELAST.			606	-0.768	ELAST.		
606	-0.768	ELAST.			607	-0.767	ELAST.			608	-0.766	ELAST.			609	-0.767	ELAST.		
609	-0.767	ELAST.			610	-0.767	ELAST.			611	-0.764	ELAST.			612	-0.765	ELAST.		
612	-0.765	ELAST.			613	-0.766	ELAST.			614	-0.767	ELAST.			615	-0.767	ELAST.		
615	-0.767	ELAST.			616	-0.777	ELAST.			617	-0.779	ELAST.			618	-0.780	ELAST.		
618	-0.780	ELAST.			619	-0.774	ELAST.			620	-0.773	ELAST.			621	-0.773	ELAST.		
621	-0.773	ELAST.			622	-0.775	ELAST.			623	-0.768	ELAST.			624	-0.767	ELAST.		
624	-0.767	ELAST.			625	-0.767	ELAST.			626	-0.767	ELAST.			627	-0.765	ELAST.		
627	-0.765	ELAST.			628	-0.765	ELAST.			629	-0.765	ELAST.			630	-0.765	ELAST.		
630	-0.765	ELAST.			631	-0.795	ELAST.			632	-0.788	ELAST.			633	-0.781	ELAST.		
633	-0.781	ELAST.			634	-0.795	ELAST.			635	-0.789	ELAST.			636	-0.783	ELAST.		
636	-0.783	ELAST.			637	-0.778	ELAST.			638	-0.780	ELAST.			639	-0.776	ELAST.		
639	-0.776	ELAST.			640	-0.772	ELAST.			641	-0.770	ELAST.			642	-0.767	ELAST.		
642	-0.767	ELAST.			643	-0.766	ELAST.			644	-0.766	ELAST.			645	-0.766	ELAST.		
645	-0.766	ELAST.			646	-0.794	ELAST.			647	-0.796	ELAST.			648	-0.799	ELAST.		
648	-0.799	ELAST.			649	-0.790	ELAST.			650	-0.787	ELAST.			651	-0.788	ELAST.		
651	-0.788	ELAST.			652	-0.791	ELAST.			653	-0.779	ELAST.			654	-0.776	ELAST.		
654	-0.776	ELAST.			655	-0.776	ELAST.			656	-0.777	ELAST.			657	-0.770	ELAST.		
657	-0.770	ELAST.			658	-0.769	ELAST.			659	-0.768	ELAST.			660	-0.767	ELAST.		
660	-0.767	ELAST.			661	-0.820	ELAST.			662	-0.810	ELAST.			663	-0.801	ELAST.		
663	-0.801	ELAST.			664	-0.820	ELAST.			665	-0.811	ELAST.			666	-0.803	ELAST.		
666	-0.803	ELAST.			667	-0.796	ELAST.			668	-0.797	ELAST.			669	-0.791	ELAST.		
669	-0.791	ELAST.			670	-0.786	ELAST.			671	-0.782	ELAST.			672	-0.775	ELAST.		
672	-0.775	ELAST.			673	-0.773	ELAST.			674	-0.772	ELAST.			675	-0.771	ELAST.		
675	-0.771	ELAST.			676	-0.781	ELAST.			677	-0.789	ELAST.			678	-0.799	ELAST.		
678	-0.799	ELAST.			679	-0.773	ELAST.			680	-0.778	ELAST.			681	-0.786	ELAST.		
681	-0.786	ELAST.			682	-0.795	ELAST.			683	-0.769	ELAST.			684	-0.772	ELAST.		
684	-0.772	ELAST.			685	-0.777	ELAST.			686	-0.782	ELAST.			687	-0.768	ELAST.		
687	-0.768	ELAST.			688	-0.769	ELAST.			689	-0.771	ELAST.			690	-0.773	ELAST.		
690	-0.773	ELAST.			691	-0.826	ELAST.			692	-0.807	ELAST.			693	-0.813	ELAST.		
693	-0.813	ELAST.			694	-0.787	ELAST.			695	-0.792	ELAST.			696	-0.773	ELAST.		
696	-0.773	ELAST.			697	-0.773	ELAST.			698	-0.808	ELAST.			699	-0.813	ELAST.		
699	-0.813	ELAST.			700	-0.818	ELAST.			701	-0.797	ELAST.			702	-0.796	ELAST.		
702	-0.796	ELAST.			703	-0.798	ELAST.			704	-0.802	ELAST.			705	-0.785	ELAST.		
705	-0.785	ELAST.			706	-0.783	ELAST.			707	-0.783	ELAST.			708	-0.785	ELAST.		
708	-0.785	ELAST.			709	-0.773	ELAST.			710	-0.773	ELAST.			711	-0.772	ELAST.		
711	-0.772	ELAST.			712	-0.772	ELAST.			713	-0.805	ELAST.			714	-0.797	ELAST.		
714	-0.797	ELAST.			715	-0.798	ELAST.			716	-0.786	ELAST.			717	-0.786	ELAST.		
717	-0.786	ELAST.			718	-0.774	ELAST.			719	-0.774	ELAST.			720	-0.802	ELAST.		
720	-0.802	ELAST.			721	-0.795	ELAST.			722	-0.796	ELAST.			723	-0.784	ELAST.		
723	-0.784	ELAST.			724	-0.785	ELAST.			725	-0.774	ELAST.			726	-0.774	ELAST.		
726	-0.774	ELAST.			727	-0.803	ELAST.			728	-0.795	ELAST.			729	-0.783	ELAST.		
729	-0.783	ELAST.			730	-0.773	ELAST.			731	-0.805	ELAST.			732	-0.805	ELAST.		
732	-0.805	ELAST.			733	-0.806	ELAST.			734	-0.809	ELAST.			735	-0.809	ELAST.		
735	-0.809	ELAST.			736	-0.810	ELAST.			737	-0.813	ELAST.							

PORTANZA GLOBALE PIASTRE - ABBASSAMENTI COMBINAZ.: A1/1

DRENATE					NON DRENATE					DRENATE					NON DRENATE				
Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI
738	-0.814	ELAST.			739	-0.814	ELAST.			740	-0.809	ELAST.			741	-0.809	ELAST.		
741	-0.809	ELAST.			742	-0.813	ELAST.			743	-0.812	ELAST.			744	-0.813	ELAST.		
744	-0.813	ELAST.			745	-0.814	ELAST.			746	-0.815	ELAST.			747	-0.814	ELAST.		
747	-0.814	ELAST.			748	-0.815	ELAST.			749	-0.816	ELAST.			750	-0.814	ELAST.		
750	-0.814	ELAST.			751	-0.815	ELAST.			752	-0.816	ELAST.			753	-0.817	ELAST.		
753	-0.817	ELAST.			754	-0.814	ELAST.			755	-0.815	ELAST.			756	-0.816	ELAST.		
756	-0.816	ELAST.			757	-0.817	ELAST.			758	-0.815	ELAST.			759	-0.816	ELAST.		
759	-0.816	ELAST.			760	-0.816	ELAST.			761	-0.817	ELAST.			762	-0.817	ELAST.		
762	-0.817	ELAST.			763	-0.817	ELAST.			764	-0.818	ELAST.			765	-0.824	ELAST.		
765	-0.824	ELAST.			766	-0.820	ELAST.			767	-0.818	ELAST.			768	-0.805	ELAST.		
768	-0.805	ELAST.			769	-0.809	ELAST.			770	-0.815	ELAST.			771	-0.807	ELAST.		
771	-0.807	ELAST.			772	-0.812	ELAST.			773	-0.818	ELAST.			774	-0.810	ELAST.		
774	-0.810	ELAST.			775	-0.808	ELAST.			776	-0.814	ELAST.			777	-0.813	ELAST.		
777	-0.813	ELAST.			778	-0.819	ELAST.			779	-0.818	ELAST.			780	-0.824	ELAST.		
780	-0.824	ELAST.			781	-0.826	ELAST.			782	-0.825	ELAST.			783	-0.819	ELAST.		
783	-0.819	ELAST.			784	-0.812	ELAST.			785	-0.828	ELAST.			786	-0.825	ELAST.		
786	-0.825	ELAST.			787	-0.821	ELAST.			788	-0.816	ELAST.			789	-0.824	ELAST.		
789	-0.824	ELAST.			790	-0.821	ELAST.			791	-0.818	ELAST.			792	-0.823	ELAST.		
792	-0.823	ELAST.			793	-0.823	ELAST.			794	-0.822	ELAST.			795	-0.820	ELAST.		
795	-0.820	ELAST.			796	-0.811	ELAST.			797	-0.816	ELAST.			798	-0.821	ELAST.		
798	-0.821	ELAST.			799	-0.826	ELAST.			800	-0.829	ELAST.			801	-0.819	ELAST.		
801	-0.819	ELAST.			802	-0.822	ELAST.			803	-0.825	ELAST.			804	-0.828	ELAST.		
804	-0.828	ELAST.			805	-0.829	ELAST.			806	-0.827	ELAST.			807	-0.828	ELAST.		
807	-0.828	ELAST.			808	-0.829	ELAST.			809	-0.830	ELAST.			810	-0.831	ELAST.		
810	-0.831	ELAST.			811	-0.825	ELAST.			812	-0.823	ELAST.			813	-0.819	ELAST.		
813	-0.819	ELAST.			814	-0.814	ELAST.			815	-0.827	ELAST.			816	-0.826	ELAST.		
816	-0.826	ELAST.			817	-0.824	ELAST.			818	-0.822	ELAST.			819	-0.830	ELAST.		
819	-0.830	ELAST.			820	-0.829	ELAST.			821	-0.829	ELAST.			822	-0.828	ELAST.		
822	-0.828	ELAST.			823	-0.830	ELAST.			824	-0.832	ELAST.			825	-0.835	ELAST.		
825	-0.835	ELAST.			826	-0.838	ELAST.			827	-0.831	ELAST.			828	-0.832	ELAST.		
828	-0.832	ELAST.			829	-0.834	ELAST.			830	-0.836	ELAST.			831	-0.831	ELAST.		
831	-0.831	ELAST.			832	-0.832	ELAST.			833	-0.833	ELAST.			834	-0.833	ELAST.		
834	-0.833	ELAST.			835	-0.780	ELAST.			836	-0.778	ELAST.			837	-0.778	ELAST.		
837	-0.778	ELAST.			838	-0.778	ELAST.			839	-0.776	ELAST.			840	-0.776	ELAST.		
840	-0.776	ELAST.			841	-0.776	ELAST.			842	-0.776	ELAST.			843	-0.777	ELAST.		
843	-0.777	ELAST.			844	-0.778	ELAST.			845	-0.777	ELAST.			846	-0.775	ELAST.		
846	-0.775	ELAST.			847	-0.774	ELAST.			848	-0.776	ELAST.			849	-0.779	ELAST.		
849	-0.779	ELAST.			850	-0.777	ELAST.			851	-0.775	ELAST.			852	-0.775	ELAST.		
852	-0.775	ELAST.			853	-0.781	ELAST.			854	-0.780	ELAST.			855	-0.778	ELAST.		
855	-0.778	ELAST.			856	-0.777	ELAST.			857	-0.801	ELAST.			858	-0.794	ELAST.		
858	-0.794	ELAST.			859	-0.788	ELAST.			860	-0.781	ELAST.			861	-0.795	ELAST.		
861	-0.795	ELAST.			862	-0.790	ELAST.			863	-0.786	ELAST.			864	-0.782	ELAST.		
864	-0.782	ELAST.			865	-0.788	ELAST.			866	-0.786	ELAST.			867	-0.784	ELAST.		
867	-0.784	ELAST.			868	-0.783	ELAST.			869	-0.808	ELAST.			870	-0.807	ELAST.		
870	-0.807	ELAST.			871	-0.804	ELAST.			872	-0.799	ELAST.			873	-0.797	ELAST.		
873	-0.797	ELAST.			874	-0.791	ELAST.			875	-0.789	ELAST.			876	-0.813	ELAST.		
876	-0.813	ELAST.			877	-0.808	ELAST.			878	-0.815	ELAST.			879	-0.816	ELAST.		
879	-0.816	ELAST.			880	-0.820	ELAST.			881	-0.812	ELAST.			882	-0.814	ELAST.		
882	-0.814	ELAST.			883	-0.815	ELAST.			884	-0.817	ELAST.			885	-0.820	ELAST.		
885	-0.820	ELAST.			886	-0.814	ELAST.			887	-0.814	ELAST.			888	-0.815	ELAST.		
888	-0.815	ELAST.			889	-0.817	ELAST.			890	-0.813	ELAST.			891	-0.814	ELAST.		
891	-0.814	ELAST.			892	-0.814	ELAST.			893	-0.814	ELAST.			894	-0.815	ELAST.		
894	-0.815	ELAST.			895	-0.819	ELAST.			896	-0.817	ELAST.			897	-0.814	ELAST.		
897	-0.814	ELAST.			898	-0.819	ELAST.			899	-0.818	ELAST.			900	-0.817	ELAST.		
900	-0.817	ELAST.			901	-0.816	ELAST.			902	-0.815	ELAST.			903	-0.819	ELAST.		
903	-0.819	ELAST.			904	-0.818	ELAST.			905	-0.817	ELAST.			906	-0.820	ELAST.		
906	-0.820	ELAST.			907	-0.820	ELAST.			908	-0.820	ELAST.			909	-0.820	ELAST.		
909	-0.820	ELAST.			910	-0.834	ELAST.			911	-0.842	ELAST.			912	-0.844	ELAST.		
912	-0.844	ELAST.			913	-0.841	ELAST.			914	-0.839	ELAST.			915	-0.845	ELAST.		
915	-0.845	ELAST.			916	-0.846	ELAST.			917	-0.847	ELAST.			918	-0.847	ELAST.		
918	-0.847	ELAST.			919	-0.847	ELAST.			920	-0.844	ELAST.			921	-0.844	ELAST.		
921	-0.844	ELAST.			922	-0.846	ELAST.			923	-0.827	ELAST.			924	-0.834	ELAST.		
924	-0.834	ELAST.			925	-0.839	ELAST.			926	-0.831	ELAST.			927	-0.836	ELAST.		
927	-0.836	ELAST.			928	-0.839	ELAST.			929	-0.842	ELAST.			930	-0.843	ELAST.		
930	-0.843	ELAST.			931	-0.839	ELAST.			932	-0.841	ELAST.			933	-0.843	ELAST.		
933	-0.843	ELAST.			934	-0.844	ELAST.			935	-0.844	ELAST.			936	-0.844	ELAST.		
936	-0.844	ELAST.			937	-0.845	ELAST.			938	-0.845	ELAST.			939	-0.846	ELAST.		
939	-0.846	ELAST.			940	-0.824	ELAST.			941	-0.829	ELAST.			942	-0.830	ELAST.		
942	-0.830	ELAST.			943	-0.835	ELAST.			944	-0.835	ELAST.			945	-0.840	ELAST.		
945	-0.840	ELAST.			946	-0.840	ELAST.			947	-0.832	ELAST.			948	-0.835	ELAST.		
948	-0.835	ELAST.			949	-0.838	ELAST.			950	-0.838	ELAST.			951	-0.839	ELAST.		
951	-0.839	ELAST.			952	-0.841	ELAST.			953	-0.842	ELAST.			954	-0.831	ELAST.		
954	-0.831	ELAST.			955	-0.828	ELAST.			956	-0.825	ELAST.			957	-0.827	ELAST.		
957	-0.827	ELAST.			958	-0.829	ELAST.			959	-0.830	ELAST.			960	-0.831	ELAST.		
960	-0.831	ELAST.			961	-0.830	ELAST.			962	-0.832	ELAST.			963	-0.832	ELAST.		
963	-0.832	ELAST.			964	-0.833	ELAST.			965	-0.833	ELAST.							

PORTANZA GLOBALE PIASTRE - ABBASSAMENTI COMBINAZ.: A1/1

		DRENATE		NON DRENATE				DRENATE		NON DRENATE				DRENATE		NON DRENATE	
Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI	SpostZ (cm)	SpostZ/ SpostEI	Nodo3d N.ro	SpostZ (cm)	SpostZ/ SpostEI
966	-0.834	ELAST.			967	-0.835	ELAST.			968	-0.835	ELAST.					
969	-0.835	ELAST.			970	-0.834	ELAST.			971	-0.837	ELAST.					
972	-0.835	ELAST.			973	-0.837	ELAST.			974	-0.836	ELAST.					
975	-0.837	ELAST.			976	-0.841	ELAST.			977	-0.795	ELAST.					
978	-0.798	ELAST.			979	-0.803	ELAST.			980	-0.809	ELAST.					
981	-0.817	ELAST.			982	-0.795	ELAST.			983	-0.796	ELAST.					
984	-0.798	ELAST.			985	-0.801	ELAST.			986	-0.805	ELAST.					
987	-0.794	ELAST.			988	-0.794	ELAST.			989	-0.795	ELAST.					
990	-0.796	ELAST.			991	-0.797	ELAST.			992	-0.813	ELAST.					
993	-0.809	ELAST.			994	-0.803	ELAST.			995	-0.801	ELAST.					
996	-0.796	ELAST.			997	-0.796	ELAST.			998	-0.800	ELAST.					
999	-0.798	ELAST.			1000	-0.795	ELAST.			1001	-0.794	ELAST.					
1002	-0.798	ELAST.			1003	-0.796	ELAST.			1004	-0.794	ELAST.					
1005	-0.794	ELAST.			1006	-0.795	ELAST.			1007	-0.794	ELAST.					
1008	-0.794	ELAST.			1009	-0.794	ELAST.			1010	-0.802	ELAST.					
1011	-0.802	ELAST.			1012	-0.801	ELAST.			1013	-0.799	ELAST.					
1014	-0.799	ELAST.			1015	-0.795	ELAST.			1016	-0.795	ELAST.					

PORTANZA GLOBALE PIASTRE - MOLTIPLICATORI DI COLLASSO - SLD

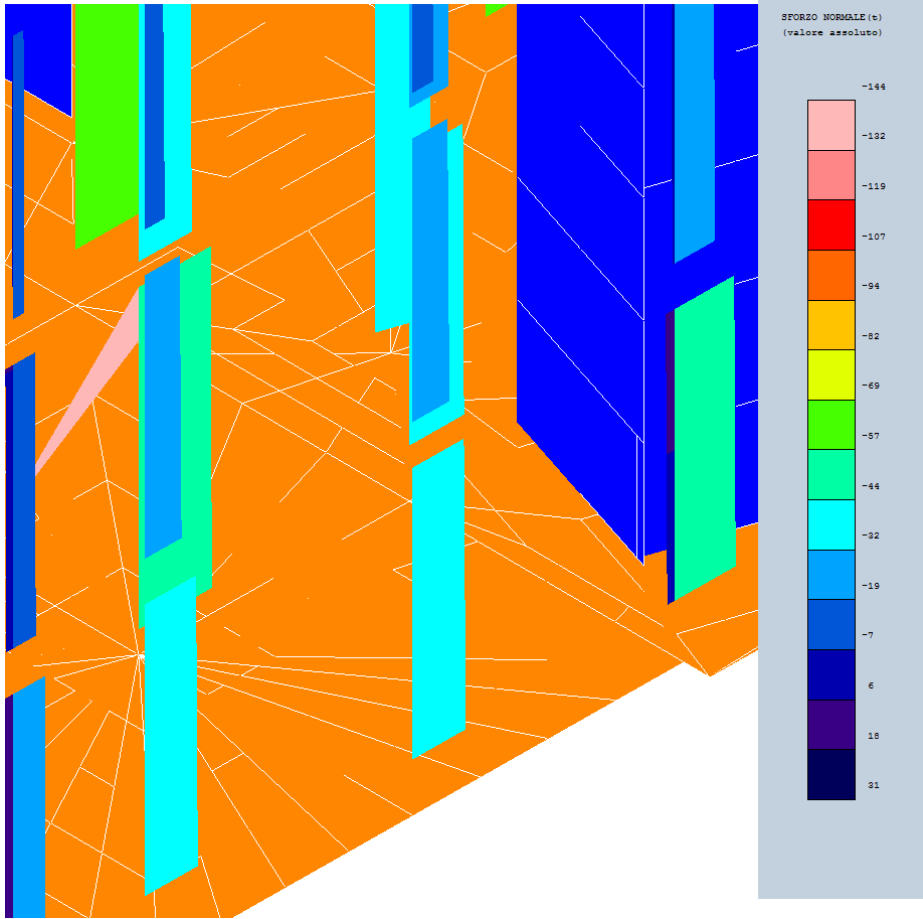
	DRENATE				NON DRENATE				RISULTATI	
Comb	Risult	Resist	Moltipl.	%Pl.	Risult	Resist	Moltipl.	%Pl.	Moltipl.	STATUS
N.ro	(t)	(t)	Collasso	Moll	(t)	(t)	Collasso	Moll	Minimo	(m)
A1 / 1	2716	2716	1.000	0					1.000	OK
A1 / 2	2585	2585	1.000	0						OK
A1 / 3	2714	2714	1.000	0						OK
A1 / 4	2583	2583	1.000	0						OK
A1 / 5	2560	2560	1.000	0						OK
A1 / 6	2716	2716	1.000	0						OK
A1 / 7	2585	2585	1.000	0						OK
A1 / 8	2563	2563	1.000	0						OK
A1 / 9	2718	2718	1.000	0						OK
A1 / 10	2587	2587	1.000	0						OK
A1 / 11	2566	2566	1.000	0						OK
A1 / 12	2716	2716	1.000	0						OK
A1 / 13	2585	2585	1.000	0						OK
A1 / 14	2563	2563	1.000	0						OK
A1 / 15	1810	1810	1.000	0						OK
A1 / 16	1810	1810	1.000	0						OK
A1 / 17	1810	1810	1.000	0						OK

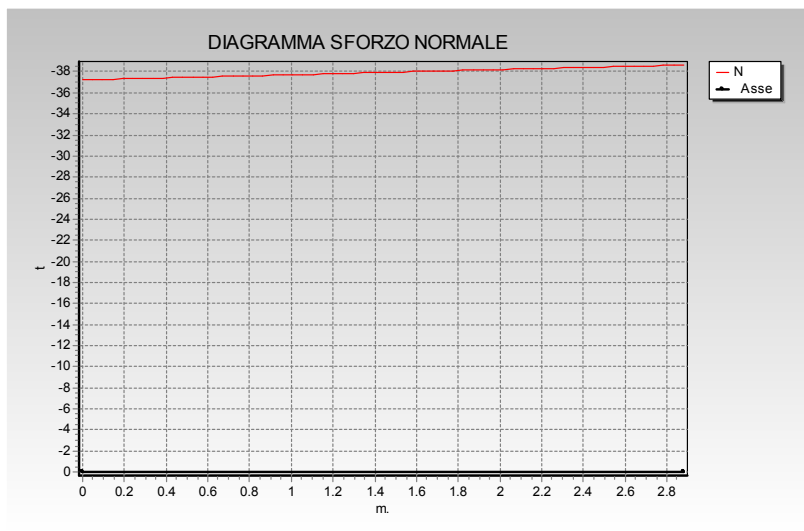
PORTANZA GLOBALE PIASTRE - MOLTIPLICATORI DI COLLASSO - SLD										
	DRENATE				NON DRENATE				RISULTATI	
Comb	Risult	Resist	Moltip.	%Pl.	Risult	Resist	Moltip.	%Pl.	Moltip.	STATUS
N.ro	(t)	(t)	Collasso	Moll	(t)	(t)	Collasso	Moll	Minimo	(m)
A1 / 18	1810	1810	1.000	0						OK
A1 / 19	1806	1806	1.000	0						OK
A1 / 20	1806	1806	1.000	0						OK
A1 / 21	1806	1806	1.000	0						OK
A1 / 22	1806	1806	1.000	0						OK
A1 / 23	1799	1799	1.000	0						OK
A1 / 24	1799	1799	1.000	0						OK
A1 / 25	1799	1799	1.000	0						OK
A1 / 26	1799	1799	1.000	0						OK
A1 / 27	1795	1795	1.000	0						OK
A1 / 28	1795	1795	1.000	0						OK
A1 / 29	1795	1795	1.000	0						OK
A1 / 30	1795	1795	1.000	0						OK
A1 / 31	1811	1811	1.000	0						OK
A1 / 32	1811	1811	1.000	0						OK
A1 / 33	1811	1811	1.000	0						OK
A1 / 34	1811	1811	1.000	0						OK
A1 / 35	1797	1797	1.000	0						OK
A1 / 36	1797	1797	1.000	0						OK
A1 / 37	1797	1797	1.000	0						OK
A1 / 38	1797	1797	1.000	0						OK
A1 / 39	1807	1807	1.000	0						OK
A1 / 40	1807	1807	1.000	0						OK
A1 / 41	1807	1807	1.000	0						OK
A1 / 42	1807	1807	1.000	0						OK
A1 / 43	1794	1794	1.000	0						OK

PORTANZA GLOBALE PIASTRE - MOLTIPLICATORI DI COLLASSO - SLD										
	DRENATE				NON DRENATE				RISULTATI	
Comb	Risult	Resist	Moltipl.	%Pl.	Risult	Resist	Moltipl.	%Pl.	Moltipl.	STATUS
N.ro	(t)	(t)	Collasso	Moll	(t)	(t)	Collasso	Moll	Minimo	(m)
A1 / 44	1794	1794	1.000	0						OK
A1 / 45	1794	1794	1.000	0						OK
A1 / 46	1794	1794	1.000	0						OK

2.12 Giudizio motivato di accettabilità dei risultati

Si allega dimostrazione dei controlli eseguiti:





È stato eseguito il controllo dei risultati verificando che nella combinazione SLU-Carichi statici i valori coincidessero con quelli ottenuti attraverso semplici calcoli.

L'incidenza dei solai è stata considerata nel seguente modo:

$$P_{\text{Solaio}} = (365+330) \times 1.3 + 200 \times 1.5 = 1210 \text{ kg/mq}$$

$$P_{\text{Copertura}} = (365+155) \times 1.3 + 120 \times 1.5 = 860 \text{ kg/mq}$$

L'area d'incidenza per il pilastro centrale in questione è pari a: $2.80 \times 1.45 = 4.1 \text{ mq}$

Quindi:

$$P_{\text{tot}} = 14900+3600 \text{ kg} = 18500 \text{ kg}$$

Allo stesso modo è stato valutato il carico derivante dal pilastro e dalle travi in c.a.:

$$P_{\text{Pilastro}} = 0.5 \times 0.3 \times 12 \times 2500 = 4500 \text{ kg} \times 1.3 = 5850 \text{ kg}$$

$$P_{\text{Travi}} = 4 \times (0.45 \times 0.3 \times 3.1 \times 2500) = 4400 \text{ kg} \times 1.3 = 5720 \text{ kg}$$

Inoltre è stata considerata l'incidenza dei tamponamenti presenti pari a: $2.8 \times 12 \times 0.3 \times 800 = 8064 \text{ kg}$

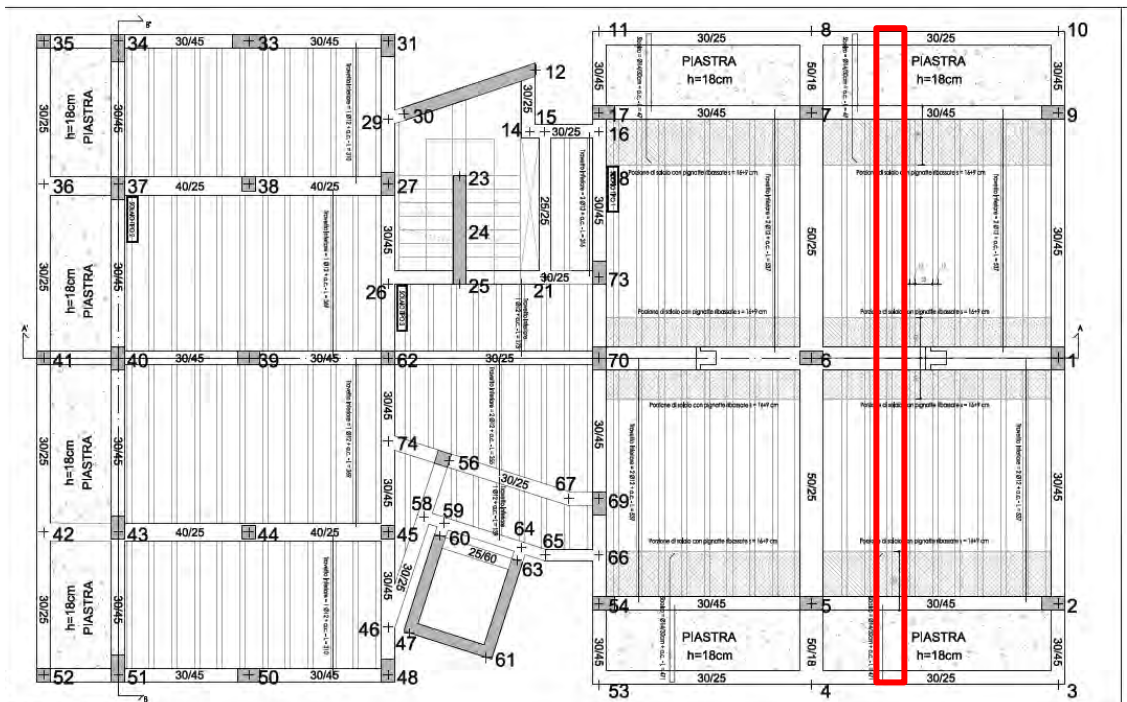
Quindi riassumendo lo sforzo normale ottenuto dal controllo eseguito corrisponde a:

$$N_{\text{tot}} = 38100 \text{ kg}$$

Il valore è paragonabile a quanto riportato nel programma di calcolo $N = 38600 \text{ kg}$ perchè compreso nella percentuale di errore ammissibile, viste le approssimazioni considerate.

2.13 Verifiche agli stati limite ultimi - Impalcati

Di seguito si riportano le verifiche degli impalcati in laterocemento evidenziati, realizzati con spessore $s = 20+5$, denominato SOLAIO TIPO 1:



Geometria

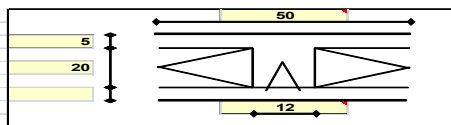
Misure in centimetri

Tipo di solaio
Con blocchi in LATERIZIO

Controllo limiti geometrici
Luce massima consigliata (snellezza 25) (m)
Larghezza dei blocchi calcolata (cm)
Larghezza max dei blocchi in laterizio (cm)
Larghezza min. nervature per blocchi in laterizio (cm)
Interasse max nervature per blocchi in laterizio (cm)

Luci e carichi

Luci (m)
Peso proprio solaio calcolato (daN/mq.)
Peso proprio solaio adottato (daN/mq.)
Sov. perm. compiutamente definiti (daN/mq.)
Sov. perm. non-compiutamente definiti (daN/mq.)
Sov. variabili (daN/mq.)
Carichi totali (daN/m)

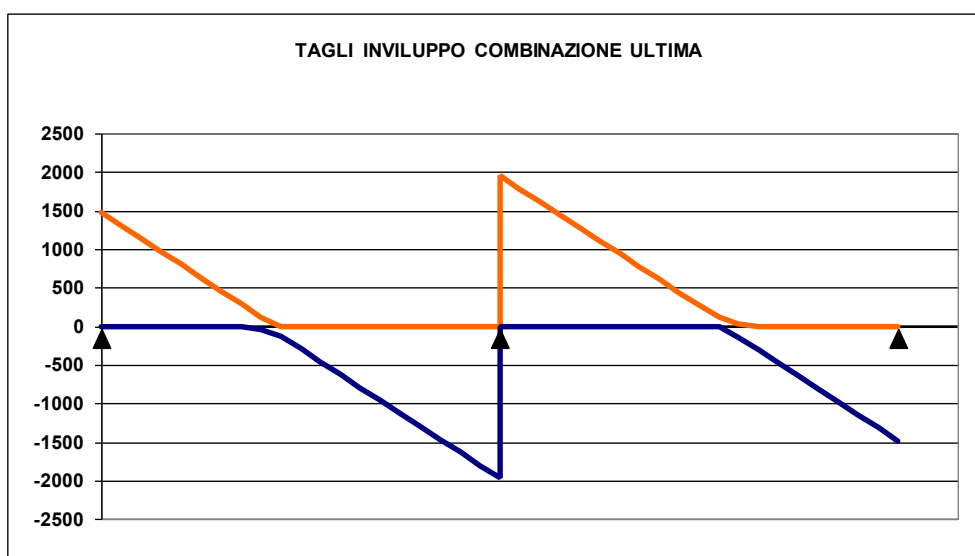
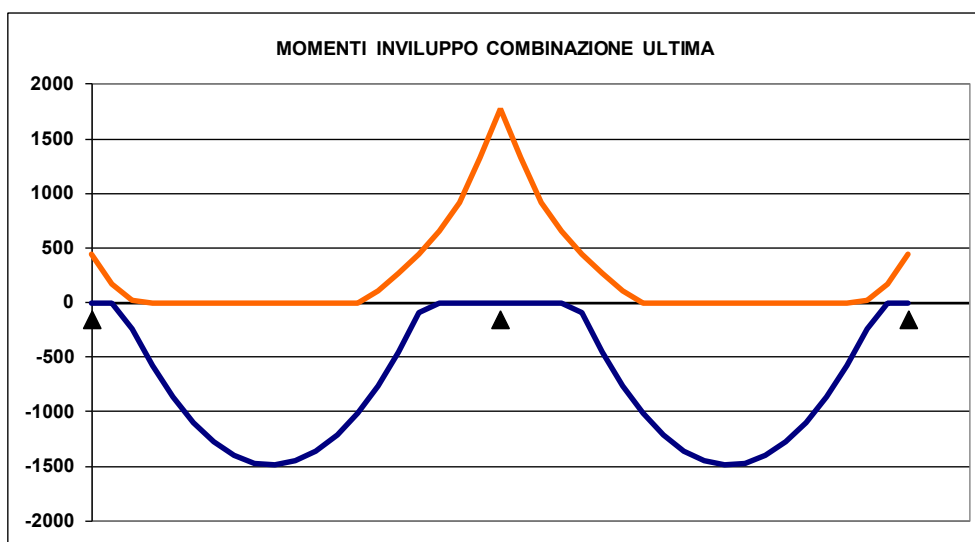
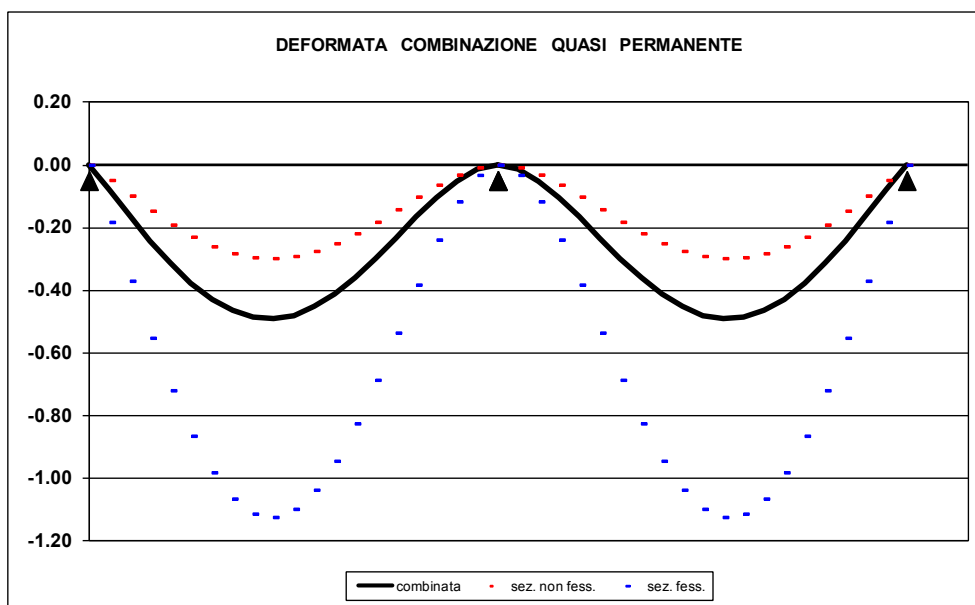


	L max	6.25		
	Largh.	38		
	Largh.	52		
	b min	8		
	i max	75		
	L	5.58	5.58	
	p.p. calc	325	325	
	p.p.	365	365	
	g1	330	330	
	g2	0	0	
	q	200	200	
	tot	895	895	
Momento d'incastro negativo alle due estremità	x sx	36		36
	Mg1 sx	-301		-301
	Mg2 sx	-0		-0
	Mq sx	-86		-86
	Mtot sx	-387		-387
Categoria del carico variabile				
Cat. A Residenziale	ψ0	0.7		
	ψ1	0.5		
	ψ2	0.3		
Ridistribuzione momenti comb. ultima				
Ridistribuzione desiderata	1-3	15%		
Rapporti fra le luci delle campate		1.00	1.00	1.00
Ridistribuzione applicata		15%	15%	15%
Coefficienti parziali sulle azioni				
	γg1	1.0	1.3	
	γg2	0.0	1.5	
	γq	0.0	1.5	
Interasse nervature (m)	i	0.50		
1: COMBINAZIONE ULTIMA				
Momenti Max - per nervatura		-442	-1770	-442
Momenti Max + per nervatura		1478	1492	1478
Tagli dx Max per nervatura		1478	1959	1478
Tagli sx Max per nervatura		2956	3917	2956
Reazioni Max per nervatura		2956	7835	2956
Reazioni Max per fascia di un metro				
2: COMBINAZIONE RARA				
Momenti Max - per nervatura		-387	-1548	-387
Momenti Max + per nervatura		1071	899	1071
Tagli dx Max per nervatura		1071	1457	1071
Tagli sx Max per nervatura		2143	2913	2143
Reazioni Max per nervatura		2143	5826	2143
Reazioni Max per fascia di un metro				
3: COMBINAZIONE QUASI PERMANENTE				
Momenti Max - per nervatura		-326	-1306	-326
Momenti Max + per nervatura		887	717	887
Tagli dx Max per nervatura		887	1229	887
Tagli sx Max per nervatura		1774	2458	1774
Reazioni Max per nervatura		1774	4915	1774
Reazioni Max per fascia di un metro				
4: COMBINAZIONE FREQUENTE				
Momenti Max - per nervatura		-344	-1375	-344
Momenti Max + per nervatura		940	769	940
Tagli dx Max per nervatura		940	1294	940
Tagli sx Max per nervatura		1879	2588	1879
Reazioni Max per nervatura		1879	5175	1879
Reazioni Max per fascia di un metro				

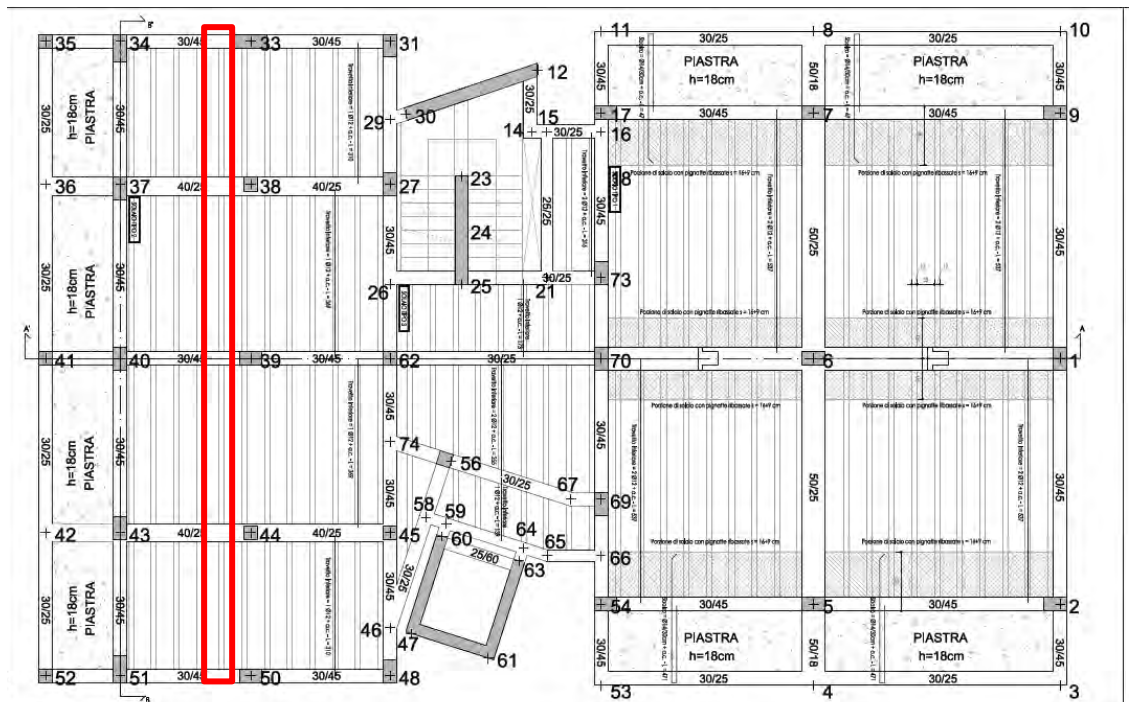
Interasse nervature (m)		i	0.50		
1: COMBINAZIONE ULTIMA					
Momenti Max - per nervatura		-442	-1770	-442	
Momenti Max + per nervatura		1492	1492		
Tagli dx Max per nervatura		1478	1959	1478	
Tagli sx Max per nervatura					
Reazioni Max per nervatura		1478	3917	1478	
Reazioni Max per fascia di un metro		2956	7835	2956	
2: COMBINAZIONE RARA					
Momenti Max - per nervatura		-387	-1548	-387	
Momenti Max + per nervatura		899	899		
Tagli dx Max per nervatura		1071	1457	1071	
Tagli sx Max per nervatura					
Reazioni Max per nervatura		1071	2913	1071	
Reazioni Max per fascia di un metro		2143	5826	2143	
3: COMBINAZIONE QUASI PERMANENTE					
Momenti Max - per nervatura		-326	-1306	-326	
Momenti Max + per nervatura		717	717		
Tagli dx Max per nervatura		887	1229	887	
Tagli sx Max per nervatura					
Reazioni Max per nervatura		887	2458	887	
Reazioni Max per fascia di un metro		1774	4915	1774	
4: COMBINAZIONE FREQUENTE					
Momenti Max - per nervatura		-344	-1375	-344	
Momenti Max + per nervatura		769	769		
Tagli dx Max per nervatura		940	1294	940	
Tagli sx Max per nervatura					
Reazioni Max per nervatura		940	2588	940	
Reazioni Max per fascia di un metro		1879	5175	1879	
← 309					
Materiali					
Calcestruzzo	Classe	C25/30			
Acciaio	Tipo	B450C			
Dati geometrici					
Diametro delle barre longitudinali superiori (mm)	φ	12	12	12	
Diametro delle barre longitudinali inferiori (mm)	φ	12	12	12	
Armatura costante superiore					
g) rete ø6/20"x20" collaborante ovunque	φ6	2.5	2.5		2.00
	CampSup	0.71	0.71		
	φ6	2.5	2.5	2.5	2.00
	AppSup	0.71	0.71	0.71	
Armatura costante inferiore					
a) nessuna	-	-	-		2.00
	CampInf	-	-		
	-	-	-	-	2.00
	AppInf	-	-	-	
Ricoprimento di calcestruzzo sulle barre (cm)	c	2.0	2.0	2.0	
Copriferro di calcolo (cm)	h'	2.6	2.6	2.6	
Spessore solaio (cm)	H	25	25	25	
Larghezza nervature (cm)	b	12	12	12	
Altezza utile (cm)	d	22.4	22.4	22.4	
← 352					
Armatura appoggi					
g) rete ø6/20"x20" collaborante ovunque	2.5ø6	2.5ø6	2.5ø6		
	0ø12	2ø12	0ø12		
	1ø12	1ø12	1ø12		
a) nessuna	0ø0	0ø0	0ø0		
Momento sollecitante (daN*m)	Med	442	1770	442	
Momento resistente (daN*m)	Mrd	588	2323	588	
indice di verifica	f	1.33	1.31	1.33	
Asse neutro (cm)	xc	3	6	3	
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ _c	-129.2	-141.1	-129.2	
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	
Deformazione calcestruzzo	ε _c	-0.142%	-0.328%	-0.142%	
Campo di rottura	n	2	2	2	
Ridistribuzione massima consentita	1-δ	30%	25%	30%	
Controllo redistribuzione	1-δ	si	si	si	
Armatura campate					
g) rete ø6/20"x20" collaborante ovunque	2.5ø6	2.5ø6			
	0ø12	0ø12			
	2ø12	2ø12			
a) nessuna	0ø0	0ø0			
Momento sollecitante (daN*m)	Med	1492	1492		
Momento resistente (daN*m)	Mrd	1902	1902		
indice di verifica	f	1.27	1.27		
Asse neutro (cm)	xc	3	3		
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913		
Sforzo calcestruzzo (daN/cm ²)	σ _c	-122.2	-122.2		
Deformazione acciaio	ε _s	1.000%	1.000%		
Deformazione calcestruzzo	ε _c	-0.127%	-0.127%		
Campo di rottura	n	2	2		

Armatura minima sugli appoggi alle due estremità					
a) nessuna					
Armatura minima in campata					
a) nessuna					
415					
controllo armatura minima scelta:		nessuna	sì		sì
Armatura appoggi		ϕ	n.	n.	c
		$\phi 6$	2.5	2.5	2.0
	sup.	$\phi 12$	-	2	2.0
CLIK PER PROCEDERE					
	inf.	$\phi 12$	1	1	2.0
		-	-	-	2.0
1: VERIFICHE IN COMBINAZIONE ULTIMA					
Momento sollecitante (daN*m)	Med	442	1770	442	
Momento resistente (daN*m)	Mrd	595	2340	595	
indice di verifica	f	1.35	1.32	1.35	
Asse neutro (cm)	xc	3	6	3	
Sforzo acciaio (daN/cm ²)	σ_s	3913	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ_c	-125.3	-141.1	-125.3	
Deformazione acciaio	ϵ_s	1.000%	1.000%	1.000%	
Deformazione calcestruzzo	ϵ_c	-0.133%	-0.324%	-0.133%	
Campo di rottura	n.	2	2	2	
Ridistribuzione massima consentita	1- δ	30%	25%	30%	
Controllo ridistribuzione	1- δ	sì	sì	sì	
2: VERIFICHE IN COMBINAZIONE RARA					
	σ_s limite	3600	3600	3600	
	σ_s	2628	2667	2628	
indice di verifica lato acciaio	f	1.37	1.35	1.37	
	σ_c limite	149.4	149.4	149.4	
	σ_c	49.0	119.4	49.0	
indice di verifica lato cls	f	3.05	1.25	3.05	
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE					
	σ_c limite	112.1	112.1	112.1	
	σ_c	41.4	100.7	41.4	
indice di verifica lato cls	f	2.71	1.11	2.71	
473					
Armatura campate					
		ϕ	n.	n.	c
		$\phi 6$	2.5	2.5	2.0
	sup.	$\phi 12$	-	-	2.0
	inf.	$\phi 12$	2	2	2.0
		-	-	-	2.0
controllo armatura minima scelta:		nessuna	sì	sì	
1: VERIFICHE IN COMBINAZIONE ULTIMA					
Momento sollecitante (daN*m)	Med	1492	1492		
Momento resistente (daN*m)	Mrd	1902	1902		
indice di verifica	f	1.27	1.27		
Asse neutro (cm)	xc	3	3		
Sforzo acciaio (daN/cm ²)	σ_s	3913	3913		
Sforzo calcestruzzo (daN/cm ²)	σ_c	-122.2	-122.2		
Deformazione acciaio	ϵ_s	1.000%	1.000%		
Deformazione calcestruzzo	ϵ_c	-0.127%	-0.127%		
Campo di rottura	n.	2	2		
2: VERIFICHE IN COMBINAZIONE RARA					
	y	4.78	4.78		
	Jci	12414	12414		
	σ_s limite	3600	3600		
	σ_s	1915	1915		
indice di verifica lato acciaio	f	1.88	1.88		
	σ_c limite	149.4	149.4		
	σ_c	34.6	34.6		
indice di verifica lato cls	f	4.31	4.31		
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE					
	y	4.78	4.78		
	Jci	12414	12414		
	σ_c limite	112.1	112.1		
	σ_c	27.6	27.6		
indice di verifica lato cls	f	4.06	4.06		
	σ_s	1526	1526		
4: VERIFICHE IN COMBINAZIONE FREQUENTE					
	σ_s	1637	1637		

Verifiche a taglio				
1: con fasce piene				
Tagli resistenti sx (daN)	VRd	1273	1273	
fascia piena (dall'asse dell'appoggio)	d1	36 cm	114 cm	
Tagli resistenti dx (daN)	VRd	1273	1273	
fascia piena (dall'asse dell'appoggio)	d2	114 cm	36 cm	
2: con fasce piene e barre longitudinali tese				
	ϕ	n.	n.	n.
	$\phi 6$	2.5	2.5	2.5
sup.	$\phi 12$	-	2	-
	ϕ	n.	n.	n.
inf.	$\phi 12$	1	1	1
	-	-	-	-
Tagli resistenti sx (daN)	VRd	1372	1893	
fascia piena (dall'asse dell'appoggio)	d1	19 cm	11 cm	
Tagli resistenti dx (daN)	VRd	1893	1372	
fascia piena (dall'asse dell'appoggio)	d2	11 cm	19 cm	
← 566				
Verifiche di fessurazione				
CONDIZ. AMBIENTALI ORDINARIE				
Appoggi				
diametro armature superiori	ϕ	6	12	6
combinazione frequente	σ_s	2335	2369	2335
comb. frequente CONDIZ. AMBIENTALI ORDINARIE	f	3.66	1.74	3.66
combinazione quasi permanente	σ_s	2217	2250	2217
comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE	f	3.35	1.61	3.35
Campate				
diametro armature inferiori	ϕ	12	12	
combinazione frequente	σ_s	1637	1637	
comb. frequente CONDIZ. AMBIENTALI ORDINARIE	f	3.27	3.27	
combinazione quasi permanente	σ_s	1526	1526	
comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE	f	2.67	2.67	
Verifiche di snellezza				
	ρ	0.46%	0.46%	
	ρ'	0.14%	0.14%	
	λ limite tab	26	26	
	K	1.3	1.3	
	λ limite calc	29.6	29.6	
	λ limite	23.7	23.7	
	λ	22.3	22.3	
indice di verifica	f	1.06	1.06	
Verifiche di deformabilità				
PER L'INTEGRITA' DEI DIVISORI				
Coefficiente di viscosità (11.2.10.7)	$\phi(\text{inf})$	1.7	1.7	
Freccia massima sez. non-fessurata (cm)	f max	0.30	0.30	
Freccia massima sez. fessurata (cm)	f max	1.12	1.12	
Freccia massima combinata (cm)	f max	0.49	0.49	
Freccia limite (cm)	f lim	1.12	1.12	
indice di verifica	f	2.27	2.27	



Di seguito si riportano le verifiche degli impalcati in laterocemento evidenziati, realizzati con spessore $s = 20+5$, denominato SOLAIO TIPO 2:

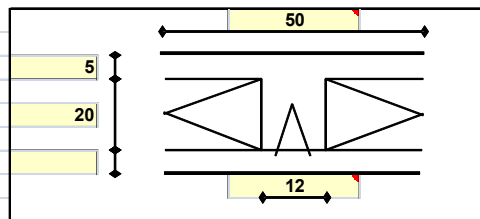


Geometria

Misure in centimetri

Tipo di solaio

Con blocchi in LATERIZIO



Controllo limiti geometrici

Luce massima consigliata (snellezza 25) (m)
Larghezza dei blocchi calcolata (cm)
Larghezza max dei blocchi in laterizio (cm)
Larghezza min. nervature per blocchi in laterizio (cm)
Interasse max nervature per blocchi in laterizio (cm)

L max	6.25
Largh.	38
Largh.	
b min	
i max	

Luci e carichi

Luci (m)
Peso proprio solaio calcolato (daN/mq.)
Peso proprio solaio adottato (daN/mq.)
Sovr. perm. compiutamente definiti (daN/mq.)
Sovr. perm. non-compiutamente definiti (daN/mq.)
Sovr. variabili (daN/mq.)
Carichi totali (daN/m)

L	3.15	3.85	3.85	3.15
p.p. calc	325	325	325	325
p.p.	365	365	365	365
g1	330	330	330	330
g2	0	0	0	0
q	200	200	200	200
tot	895	895	895	895

Momento d'incastro negativo alle due estremità

x sx	72				72	x dx
Mg1 sx	-48				-48	Mg1 dx
Mg2 sx	-0				-0	Mg2 dx
Mq sx	-14				-14	Mq dx
Mtot sx	-62				-62	Mtot dx

Categoria del carico variabile

Cat. A Residenziale	ψ_0	0.7
	ψ_1	0.5
	ψ_2	0.3

Ridistribuzione momenti comb. ultima

Ridistribuzione desiderata	1-8	15%				
Rapporti fra le luci delle campate		1.00	0.82	1.00	1.22	1.00
Ridistribuzione applicata		15%	15%	15%	15%	15%

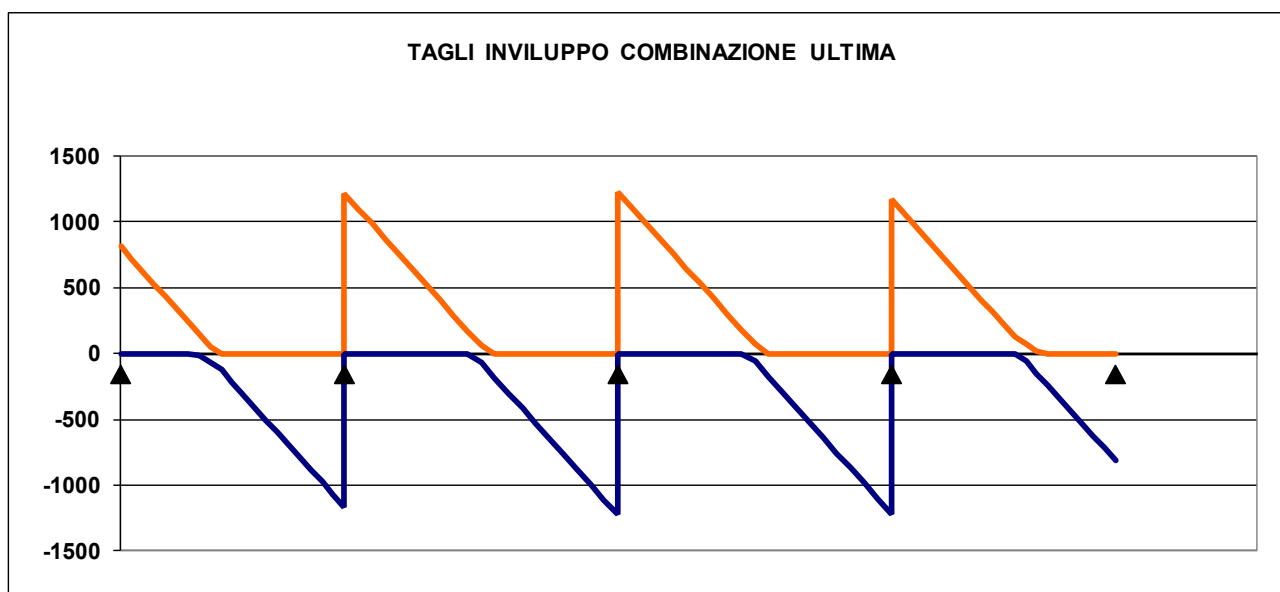
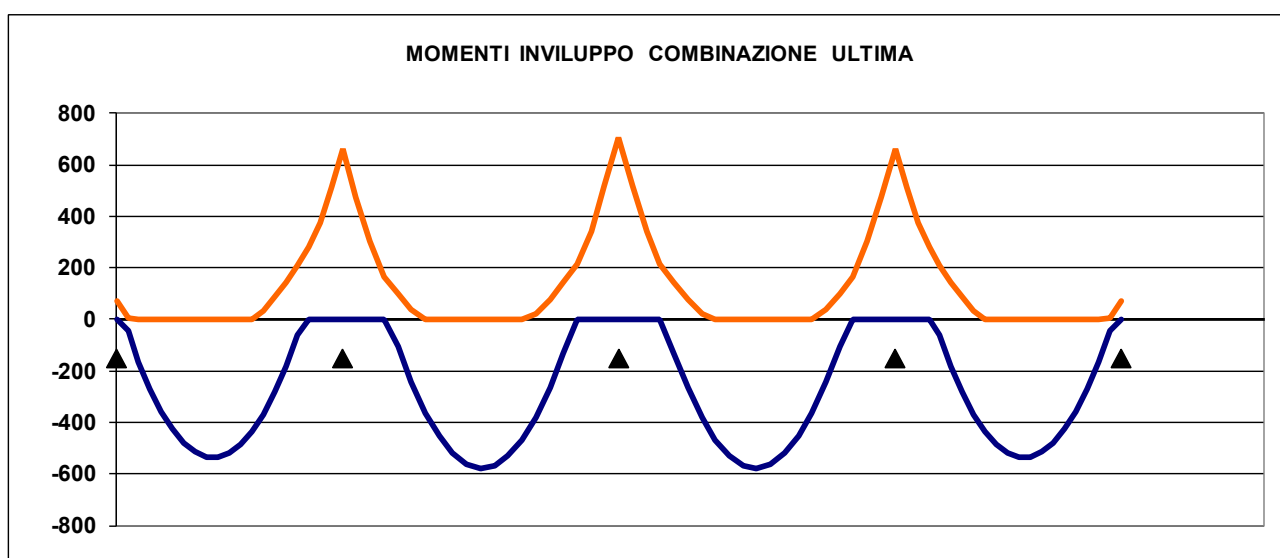
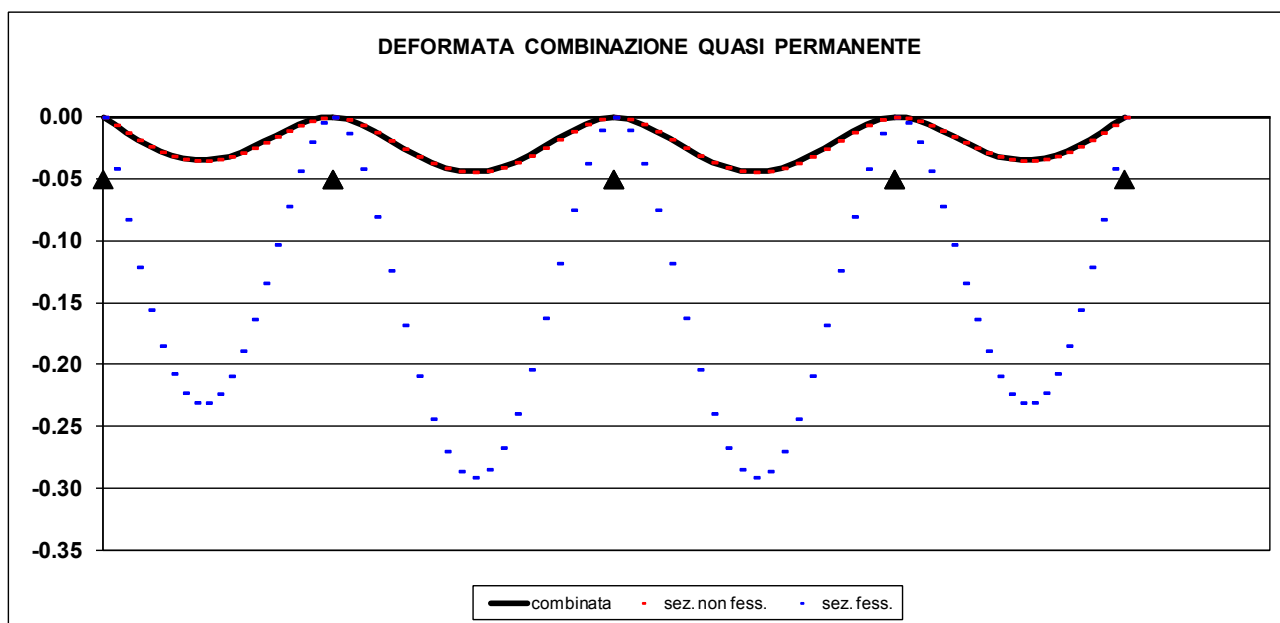
Coefficienti parziali sulle azioni

DEFAULT NTC '08	γ_{g1}	1.0	1.3			
	γ_{g2}	0.0	1.5		NTC '08	
	γ_q	0.0	1.5			

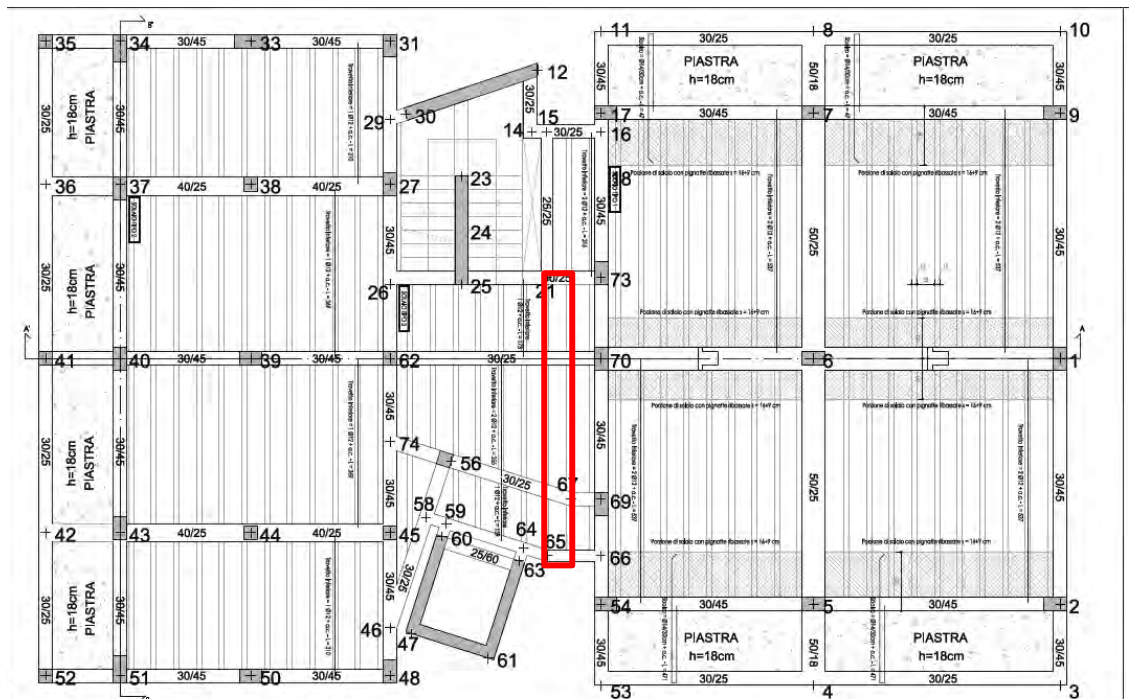
Interasse nervature (m)		i 0.50				
1: COMBINAZIONE ULTIMA						
Momenti Max - per nervatura		-70	-661	-706	-661	-70
Momenti Max + per nervatura		539	577	577	539	
Tagli dx Max per nervatura		813	1216	1227	1168	
Tagli sx Max per nervatura			1168	1227	1216	813
Reazioni Max per nervatura		813	2384	2453	2384	813
Reazioni Max per fascia di un metro		1626	4769	4907	4769	1626
2: COMBINAZIONE RARA						
Momenti Max - per nervatura		-62	-559	-591	-559	-62
Momenti Max + per nervatura		318	329	329	318	
Tagli dx Max per nervatura		581	881	891	863	
Tagli sx Max per nervatura			863	891	881	581
Reazioni Max per nervatura		581	1744	1782	1744	581
Reazioni Max per fascia di un metro		1161	3488	3564	3488	1161
3: COMBINAZIONE QUASI PERMANENTE						
Momenti Max - per nervatura		-52	-460	-482	-460	-52
Momenti Max + per nervatura		248	251	251	248	
Tagli dx Max per nervatura		475	730	739	724	
Tagli sx Max per nervatura			724	739	730	475
Reazioni Max per nervatura		475	1454	1477	1454	475
Reazioni Max per fascia di un metro		950	2907	2955	2907	950
4: COMBINAZIONE FREQUENTE						
Momenti Max - per nervatura		-55	-488	-513	-488	-55
Momenti Max + per nervatura		268	273	273	268	
Tagli dx Max per nervatura		505	773	782	764	
Tagli sx Max per nervatura			764	782	773	505
Reazioni Max per nervatura		505	1537	1564	1537	505
Reazioni Max per fascia di un metro		1010	3073	3129	3073	1010
← 309						
Materiali						
Calcestruzzo	Classe	C25/30				
Acciaio	Tipo	B450C				
Dati geometrici						
Diametro delle barre longitudinali superiori (mm)	φ	12	12	12	12	12
Diametro delle barre longitudinali inferiori (mm)	φ	12	12	12	12	12
Armatura costante superiore						
c) rete ø6/20"x20" collaborante solo in campata	ø6	2.5	2.5	2.5	2.5	c
	CampSup	0.71	0.71	0.71	0.71	2.00
	-	-	-	-	-	2.00
	AppSup	-	-	-	-	-
Armatura costante inferiore						
a) nessuna	-	-	-	-	-	2.00
	CampInf	-	-	-	-	2.00
	-	-	-	-	-	2.00
	AppInf	-	-	-	-	-
Ricoprimento di calcestruzzo sulle barre (cm)	c	2.0	2.0	2.0	2.0	2.0
Copriferro di calcolo (cm)	h'	2.6	2.6	2.6	2.6	2.6
Spessore solaio (cm)	H	25	25	25	25	25
Larghezza nervature (cm)	b	12	12	12	12	12
Altezza utile (cm)	d	22.4	22.4	22.4	22.4	22.4
← 352						
c) rete ø6/20"x20" collaborante solo in campata						
Armatura appoggi		0ø0	0ø0	0ø0	0ø0	0ø0
	1ø12	1ø12	1ø12	1ø12	1ø12	1ø12
	1ø12	1ø12	1ø12	1ø12	1ø12	1ø12
a) nessuna	0ø0	0ø0	0ø0	0ø0	0ø0	0ø0
Momento sollecitante (daN*m)	Med	70	661	706	661	70
Momento resistente (daN*m)	Mrd	924	924	924	924	924
indice di verifica	f	13.11	1.40	1.31	1.40	13.11
Asse neutro (cm)	xc	3	3	3	3	3
Sforzo acciaio (daN/cm ^{q.})	σ _s	3913	3913	3913	3913	3913
Sforzo calcestruzzo (daN/cm ^{q.})	σ _c	-138.9	-138.9	-138.9	-138.9	-138.9
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	1.000%	1.000%
Deformazione calcestruzzo	ε _c	-0.175%	-0.175%	-0.175%	-0.175%	-0.175%
Campo di rottura	n	2	2	2	2	2
Ridistribuzione massima consentita	1-δ	30%	30%	30%	30%	30%
Controllo ridistribuzione	1-δ	si	si	si	si	si
c) rete ø6/20"x20" collaborante solo in campata						
	2.5ø6	2.5ø6	2.5ø6	2.5ø6	2.5ø6	
Armatura campate		0ø12	0ø12	0ø12	0ø12	
	1ø12	1ø12	1ø12	1ø12	1ø12	
a) nessuna	0ø0	0ø0	0ø0	0ø0	0ø0	
Momento sollecitante (daN*m)	Med	539	577	577	539	
Momento resistente (daN*m)	Mrd	972	972	972	972	
indice di verifica	f	1.80	1.69	1.69	1.80	
Asse neutro (cm)	xc	2	2	2	2	
Sforzo acciaio (daN/cm ^{q.})	σ _s	3913	3913	3913	3913	
Sforzo calcestruzzo (daN/cm ^{q.})	σ _c	-98.4	-98.4	-98.4	-98.4	
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	1.000%	
Deformazione calcestruzzo	ε _c	-0.090%	-0.090%	-0.090%	-0.090%	
Campo di rottura	n	2	2	2	2	

Armatura minima sugli appoggi alle due estremità							
a) nessuna							
Armatura minima in campata							
a) nessuna							
← 415							
controllo armatura minima scelta: nessuna si							
Armatura appoggi	φ	n.	n.	n.	n.	n.	c
	-	-	-	-	-	-	2.0
	sup. ø12	1	1	1	1	1	2.0
	inf. ø12	1	1	1	1	1	2.0
	-	-	-	-	-	-	2.0
CLIK PER PROCEDERE							
1: VERIFICHE IN COMBINAZIONE ULTIMA							
Momento sollecitante (daN*m)	Med	70	661	706	661	70	
Momento resistente (daN*m)	Mrd	924	924	924	924	924	
indice di verifica	f	13.11	1.40	1.31	1.40	13.11	
Asse neutro (cm)	x _c	3	3	3	3	3	
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	3913	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ _c	-138.9	-138.9	-138.9	-138.9	-138.9	
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	1.000%	1.000%	
Deformazione calcestruzzo	ε _c	-0.175%	-0.175%	-0.175%	-0.175%	-0.175%	
Campo di rottura	n.	2	2	2	2	2	
Ridistribuzione massima consentita	1-δ	30%	30%	30%	30%	30%	
Controllo ridistribuzione	1-δ	si	si	si	si	si	
2: VERIFICHE IN COMBINAZIONE RARA							
σ _s limite		3600	3600	3600	3600	3600	
σ _s		269	2442	2579	2442	269	
indice di verifica lato acciaio	f	13.37	1.47	1.40	1.47	13.37	
σ _c limite		149.4	149.4	149.4	149.4	149.4	
σ _c		6.6	60.1	63.5	60.1	6.6	
indice di verifica lato cls	f	22.54	2.49	2.35	2.49	22.54	
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE							
σ _c limite		112.1	112.1	112.1	112.1	112.1	
σ _c		5.6	49.5	51.8	49.5	5.6	
indice di verifica lato cls	f	20.04	2.27	2.16	2.27	20.04	
← 473							
Armatura campate							
	φ	n.	n.	n.	n.		c
	ø6	2.5	2.5	2.5	2.5		2.0
sup. ø12	-	-	-	-	-		2.0
inf. ø12	1	1	1	1	1		2.0
	-	-	-	-	-		2.0
controllo armatura minima scelta: nessuna si							
1: VERIFICHE IN COMBINAZIONE ULTIMA							
Momento sollecitante (daN*m)	Med	539	577	577	539		
Momento resistente (daN*m)	Mrd	972	972	972	972		
indice di verifica	f	1.80	1.69	1.69	1.80		
Asse neutro (cm)	x _c	2	2	2	2		
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	3913	3913		
Sforzo calcestruzzo (daN/cm ²)	σ _c	-98.4	-98.4	-98.4	-98.4		
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	1.000%		
Deformazione calcestruzzo	ε _c	-0.090%	-0.090%	-0.090%	-0.090%		
Campo di rottura	n.	2	2	2	2		
2: VERIFICHE IN COMBINAZIONE RARA							
y		3.51	3.51	3.51	3.51		
J _{ci}		6787	6787	6787	6787		
σ _s limite		3600	3600	3600	3600		
σ _s		1327	1375	1375	1326		
indice di verifica lato acciaio	f	2.71	2.62	2.62	2.71		
σ _c limite		149.4	149.4	149.4	149.4		
σ _c		16.4	17.0	17.0	16.4		
indice di verifica lato cls	f	9.10	8.78	8.78	9.10		
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE							
y		3.51	3.51	3.51	3.51		
J _{ci}		6787	6787	6787	6787		
σ _c limite		112.1	112.1	112.1	112.1		
σ _c		12.8	13.0	13.0	12.8		
indice di verifica lato cls	f	8.74	8.64	8.64	8.74		
σ _s		1035	1048	1048	1035		
4: VERIFICHE IN COMBINAZIONE FREQUENTE							
σ _s		1119	1142	1142	1119		

Verifiche a taglio					
1: con fasce piene					
Tagli resistenti sx (daN)	VRd	1273	1273	1273	1273
fascia piena (dall'asse dell'appoggio)	d1	-	-	-	-
Tagli resistenti dx (daN)	VRd	1273	1273	1273	1273
fascia piena (dall'asse dell'appoggio)	d2	-	-	-	-
2: con fasce piene e barre longitudinali tese					
ϕ	n.	n.	n.	n.	n.
sup.	$\phi 12$	1	1	1	1
inf.	$\phi 12$	1	1	1	1
Tagli resistenti sx (daN)	VRd	1372	1372	1372	1372
fascia piena (dall'asse dell'appoggio)	d1	-	-	-	-
Tagli resistenti dx (daN)	VRd	1372	1372	1372	1372
fascia piena (dall'asse dell'appoggio)	d2	-	-	-	-
← 566					
Verifiche di fessurazione					
CONDIZ. AMBIENTALI ORDINARIE					
Appoggi					
diametro armature superiori	ϕ	12	12	12	12
combinazione frequente	σ_s	239	2133	2239	2133
comb. frequente CONDIZ. AMBIENTALI ORDINARIE	f	3.33	2.34	2.07	2.34
combinazione quasi permanente	σ_s	227	2009	2103	2009
comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE	f	2.67	2.07	1.89	2.07
Campate					
diametro armature inferiori	ϕ	12	12	12	12
combinazione frequente	σ_s	1119	1142	1142	1119
comb. frequente CONDIZ. AMBIENTALI ORDINARIE	f	3.33	3.33	3.33	3.33
combinazione quasi permanente	σ_s	1035	1048	1048	1035
comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE	f	2.67	2.67	2.67	2.67
Verifiche di snellezza					
ρ		0.23%	0.23%	0.23%	0.23%
ρ'		0.14%	0.14%	0.14%	0.14%
λ limite tab		26	30	30	26
K		1.3	1.5	1.5	1.3
λ limite calc		50.1	54.0	54.0	50.1
λ limite		40.1	43.2	43.2	40.1
λ		12.6	15.4	15.4	12.6
indice di verifica	f	3.18	2.81	2.81	3.18
Verifiche di deformabilità					
PER L'INTEGRITA' DEI DIVISORI					
Coefficiente di viscosità (11.2.10.7)	$\phi(\text{inf})$	1.8	1.8	1.8	1.8
Freccia massima sez. non-fessurata (cm)	f max	0.04	0.04	0.04	0.04
Freccia massima sez. fessurata (cm)	f max	0.23	0.29	0.29	0.23
Freccia massima combinata (cm)	f max	0.04	0.04	0.04	0.04
Freccia limite (cm)	f lim	0.63	0.77	0.77	0.63
indice di verifica	f	17.94	17.39	17.39	17.94



Di seguito si riportano le verifiche degli impalcati in laterocemento evidenziati, realizzati con spessore $s = 20+5$, denominato SOLAIO TIPO 3:

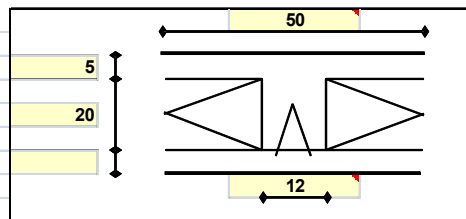


Geometria

Misure in centimetri

Tipo di solaio

Con blocchi in LATERIZIO



Controllo limiti geometrici

Luce massima consigliata (snellezza 25) (m)
Larghezza dei blocchi calcolata (cm)
Larghezza max dei blocchi in laterizio (cm)
Larghezza min. nervature per blocchi in laterizio (cm)
Interasse max nervature per blocchi in laterizio (cm)

L max	6.25
Largh.	38
Largh.	52
b min	8
i max	75

Luci e carichi

Luci (m)
Peso proprio solaio calcolato (daN/mq.)
Peso proprio solaio adottato (daN/mq.)
Sovr. perm. compiutamente definiti (daN/mq.)
Sovr. perm. non-compiutamente definiti (daN/mq.)
Sovr. variabili (daN/mq.)
Carichi totali (daN/m)

ADOTTA
→

L	1.95	4.45
p.p. calc	325	325
p.p.	365	365
g1	155	155
g2	0	0
q	400	400
tot	920	920

Momento d'incastro negativo alle due estremità

x sx	36	36	x dx
Mg1 sx	-27	-143	Mg1 dx
Mg2 sx	-0	-0	Mg2 dx
Mq sx	-21	-110	Mq dx
Mtot sx	-49	-253	Mtot dx

Categoria del carico variabile

Cat. B Uffici

ψ_0	0.7
ψ_1	0.5
ψ_2	0.3

Ridistribuzione momenti comb. ultima

Ridistribuzione desiderata
Rapporti fra le luci delle campate
Ridistribuzione applicata

1-8	15%		
	1.00	0.44	1.00
	15%	0%	15%

Coefficienti parziali sulle azioni

DEFAULT NTC '08

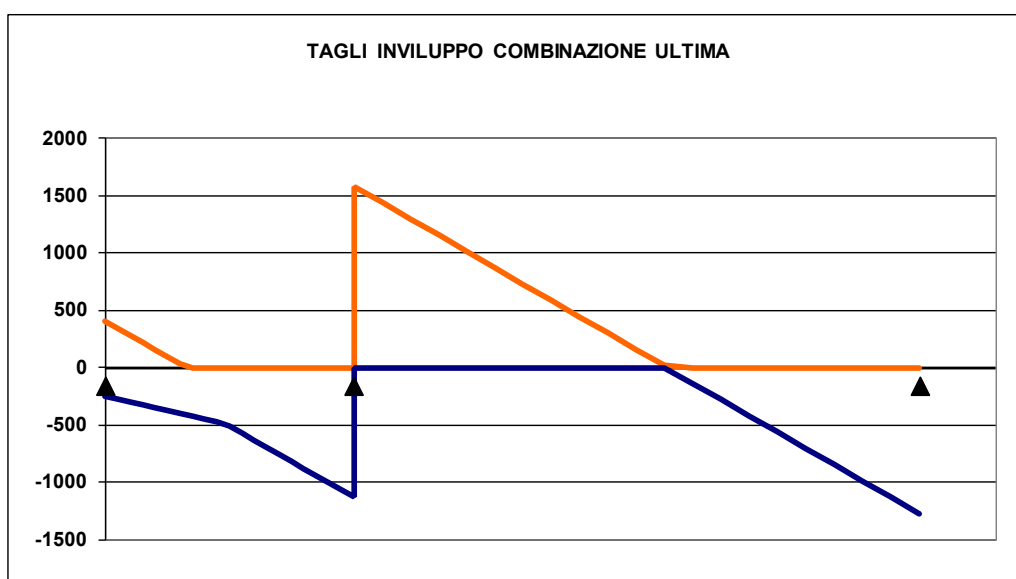
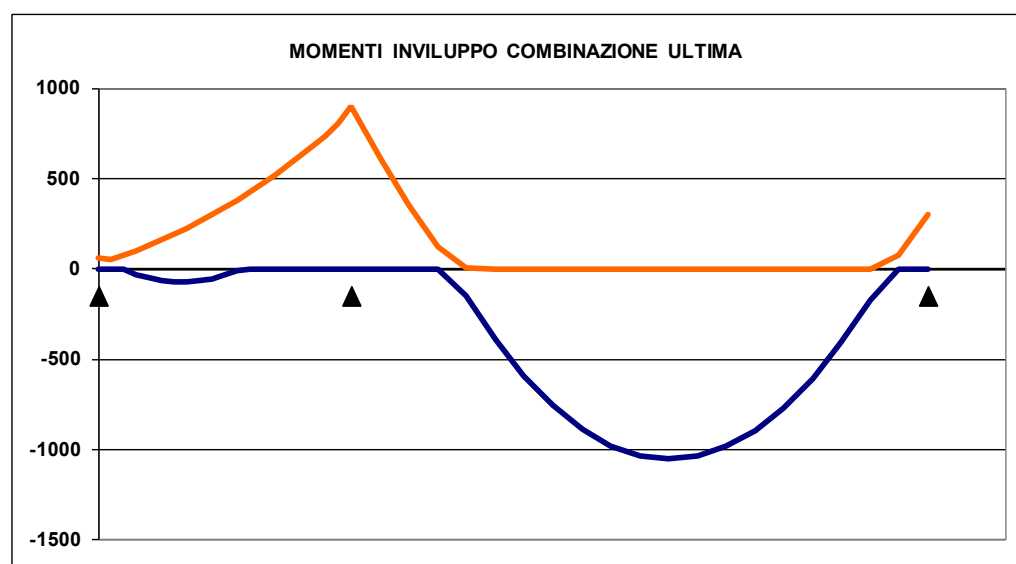
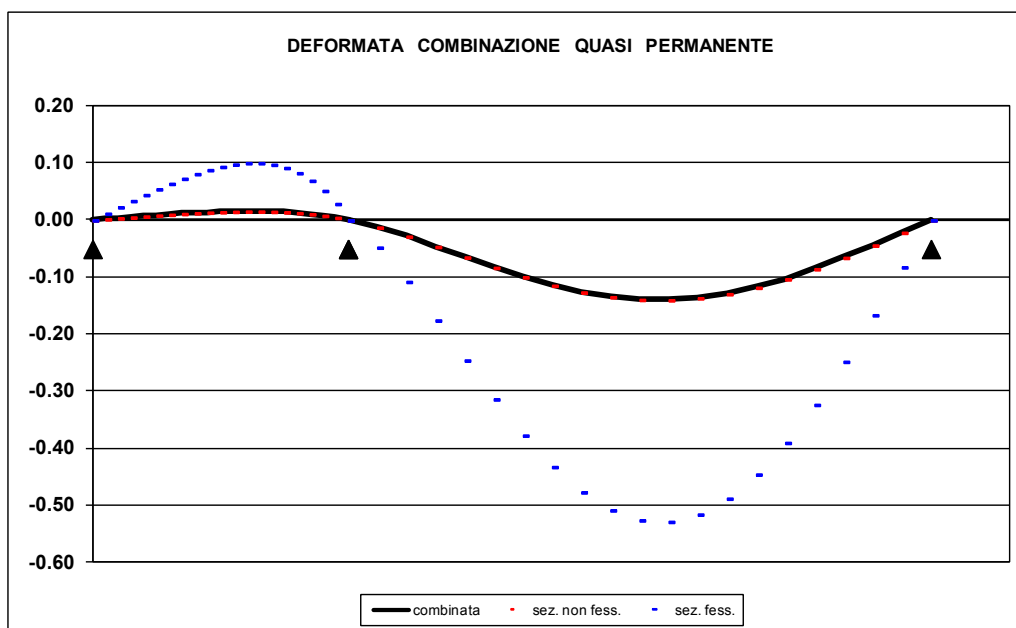
γ_{g1}	1.0	1.3
γ_{g2}	0.0	1.5
γ_q	0.0	1.5

NTC '08

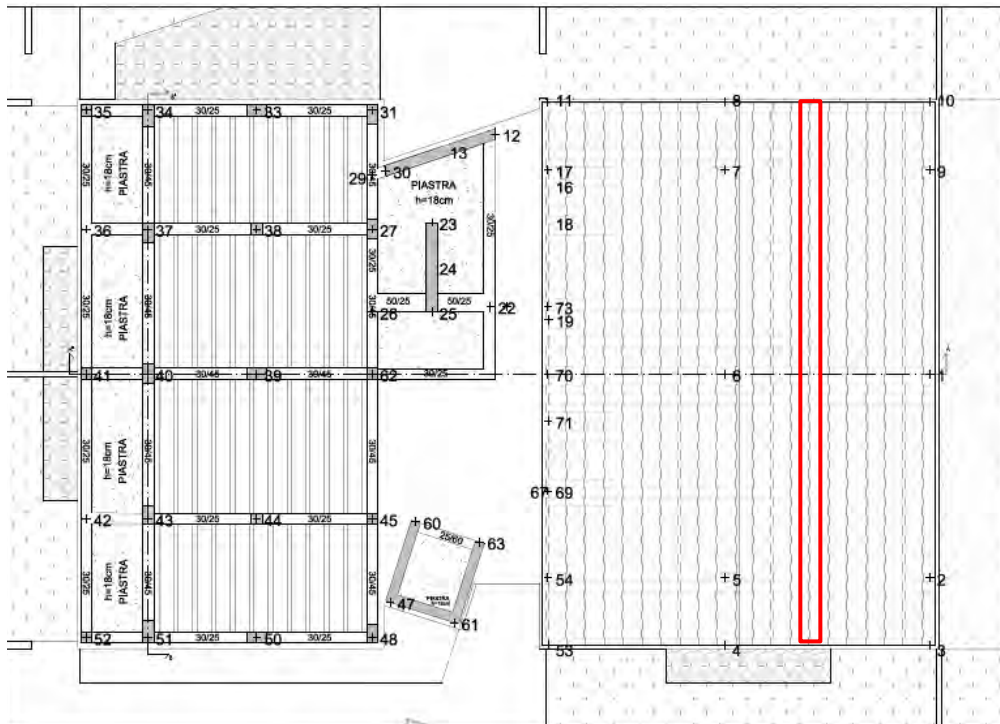
Interasse nervature (m)	i	0.50			
1: COMBINAZIONE ULTIMA					
Momenti Max - per nervatura		-57	-1058	-298	
Momenti Max + per nervatura		108	1054		
Tagli dx Max per nervatura		411	1578		
Tagli sx Max per nervatura			1130	1272	
Reazioni Max per nervatura		411	2709	1272	
Reazioni Max per fascia di un metro		821	5417	2543	
2: COMBINAZIONE RARA					
Momenti Max - per nervatura		-49	-763	-253	
Momenti Max + per nervatura		48	656		
Tagli dx Max per nervatura		239	1138		
Tagli sx Max per nervatura			815	915	
Reazioni Max per nervatura		239	1953	915	
Reazioni Max per fascia di un metro		478	3906	1829	
3: COMBINAZIONE QUASI PERMANENTE					
Momenti Max - per nervatura		-34	-531	-176	
Momenti Max + per nervatura		-2	452		
Tagli dx Max per nervatura		104	792		
Tagli sx Max per nervatura			567	634	
Reazioni Max per nervatura		104	1359	634	
Reazioni Max per fascia di un metro		208	2717	1268	
4: COMBINAZIONE FREQUENTE					
Momenti Max - per nervatura		-38	-597	-198	
Momenti Max + per nervatura		13	510		
Tagli dx Max per nervatura		143	891		
Tagli sx Max per nervatura			638	714	
Reazioni Max per nervatura		143	1528	714	
Reazioni Max per fascia di un metro		286	3057	1428	
		← 309			
Materiali					
Calcestruzzo	Classe	C25/30			
Acciaio	Tipo	B450C			
Dati geometrici					
Diametro delle barre longitudinali superiori (mm)	φ	12	12	12	
Diametro delle barre longitudinali inferiori (mm)	φ	12	12	12	
Armatura costante superiore					
g) rete ø6/20"x20" collaborante ovunque	φ	n.	n.	n.	c
	ø6	2.5	2.5		2.00
	CampSup	0.71	0.71		
	ø6	2.5	2.5	2.5	2.00
	AppSup	0.71	0.71	0.71	
Armatura costante inferiore					
a) nessuna	-	-	-		2.00
	CampInf	-	-		
	-	-	-	-	2.00
	AppInf	-	-	-	
Ricoprimento di calcestruzzo sulle barre (cm)					
	c	2.0	2.0	2.0	
Copriferro di calcolo (cm)	h'	2.6	2.6	2.6	
Spessore solaio (cm)	H	25	25	25	
Larghezza nervature (cm)	b	12	12	12	
Altezza utile (cm)	d	22.4	22.4	22.4	
	← 352				
Armatura appoggi					
g) rete ø6/20"x20" collaborante ovunque	2.5ø6	2.5ø6	2.5ø6		
	0ø12	1ø12	0ø12		
	1ø12	1ø12	1ø12		
a) nessuna	0ø0	0ø0	0ø0		
Momento sollecitante (daN*m)	Med	57	1058	298	
Momento resistente (daN*m)	Mrd	588	1473	588	
indice di verifica	f	10.27	1.39	1.97	
Asse neutro (cm)	xc	3	4	3	
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ _c	-129.2	-141.1	-129.2	
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	
Deformazione calcestruzzo	ε _c	-0.142%	-0.232%	-0.142%	
Campo di rottura	n.	2	2	2	
Ridistribuzione massima consentita	1-δ	30%	0%	30%	
Controllo redistribuzione	1-δ	si	si	si	
Armatura campate					
g) rete ø6/20"x20" collaborante ovunque	2.5ø6	2.5ø6			
	0ø12	0ø12			
	1ø12	2ø12			
a) nessuna	0ø0	0ø0			
Momento sollecitante (daN*m)	Med	108	1054		
Momento resistente (daN*m)	Mrd	972	1902		
indice di verifica	f	9.03	1.81		
Asse neutro (cm)	xc	2	3		
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913		
Sforzo calcestruzzo (daN/cm ²)	σ _c	-98.4	-122.2		
Deformazione acciaio	ε _s	1.000%	1.000%		
Deformazione calcestruzzo	ε _c	-0.090%	-0.127%		
Campo di rottura	n.	2	2		

Armatura minima sugli appoggi alle due estremità				
a) nessuna				
Armatura minima in campata				
a) nessuna				
← 415				
controllo armatura minima scelta: nessuna sì n. sì c				
Armatura appoggi				
	φ	n.	n.	c
	ø6	2.5	2.5	2.0
sup.	ø12	-	1	2.0
CLIK PER PROCEDERE				
inf.	ø12	1	1	2.0
	-	-	-	2.0
1: VERIFICHE IN COMBINAZIONE ULTIMA				
Momento sollecitante (daN*m)	Med	57	1058	298
Momento resistente (daN*m)	Mrd	595	1482	595
indice di verifica	f	10.39	1.40	2.00
Asse neutro (cm)	xc	3	4	3
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	3913
Sforzo calcestruzzo (daN/cm ²)	σ _c	-125.3	-141.1	-125.3
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%
Deformazione calcestruzzo	ε _c	-0.133%	-0.228%	-0.133%
Campo di rottura	n.	2	2	2
Ridistribuzione massima consentita	1-δ	30%	0%	30%
Controllo redistribuzione	1-δ	si	si	si
2: VERIFICHE IN COMBINAZIONE RARA				
σ _s limite		3600	3600	3600
σ _s		330	2077	1718
indice di verifica lato acciaio	f	10.91	1.73	2.10
σ _c limite		149.4	149.4	149.4
σ _c		6.2	68.5	32.1
indice di verifica lato cls	f	24.27	2.18	4.66
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE				
σ _c limite		112.1	112.1	112.1
σ _c		4.3	47.6	22.3
indice di verifica lato cls	f	26.16	2.35	5.02
← 473				
Armatura campate				
	φ	n.	n.	c
	ø6	2.5	2.5	2.0
sup.	ø12	-	-	2.0
inf.	ø12	1	2	2.0
	-	-	-	2.0
controllo armatura minima scelta: nessuna sì sì				
1: VERIFICHE IN COMBINAZIONE ULTIMA				
Momento sollecitante (daN*m)	Med	108	1054	
Momento resistente (daN*m)	Mrd	972	1902	
indice di verifica	f	9.03	1.81	
Asse neutro (cm)	xc	2	3	
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ _c	-98.4	-122.2	
Deformazione acciaio	ε _s	1.000%	1.000%	
Deformazione calcestruzzo	ε _c	-0.090%	-0.127%	
Campo di rottura	n.	2	2	
2: VERIFICHE IN COMBINAZIONE RARA				
y		3.51	4.78	
Jci		6787	12414	
σ _s limite		3600	3600	
σ _s		202	1398	
indice di verifica lato acciaio	f	17.84	2.58	
σ _c limite		149.4	149.4	
σ _c		2.5	25.3	
indice di verifica lato cls	f	59.82	5.91	
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE				
y		3.51	4.78	
Jci		6787	12414	
σ _c limite		112.1	112.1	
σ _c		0.1	17.4	
indice di verifica lato cls	f	1188.47	6.44	
σ _s		8	963	
4: VERIFICHE IN COMBINAZIONE FREQUENTE				
σ _s		52	1087	

Verifiche a taglio				
	fck	249	249	
	b	120	120	
	d (mm)	224	224	
	k calc	1.94	1.94	
	k	1.94	1.94	
	v min	0.47	0.47	
	ρ_1 calc	0.0042	0.0068	
	ρ_1	0.0042	0.0068	
	VRd1	1372	1614	
	VRd2	1273	1273	
	ρ_1 calc	0.0068	0.0042	
	ρ_1	0.0068	0.0042	
	VRd1	1614	1372	
	VRd2	1273	1273	
1: con fasce piene				
	Tagli resistenti sx (daN)	VRd	1273	1273
	fascia piena (dall'asse dell'appoggio)	d1	-	48 cm
	Tagli resistenti dx (daN)	VRd	1273	1273
	fascia piena (dall'asse dell'appoggio)	d2	-	-
2: con fasce piene e barre longitudinali tese				
	ϕ	n.	n.	n.
	$\phi 6$	2.5	2.5	2.5
sup.	$\phi 12$	-	1	-
	$\phi 12$	1	1	1
inf.	-	-	-	-
	Tagli resistenti sx (daN)	VRd	1372	1614
	fascia piena (dall'asse dell'appoggio)	d1	-	-
	Tagli resistenti dx (daN)	VRd	1614	1372
	fascia piena (dall'asse dell'appoggio)	d2	-	-
← 566				
Verifiche di fessurazione				
CONDIZ. AMBIENTALI ORDINARIE				
Appoggi				
	diametro armature superiori	ϕ	6	12
	combinazione frequente	σ_s	258	1626
	comb. frequente CONDIZ. AMBIENTALI ORDINARIE	f	6.67	3.29
	combinazione quasi permanente	σ_s	230	1445
	comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE	f	5.33	2.67
Campate				
	diametro armature inferiori	ϕ	12	12
	combinazione frequente	σ_s	52	1087
	comb. frequente CONDIZ. AMBIENTALI ORDINARIE	f	3.33	3.33
	combinazione quasi permanente	σ_s	8	963
	comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE	f	2.67	2.67
Verifiche di snellezza				
	ρ	0.23%	0.46%	
	ρ'	0.14%	0.14%	
	λ limite tab	26	26	
	K	1.3	1.3	
	λ limite calc	250.8	42.0	
	λ limite	200.6	33.6	
	λ	7.8	17.8	
	indice di verifica	f	25.72	1.89
Verifiche di deformabilità				
PER L'INTEGRITA' DEI DIVISORI				
	Coefficiente di viscosità (11.2.10.7)	$\phi(\text{inf})$	1.7	1.7
	Freccia massima sez. non-fessurata (cm)	f max	0.00	0.14
	Freccia massima sez. fessurata (cm)	f max	0.00	0.53
	Freccia massima combinata (cm)	f max	0.00	0.14
	Freccia limite (cm)	f lim	0.39	0.89
	indice di verifica	f	-	6.36



Di seguito si riportano le verifiche degli impalcati in laterocemento evidenziati, realizzati con spessore $s = 20+5$, denominato SOLAIO TIPO 1, al piano di copertura:



Geometria

Misure in centimetri

Tipo di solaio

Con blocchi in LATERIZIO

Controllo limiti geometrici

Luce massima consigliata (snellezza 25) (m)
Larghezza dei blocchi calcolata (cm)
Larghezza max dei blocchi in laterizio (cm)
Larghezza min. nervature per blocchi in laterizio (cm)
Interasse max nervature per blocchi in laterizio (cm)

L max 6.25
Largh. 38
Largh. 52
b min 8
i max 75

Luci e carichi

Luci (m)
Peso proprio solaio calcolato (daN/mq.)
Peso proprio solaio adottato (daN/mq.)
Sovr. perm. compiutamente definiti (daN/mq.)
Sovr. perm. non-compiutamente definiti (daN/mq.)
Sovr. variabili (daN/mq.)
Carichi totali (daN/m)

L 5.58 5.58
p.p. calc 325 325
p.p. 365 365
g1 155 155
g2 0 0
q 120 120
tot 640 640

Momento d'incastro negativo alle due estremità

x sx 36 36 x dx
Mg1 sx -225 -225 Mg1 dx
Mg2 sx -0 -0 Mg2 dx
Mq sx -52 -52 Mq dx
Mtot sx -277 -277 Mtot dx

Categoria del carico variabile

Cat. L Neve fino a 1000 m
 ψ_0 0.5
 ψ_1 0.2
 ψ_2 0.0

Ridistribuzione momenti comb. ultima

Ridistribuzione desiderata 1-8 15%
Rapporti fra le luci delle campate 1.00 1.00 1.00
Ridistribuzione applicata 15% 15% 15%

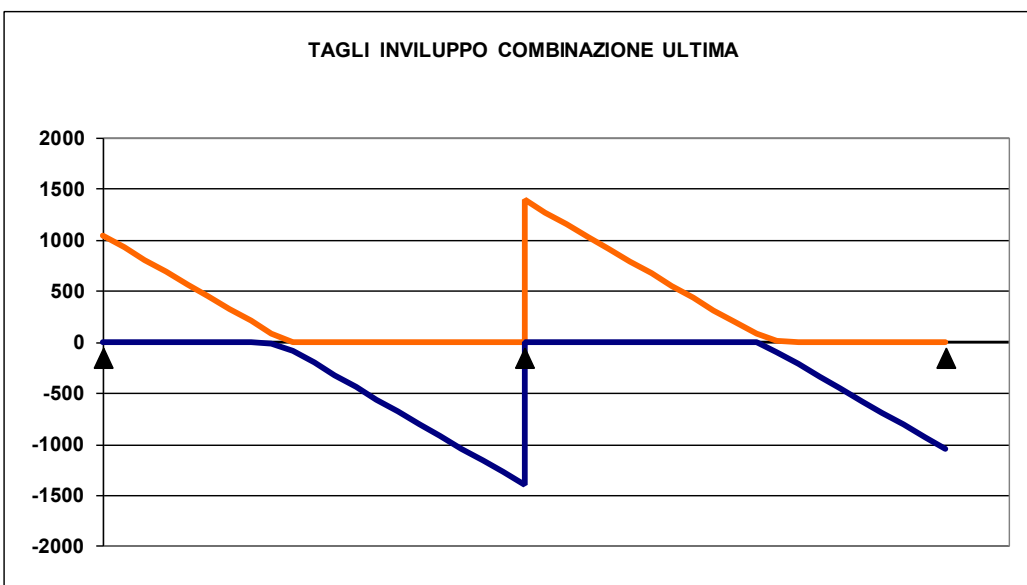
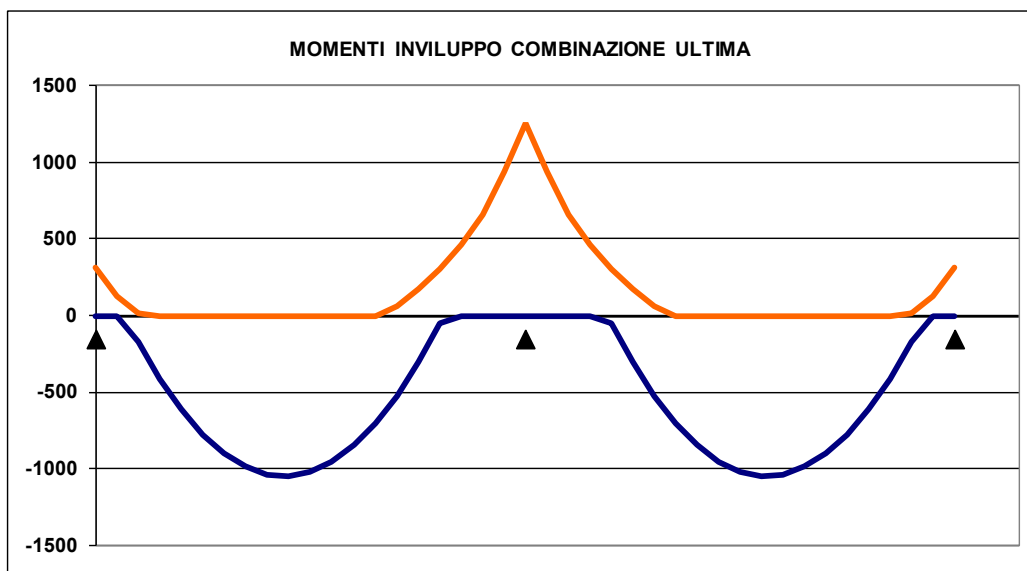
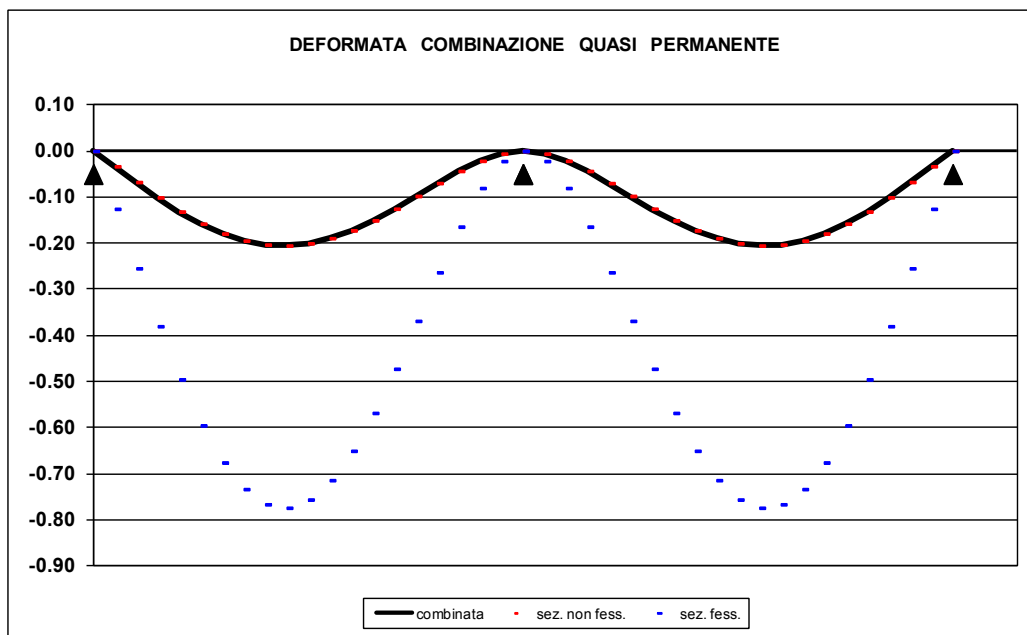
Coefficienti parziali sulle azioni

γ_{g1} 1.0 1.3
 γ_{g2} 0.0 1.5
 γ_q 0.0 1.5
DEFAULT NTC '08 NTC '08

Interasse nervature (m)	i	0.50			
1: COMBINAZIONE ULTIMA					
Momenti Max - per nervatura		-315	-1259	-315	
Momenti Max + per nervatura		1050	1050		
Tagli dx Max per nervatura		1047	1393		
Tagli sx Max per nervatura			1047		
Reazioni Max per nervatura		1047	2786	1047	
Reazioni Max per fascia di un metro		2094	5573	2094	
2: COMBINAZIONE RARA					
Momenti Max - per nervatura		-277	-1107	-277	
Momenti Max + per nervatura		634	634		
Tagli dx Max per nervatura		763	1042		
Tagli sx Max per nervatura			763		
Reazioni Max per nervatura		763	2083	763	
Reazioni Max per fascia di un metro		1525	4166	1525	
3: COMBINAZIONE QUASI PERMANENTE					
Momenti Max - per nervatura		-225	-899	-225	
Momenti Max + per nervatura		478	478		
Tagli dx Max per nervatura		605	846		
Tagli sx Max per nervatura			605		
Reazioni Max per nervatura		605	1693	605	
Reazioni Max per fascia di un metro		1209	3385	1209	
4: COMBINAZIONE FREQUENTE					
Momenti Max - per nervatura		-235	-941	-235	
Momenti Max + per nervatura		509	509		
Tagli dx Max per nervatura		636	885		
Tagli sx Max per nervatura			636		
Reazioni Max per nervatura		636	1771	636	
Reazioni Max per fascia di un metro		1272	3541	1272	
		← 309			
Materiali					
Calcestruzzo	Classe	C25/30			
Acciaio	Tipo	B450C			
Dati geometrici					
Diametro delle barre longitudinali superiori (mm)	φ	12	12	12	
Diametro delle barre longitudinali inferiori (mm)	φ	12	12	12	
Armatura costante superiore					
g) rete ø6/20"x20" collaborante ovunque	φ	n.	n.	n.	c
	ø6	2.5	2.5		2.00
	CampSup	0.71	0.71		
	ø6	2.5	2.5	2.5	2.00
	AppSup	0.71	0.71	0.71	
Armatura costante inferiore					
a) nessuna	-	-	-		2.00
	CampInf	-	-		
	-	-	-	-	2.00
	AppInf	-	-	-	
Ricoprimento di calcestruzzo sulle barre (cm)	c	2.0	2.0	2.0	
Copriferro di calcolo (cm)	h'	2.6	2.6	2.6	
Spessore solaio (cm)	H	25	25	25	
Larghezza nervature (cm)	b	12	12	12	
Altezza utile (cm)	d	22.4	22.4	22.4	
	← 352				
Armatura appoggi					
g) rete ø6/20"x20" collaborante ovunque	2.5ø6	2.5ø6	2.5ø6		
	0ø12	1ø12	0ø12		
	1ø12	1ø12	1ø12		
a) nessuna	0ø0	0ø0	0ø0		
Momento sollecitante (daN*m)	Med	315	1259	315	
Momento resistente (daN*m)	Mrd	588	1473	588	
indice di verifica	f	1.87	1.17	1.87	
Asse neutro (cm)	x _c	3	4	3	
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ _c	-129.2	-141.1	-129.2	
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	
Deformazione calcestruzzo	ε _c	-0.142%	-0.232%	-0.142%	
Campo di rottura	n.	2	2	2	
Ridistribuzione massima consentita	1-δ	30%	30%	30%	
Controllo ridistribuzione	1-δ	si	si	si	
g) rete ø6/20"x20" collaborante ovunque	2.5ø6	2.5ø6			
	0ø12	0ø12			
Armatura campate					
	2ø12	2ø12			
a) nessuna	0ø0	0ø0			
Momento sollecitante (daN*m)	Med	1050	1050		
Momento resistente (daN*m)	Mrd	1902	1902		
indice di verifica	f	1.81	1.81		
Asse neutro (cm)	x _c	3	3		
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913		
Sforzo calcestruzzo (daN/cm ²)	σ _c	-122.2	-122.2		
Deformazione acciaio	ε _s	1.000%	1.000%		
Deformazione calcestruzzo	ε _c	-0.127%	-0.127%		
Campo di rottura	n.	2	2		

Armatura minima sugli appoggi alle due estremità				
a) nessuna				
Armatura minima in campata				
a) nessuna				
← 415				
controllo armatura minima scelta: nessuna si n. si c				
Armatura appoggi				
	ϕ	n.	n.	n.
	ø6	2.5	2.5	2.5
sup.	ø12	-	1	-
CLIK PER PROCEDERE				
inf.	ø12	1	1	1
	-	-	-	-
1: VERIFICHE IN COMBINAZIONE ULTIMA				
Momento sollecitante (daN*m)	Med	315	1259	315
Momento resistente (daN*m)	Mrd	595	1482	595
indice di verifica	f	1.89	1.18	1.89
Asse neutro (cm)	xc	3	4	3
Sforzo acciaio (daN/cm ²)	σ_s	3913	3913	3913
Sforzo calcestruzzo (daN/cm ²)	σ_c	-125.3	-141.1	-125.3
Deformazione acciaio	ϵ_s	1.000%	1.000%	1.000%
Deformazione calcestruzzo	ϵ_c	-0.133%	-0.228%	-0.133%
Campo di rottura	n.	2	2	2
Ridistribuzione massima consentita	1- δ	30%	30%	30%
Controllo redistribuzione	1-δ	si	si	si
2: VERIFICHE IN COMBINAZIONE RARA				
σ_s limite		3600	3600	3600
σ_s		1879	3014	1879
indice di verifica lato acciaio	f	1.92	1.19	1.92
σ_c limite		149.4	149.4	149.4
σ_c		35.1	99.4	35.1
indice di verifica lato cls	f	4.26	1.50	4.26
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE				
σ_c limite		112.1	112.1	112.1
σ_c		28.5	80.8	28.5
indice di verifica lato cls	f	3.93	1.39	3.93
← 473				
Armatura campate				
	ϕ	n.	n.	c
	ø6	2.5	2.5	2.0
sup.	ø12	-	-	2.0
inf.	ø12	2	2	2.0
	-	-	-	2.0
controllo armatura minima scelta: nessuna si si				
1: VERIFICHE IN COMBINAZIONE ULTIMA				
Momento sollecitante (daN*m)	Med	1050	1050	
Momento resistente (daN*m)	Mrd	1902	1902	
indice di verifica	f	1.81	1.81	
Asse neutro (cm)	xc	3	3	
Sforzo acciaio (daN/cm ²)	σ_s	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ_c	-122.2	-122.2	
Deformazione acciaio	ϵ_s	1.000%	1.000%	
Deformazione calcestruzzo	ϵ_c	-0.127%	-0.127%	
Campo di rottura	n.	2	2	
2: VERIFICHE IN COMBINAZIONE RARA				
y		4.78	4.78	
Jci		12414	12414	
σ_s limite		3600	3600	
σ_s		1350	1350	
indice di verifica lato acciaio	f	2.67	2.67	
σ_c limite		149.4	149.4	
σ_c		24.4	24.4	
indice di verifica lato cls	f	6.12	6.12	
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE				
y		4.78	4.78	
Jci		12414	12414	
σ_c limite		112.1	112.1	
σ_c		18.4	18.4	
indice di verifica lato cls	f	6.09	6.09	
σ_s		1017	1017	
4: VERIFICHE IN COMBINAZIONE FREQUENTE				
σ_s		1084	1084	

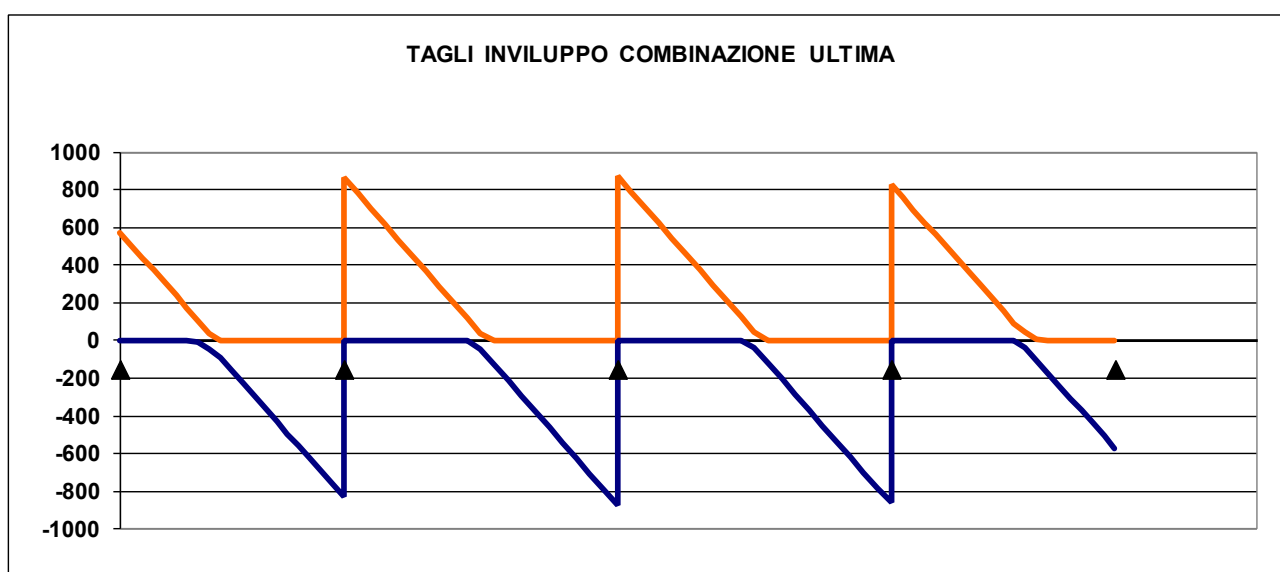
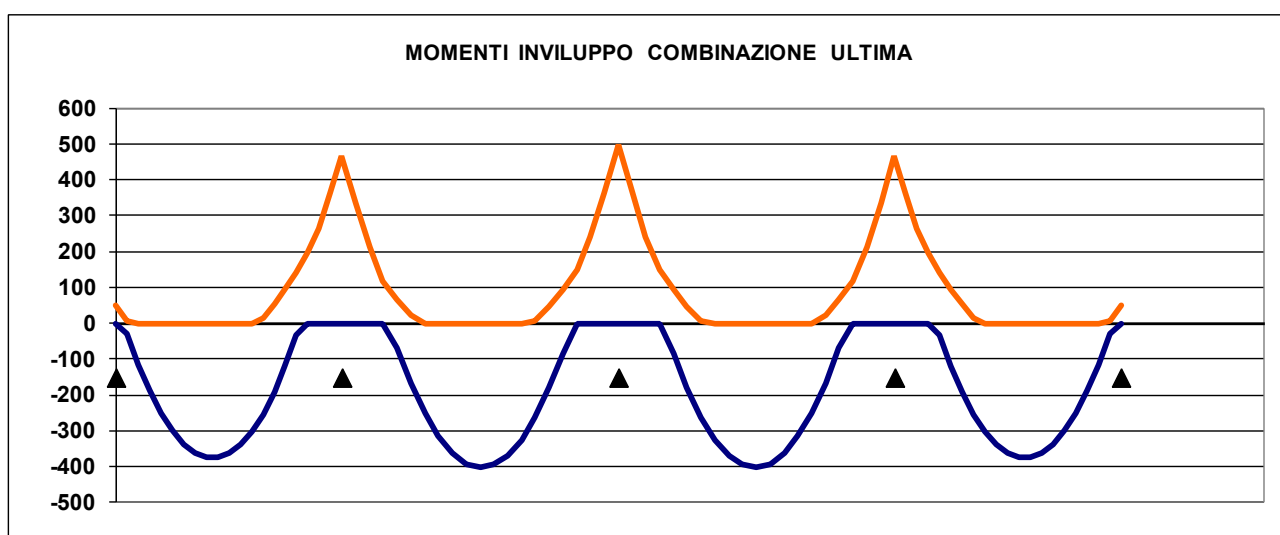
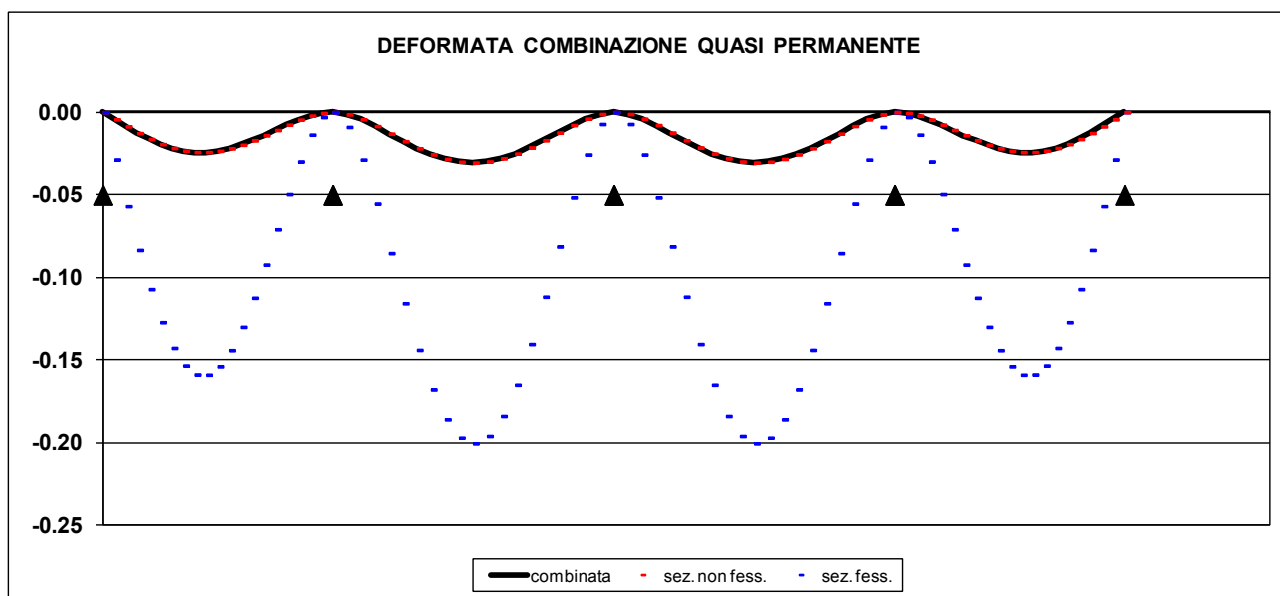
Verifiche a taglio				
<div> <div>1: con fasce piene</div> <div> <div>Tagli resistenti sx (daN)</div> <div>VRd</div> <div>1273</div> <div>1273</div> </div> <div> <div>fascia piena (dall'asse dell'appoggio)</div> <div>d1</div> <div>-</div> <div>28 cm</div> </div> <div> <div>Tagli resistenti dx (daN)</div> <div>VRd</div> <div>1273</div> <div>1273</div> </div> <div> <div>fascia piena (dall'asse dell'appoggio)</div> <div>d2</div> <div>28 cm</div> <div>-</div> </div> </div>				
<div> <div>2: con fasce piene e barre longitudinali tese</div> <div> <div> <div>ϕ</div> <div>n.</div> <div>n.</div> <div>n.</div> </div> <div> <div>ø6</div> <div>2.5</div> <div>2.5</div> <div>2.5</div> </div> <div> <div>sup.</div> <div>ø12</div> <div>-</div> <div>1</div> <div>-</div> </div> <div> <div>inf.</div> <div>ø12</div> <div>1</div> <div>1</div> <div>1</div> </div> <div> <div>-</div> <div>-</div> <div>-</div> <div>-</div> </div> </div> </div>				
<div> <div> <div>Tagli resistenti sx (daN)</div> <div>VRd</div> <div>1372</div> <div>1614</div> </div> <div> <div>fascia piena (dall'asse dell'appoggio)</div> <div>d1</div> <div>-</div> <div>-</div> </div> <div> <div>Tagli resistenti dx (daN)</div> <div>VRd</div> <div>1614</div> <div>1372</div> </div> <div> <div>fascia piena (dall'asse dell'appoggio)</div> <div>d2</div> <div>-</div> <div>-</div> </div> </div>				
<div> <div>← 566</div> </div>				
Verifiche di fessurazione				
CONDIZ. AMBIENTALI ORDINARIE				
Appoggi				
<div> <div> <div>diametro armature superiori</div> <div>ϕ</div> <div>6</div> <div>12</div> <div>6</div> </div> <div> <div>combinazione frequente</div> <div>σ_s</div> <div>1598</div> <div>2562</div> <div>1598</div> </div> <div> <div>comb. frequente CONDIZ. AMBIENTALI ORDINARIE</div> <div>f</div> <div>6.67</div> <div>1.53</div> <div>6.67</div> </div> <div> <div>combinazione quasi permanente</div> <div>σ_s</div> <div>1527</div> <div>2449</div> <div>1527</div> </div> <div> <div>comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE</div> <div>f</div> <div>5.33</div> <div>1.29</div> <div>5.33</div> </div> </div>				
Campate				
<div> <div> <div>diametro armature inferiori</div> <div>ϕ</div> <div>12</div> <div>12</div> </div> <div> <div>combinazione frequente</div> <div>σ_s</div> <div>1084</div> <div>1084</div> </div> <div> <div>comb. frequente CONDIZ. AMBIENTALI ORDINARIE</div> <div>f</div> <div>3.33</div> <div>3.33</div> </div> <div> <div>combinazione quasi permanente</div> <div>σ_s</div> <div>1017</div> <div>1017</div> </div> <div> <div>comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE</div> <div>f</div> <div>2.67</div> <div>2.67</div> </div> </div>				
Verifiche di snellezza				
<div> <div> <div>ρ</div> <div>0.46%</div> <div>0.46%</div> </div> <div> <div>ρ'</div> <div>0.14%</div> <div>0.14%</div> </div> <div> <div>λ limite tab</div> <div>26</div> <div>26</div> </div> <div> <div>K</div> <div>1.3</div> <div>1.3</div> </div> <div> <div>λ limite calc</div> <div>42.1</div> <div>42.1</div> </div> <div> <div>λ limite</div> <div>33.7</div> <div>33.7</div> </div> <div> <div>λ</div> <div>22.3</div> <div>22.3</div> </div> <div> <div>indice di verifica</div> <div>f</div> <div>1.51</div> <div>1.51</div> </div> </div>				
Verifiche di deformabilità				
PER L'INTEGRITA' DEI DIVISORI				
<div> <div> <div>Coefficiente di viscosità (11.2.10.7)</div> <div>ϕ(inf)</div> <div>1.7</div> <div>1.7</div> </div> </div>				
<div> <div> <div>Freccia massima sez. non-fessurata (cm)</div> <div>f max</div> <div>0.21</div> <div>0.21</div> </div> <div> <div>Freccia massima sez. fessurata (cm)</div> <div>f max</div> <div>0.77</div> <div>0.77</div> </div> <div> <div>Freccia massima combinata (cm)</div> <div>f max</div> <div>0.21</div> <div>0.21</div> </div> <div> <div>Freccia limite (cm)</div> <div>f lim</div> <div>1.12</div> <div>1.12</div> </div> <div> <div>indice di verifica</div> <div>f</div> <div>5.43</div> <div>5.43</div> </div> </div>				



Interasse nervature (m)		i 0.50				
1: COMBINAZIONE ULTIMA						
Momenti Max - per nervatura		-50				
Momenti Max + per nervatura		378 403 403 378				
Tagli dx Max per nervatura		575 862 869 830 575				
Tagli sx Max per nervatura		830 869 862				
Reazioni Max per nervatura		575 1692 1739 1692 575				
Reazioni Max per fascia di un metro		1149 3384 3478 3384 1149				
2: COMBINAZIONE RARA						
Momenti Max - per nervatura		-44				
Momenti Max + per nervatura		223 230 230 223				
Tagli dx Max per nervatura		412 627 634 616 412				
Tagli sx Max per nervatura		616 634 627				
Reazioni Max per nervatura		412 1244 1269 1244 412				
Reazioni Max per fascia di un metro		824 2487 2538 2487 824				
3: COMBINAZIONE QUASI PERMANENTE						
Momenti Max - per nervatura		-36				
Momenti Max + per nervatura		163 163 163 163				
Tagli dx Max per nervatura		322 497 504 497 322				
Tagli sx Max per nervatura		497 504 497				
Reazioni Max per nervatura		322 994 1008 994 322				
Reazioni Max per fascia di un metro		643 1989 2015 1989 643				
4: COMBINAZIONE FREQUENTE						
Momenti Max - per nervatura		-37				
Momenti Max + per nervatura		175 176 176 175				
Tagli dx Max per nervatura		340 523 530 521 340				
Tagli sx Max per nervatura		521 530 523				
Reazioni Max per nervatura		340 1044 1060 1044 340				
Reazioni Max per fascia di un metro		679 2089 2120 2089 679				
← 309						
Materiali						
Calcestruzzo	Classe	C25/30				
Acciaio	Tipo	B450C				
Dati geometrici						
Diametro delle barre longitudinali superiori (mm)	φ	12				
Diametro delle barre longitudinali inferiori (mm)	φ	12				
Armatura costante superiore						
φ	n.	n.				
c) rete ø6/20"x20" collaborante solo in campata	ø6	2.5				
	CampSup	0.71				
	-	-				
	AppSup	-				
Armatura costante inferiore						
a) nessuna	-	-				
	CampInf	-				
	-	-				
	AppInf	-				
Ricoprimento di calcestruzzo sulle barre (cm)	c	2.0				
Copriferro di calcolo (cm)	h'	2.6				
Spessore solaio (cm)	H	25				
Larghezza nervature (cm)	b	12				
Altezza utile (cm)	d	22.4				
← 352						
c) rete ø6/20"x20" collaborante solo in campata						
Armatura appoggi		0ø0	0ø0	0ø0	0ø0	0ø0
		1ø12	1ø12	1ø12	1ø12	1ø12
		1ø12	1ø12	1ø12	1ø12	1ø12
a) nessuna		0ø0	0ø0	0ø0	0ø0	0ø0
Momento sollecitante (daN*m)	Med	50	468	499	468	50
Momento resistente (daN*m)	Mrd	924	924	924	924	924
indice di verifica	f	18.43	1.97	1.85	1.97	18.43
Asse neutro (cm)	x.c	3	3	3	3	3
Sforzo acciaio (daN/cm ²)	σ.s	3913	3913	3913	3913	3913
Sforzo calcestruzzo (daN/cm ²)	σ.c	-138.9	-138.9	-138.9	-138.9	-138.9
Deformazione acciaio	ε.s	1.000%	1.000%	1.000%	1.000%	1.000%
Deformazione calcestruzzo	ε.c	-0.175%	-0.175%	-0.175%	-0.175%	-0.175%
Campo di rottura	n.	2	2	2	2	2
Ridistribuzione massima consentita	1-δ	30%	30%	30%	30%	30%
Controllo redistribuzione	1-δ	si	si	si	si	si
c) rete ø6/20"x20" collaborante solo in campata						
Armatura campate		2.5ø6	2.5ø6	2.5ø6	2.5ø6	
		0ø12	0ø12	0ø12	0ø12	
		1ø12	1ø12	1ø12	1ø12	
a) nessuna		0ø0	0ø0	0ø0	0ø0	
Momento sollecitante (daN*m)	Med	378	403	403	378	
Momento resistente (daN*m)	Mrd	972	972	972	972	
indice di verifica	f	2.58	2.41	2.41	2.58	
Asse neutro (cm)	x.c	2	2	2	2	
Sforzo acciaio (daN/cm ²)	σ.s	3913	3913	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ.c	-98.4	-98.4	-98.4	-98.4	
Deformazione acciaio	ε.s	1.000%	1.000%	1.000%	1.000%	
Deformazione calcestruzzo	ε.c	-0.090%	-0.090%	-0.090%	-0.090%	
Campo di rottura	n.	2	2	2	2	

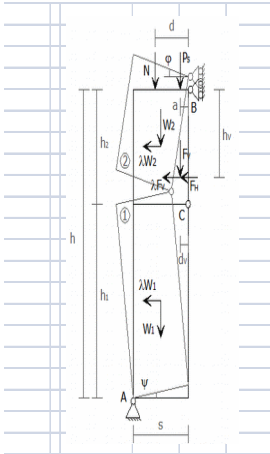
Armatura minima sugli appoggi alle due estremità							
a) nessuna							
Armatura minima in campata							
a) nessuna							
← 415							
controllo armatura minima scelta: nessuna sì							
Armatura appoggi	φ	n.	n.	n.	n.	n.	c
	-	-	-	-	-	-	2.0
	sup. ø12	1	1	1	1	1	2.0
	inf. ø12	1	1	1	1	1	2.0
	-	-	-	-	-	-	2.0
CLIK PER PROCEDERE							
1: VERIFICHE IN COMBINAZIONE ULTIMA							
Momento sollecitante (daN*m)	Med	50	468	499	468	50	
Momento resistente (daN*m)	Mrd	924	924	924	924	924	
indice di verifica	f	18.43	1.97	1.85	1.97	18.43	
Asse neutro (cm)	x _c	3	3	3	3	3	
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	3913	3913	3913	
Sforzo calcestruzzo (daN/cm ²)	σ _c	-138.9	-138.9	-138.9	-138.9	-138.9	
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	1.000%	1.000%	
Deformazione calcestruzzo	ε _c	-0.175%	-0.175%	-0.175%	-0.175%	-0.175%	
Campo di rottura	n.	2	2	2	2	2	
Ridistribuzione massima consentita	1-δ	30%	30%	30%	30%	30%	
Controllo ridistribuzione	1-δ	sì	sì	sì	sì	sì	
2: VERIFICHE IN COMBINAZIONE RARA							
σ _s limite		3600	3600	3600	3600	3600	
σ _s		193	1735	1829	1735	193	
indice di verifica lato acciaio	f	18.70	2.07	1.97	2.07	18.70	
σ _c limite		149.4	149.4	149.4	149.4	149.4	
σ _c		4.7	42.7	45.0	42.7	4.7	
indice di verifica lato cls	f	31.51	3.50	3.32	3.50	31.51	
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE							
σ _c limite		112.1	112.1	112.1	112.1	112.1	
σ _c		3.9	33.6	35.0	33.6	3.9	
indice di verifica lato cls	f	29.09	3.34	3.20	3.34	29.09	
← 473							
Armatura campate							
	φ	n.	n.	n.	n.		c
	ø6	2.5	2.5	2.5	2.5		2.0
	sup. ø12	-	-	-	-		2.0
	inf. ø12	1	1	1	1		2.0
	-	-	-	-	-		2.0
controllo armatura minima scelta: nessuna sì							
1: VERIFICHE IN COMBINAZIONE ULTIMA							
Momento sollecitante (daN*m)	Med	378	403	403	378		
Momento resistente (daN*m)	Mrd	972	972	972	972		
indice di verifica	f	2.58	2.41	2.41	2.58		
Asse neutro (cm)	x _c	2	2	2	2		
Sforzo acciaio (daN/cm ²)	σ _s	3913	3913	3913	3913		
Sforzo calcestruzzo (daN/cm ²)	σ _c	-98.4	-98.4	-98.4	-98.4		
Deformazione acciaio	ε _s	1.000%	1.000%	1.000%	1.000%		
Deformazione calcestruzzo	ε _c	-0.090%	-0.090%	-0.090%	-0.090%		
Campo di rottura	n.	2	2	2	2		
2: VERIFICHE IN COMBINAZIONE RARA							
y		3.51	3.51	3.51	3.51		
J _{ci}		6787	6787	6787	6787		
σ _s limite		3600	3600	3600	3600		
σ _s		931	960	960	931		
indice di verifica lato acciaio	f	3.87	3.75	3.75	3.87		
σ _c limite		149.4	149.4	149.4	149.4		
σ _c		11.5	11.9	11.9	11.5		
indice di verifica lato cls	f	12.97	12.58	12.58	12.97		
3: VERIFICHE IN COMBINAZIONE QUASI PERMANENTE							
y		3.51	3.51	3.51	3.51		
J _{ci}		6787	6787	6787	6787		
σ _c limite		112.1	112.1	112.1	112.1		
σ _c		8.4	8.4	8.4	8.4		
indice di verifica lato cls	f	13.29	13.32	13.32	13.29		
σ _s		681	680	680	681		
4: VERIFICHE IN COMBINAZIONE FREQUENTE							
σ _s		731	736	736	731		

Verifiche a taglio					
1: con fasce piene					
Tagli resistenti sx (daN)	VRd	1273	1273	1273	1273
fascia piena (dall'asse dell'appoggio)	d1	-	-	-	-
Tagli resistenti dx (daN)	VRd	1273	1273	1273	1273
fascia piena (dall'asse dell'appoggio)	d2	-	-	-	-
2: con fasce piene e barre longitudinali tese					
ϕ	n.	n.	n.	n.	n.
sup.	$\phi 12$	1	1	1	1
inf.	$\phi 12$	1	1	1	1
Tagli resistenti sx (daN)	VRd	1372	1372	1372	1372
fascia piena (dall'asse dell'appoggio)	d1	-	-	-	-
Tagli resistenti dx (daN)	VRd	1372	1372	1372	1372
fascia piena (dall'asse dell'appoggio)	d2	-	-	-	-
← 566					
Verifiche di fessurazione					
CONDIZ. AMBIENTALI ORDINARIE					
Appoggi					
diametro armature superiori	ϕ	12	12	12	12
combinazione frequente	σ_s	164	1439	1503	1439
comb. frequente CONDIZ. AMBIENTALI ORDINARIE	f	3.33	3.33	3.33	3.33
combinazione quasi permanente	σ_s	156	1364	1421	1364
comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE	f	2.67	2.67	2.67	2.67
Campate					
diametro armature inferiori	ϕ	12	12	12	12
combinazione frequente	σ_s	731	736	736	731
comb. frequente CONDIZ. AMBIENTALI ORDINARIE	f	3.33	3.33	3.33	3.33
combinazione quasi permanente	σ_s	681	680	680	681
comb. quasi perm. CONDIZ. AMBIENTALI ORDINARIE	f	2.67	2.67	2.67	2.67
Verifiche di snellezza					
ρ		0.23%	0.23%	0.23%	0.23%
ρ'		0.14%	0.14%	0.14%	0.14%
λ limite tab		26	30	30	26
K		1.3	1.5	1.5	1.3
λ limite calc		71.5	77.3	77.3	71.5
λ limite		57.2	61.9	61.9	57.2
λ		12.6	15.4	15.4	12.6
indice di verifica	f	4.54	4.02	4.02	4.54
Verifiche di deformabilità					
PER L'INTEGRITA' DEI DIVISORI					
Coefficiente di viscosità (11.2.10.7)	$\phi(\text{inf})$	1.8	1.8	1.8	1.8
Freccia massima sez. non-fessurata (cm)	f max	0.02	0.03	0.03	0.02
Freccia massima sez. fessurata (cm)	f max	0.16	0.20	0.20	0.16
Freccia massima combinata (cm)	f max	0.02	0.03	0.03	0.02
Freccia limite (cm)	f lim	0.63	0.77	0.77	0.63
indice di verifica	f	26.05	25.24	25.24	26.05



1.14 Verifiche elementi secondari

Di seguito si riportano le verifiche di resistenza e stabilità condotte sulle pareti di tamponamento del fabbricato:



Caratteristiche pannello murario

Z _{PIANO}	675	cm			
H _{PARETE}	252	cm	Ares	3000	cmq
B	100	cm	J	225000	cm4
s	30	cm	g	9.81	m/sec2
fk	72	kg/cm	fd	36	kg/cm
gamma	880	kg/mc			
E	72000	kg/cm			

Azione sismica

alpha	0.182	-	Sa	0.52	NTC08
S	1.43	-			
Z	801	cm	Sa	0.447	NTC18
H	1320	cm			
Ta	0.016	sec	ta/T1	0.03	
T1	0.50	sec			
Wa	665.28	kg			
qa	2	-			
Fsismica	149	kg			

$$S_a(T_a) = \begin{cases} \alpha S \left(1 + \frac{z}{H}\right) \left[\frac{a_p}{1 + (a_p - 1) \left(1 - \frac{T_a}{aT_1}\right)^2} \right] \geq \alpha S & \text{per } T_a < aT_1 \\ \alpha S \left(1 + \frac{z}{H}\right) a_p & \text{per } aT_1 \leq T_a < bT_1 \\ \alpha S \left(1 + \frac{z}{H}\right) \left[\frac{a_p}{1 + (a_p - 1) \left(1 - \frac{T_a}{bT_1}\right)^2} \right] \geq \alpha S & \text{per } T_a \geq bT_1 \end{cases}$$

Schema 1

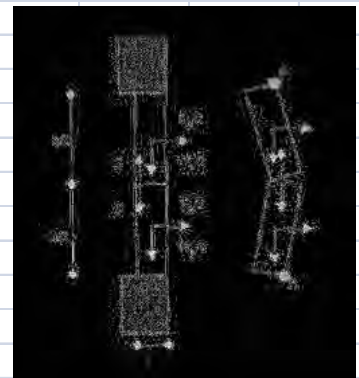
Med	94	kgm	sigma 0	0.22176	kg/cm
Mrd	99	kgm			
	1.06				

Schema 2

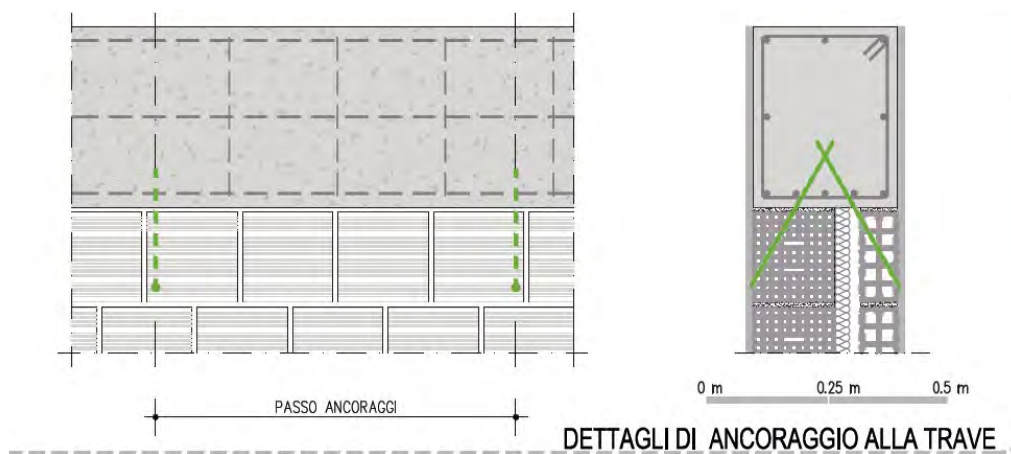
Med	47	kgm	sigma 0	0.11088	kg/cm
Mrd	50	kgm			
	1.06				

Schema 3

Med	97	kgm			
Mrd	100	kgm			
	1.03				



In riferimento alle verifiche condotte sui nuovi tamponamenti si comunica che si intende eseguire un collegamento in testa e al piede della parete come quello rappresentato nel disegno seguente con ferri diametro 6 mm ad un passo di 50 cm gli uni dagli altri, senza l'utilizzo di ulteriori rinforzi:



Elaborato 3

RELAZIONE SUI MATERIALI

3. Relazione sui Materiali

La relazione sui materiali è stata redatta secondo le prescrizioni e le indicazioni riportate nel capitolo 10 e 11 delle NTC18, tenendo conto delle indicazioni fornite nelle relative parti della Circolare Ministeriale.

3.1 Elenco dei materiali impiegati e loro modalità di posa in opera

Si descrivono di seguito i materiali utilizzati negli interventi locali previsti per l'edificio in oggetto.

Calcestruzzo C 25/30

Per realizzare le strutture in c.a. è previsto calcestruzzo classe C25/30.

La resistenza caratteristica a compressione è definita come la resistenza per la quale si ha il 5% di probabilità di trovare valori inferiori. Nelle presenti norme la resistenza caratteristica designa quella dedotta da prove su provini come sopra descritti, confezionati e stagionati come specificato al § 11.2.4, eseguite a 28 giorni di maturazione. Si dovrà tener conto degli effetti prodotti da eventuali processi accelerati di maturazione. In tal caso potranno essere indicati altri tempi di maturazione a cui riferire le misure di resistenza ed il corrispondente valore caratteristico.

Il conglomerato per il getto delle strutture di un'opera o di parte di essa si considera omogeneo se confezionato con la stessa miscela e prodotto con medesime procedure.

Acciaio B450C

L'acciaio da armatura per c.c.a. da utilizzare sarà il B450C Controllato ad aderenza migliorata come già descritto nelle tavole del progetto esecutivo. Il materiale sarà conforme con quanto richiesto al punto § 11.3 delle NTC18.

11.3.2.1 Acciaio per cemento armato B450C

L'acciaio per cemento armato B450C è caratterizzato dai seguenti valori nominali delle tensioni caratteristiche di snervamento e rottura da utilizzare nei calcoli:

Tabella 11.3.Ia

f_{yk}	450 N/mm ²
f_{tk}	540 N/mm ²

e deve rispettare i requisiti indicati nella seguente Tab. 11.3.Ib:

Nella tabella precedente sono riportate le caratteristiche di resistenza nominali che saranno opportunamente ridotte per i coefficienti di sicurezza, come indicato nella normativa tecnica.

Acciaio Strutturale S275

Tutti gli acciai che saranno utilizzati nelle opere previste, siano essi destinati ad utilizzo come armature per cemento armato o carpenterie in strutture metalliche devono essere prodotti con un sistema permanente di controllo interno della produzione in stabilimento che deve assicurare il mantenimento dello stesso livello di affidabilità nella conformità del prodotto finito, indipendentemente dal processo di produzione.

Per la realizzazione delle strutture metalliche devono essere utilizzati acciai conformi alle norme armonizzate della Serie Uni En 10025.

Il direttore dei lavori prima della messa in opera, è tenuto a verificare quanto sopra indicato e rifiutare le eventuali forniture non conformi.

È stata scelta questa tipologia costruttiva per non realizzare cordoli in breccia nella muratura, che possono modificare lo stato tensionale delle pareti portanti. In questo modo si prevedono selle localizzate in prossimità dell'appoggio per inserire le travi in acciaio e creare un corretto grado di vincolamento.

Fissaggi Tipo Fischer-Hilti

Barre filettate da un metro, con dado esagonale e rosetta, in acciaio zincato classe 8.8 e 4.6. questi elementi sono utilizzati generalmente per applicazioni strutturali e carpenteria pesante.

Malta

Secondo le indicazioni delle NTC18 la malta di allettamento per la muratura ordinaria deve avere resistenza media non inferiore a 5 MPa e i giunti verticali devono essere riempiti con malta.

Si è scelto di utilizzare malta con caratteristiche meccaniche medie tipiche delle malte M10.

3.2 Valori di calcolo

Calcestruzzo C 25/30

In sede progettuale sono state assunte convenzionalmente le seguenti grandezze nominali delle proprietà del materiale:

$$R_{ck} = 30 \text{ MPa} \quad f_{ck} = 24.9 \text{ MPa} \quad f_{cd} = 14.11 \text{ MPa}$$

Si osserva che la classe d'esposizione del calcestruzzo è in entrambi i casi XC1.

<ul style="list-style-type: none">• Produzione calcestruzzo: Ordinaria• Valore di f_{bd} riferito a barre $\Phi \leq 32\text{mm}$															
Classe	f_{ck}	α_{cc}	γ_{cls}	E_{cm}	f_{cd}	f_{ctm}	f_{ctk}	f_{ctd}	f_{ctm}	f_{hk}	f_{bd}	ε_{c2}	ε_{cu}	$\sigma_{c,Rara}$	$\sigma_{c,QP}$
	[MPa]			[MPa]	[MPa]	[MPa]	[MPa]	[MPa]	[MPa]	[MPa]	[MPa]			[MPa]	[MPa]
C25/30	25.00	0.85	1.50	31,476	14.17	2.57	1.80	1.20	3.08	4.04	2.70	0.00200	0.00350	15.00	11.25
Calcestruzzo a prestazione garantita secondo UNI EN 206-1															
<ul style="list-style-type: none">• Cemento conforme alla norma EN 197-1• Diametro massimo barre di armatura, $\Phi_{max} = 14 \text{ mm}$• Aggregati normali conformi alla norma UNI EN 12620, $D_{max} = 20 \text{ mm}$• Interfero minimo $d_{bars} = 25 \text{ mm}$• Acqua di impasto conforme alla norma EN 1008• Additivi conformi alla norma EN 934-2															
Classe esposizione Minima classe di resistenza Rapporto $(A/C)_{max}$ Slump Quantità minima cemento $[\text{kg/m}^3]$ Contenuto minimo aria Altro															
XC2	C25/30					0.60			S4	300			-		-

Acciaio Strutturale S275

In sede progettuale sono state assunte convenzionalmente le seguenti grandezze nominali delle proprietà del materiale:

$$E = 210000 \text{ MPa}$$

$$G = E / [2(1 + \nu)]$$

$$\nu = 0.3$$

$$\rho = 7850 \text{ kg/m}^3$$

Norme e qualità degli acciai	Spessore nominale dell'elemento			
	t ≤ 40 mm		40 mm < t ≤ 80 mm	
	f _{yk} [N/mm ²]	f _{tk} [N/mm ²]	f _{yk} [N/mm ²]	f _{tk} [N/mm ²]
UNI EN 10025-2				
S 235	235	360	215	360
S 275	275	430	255	410
S 355	355	510	335	470
S 450	440	550	420	550
UNI EN 10025-3				
S 275 N/NL	275	390	255	370
S 355 N/NL	355	490	335	470
S 420 N/NL	420	520	390	520
S 460 N/NL	460	540	430	540
UNI EN 10025-4				
S 275 M/ML	275	370	255	360
S 355 M/ML	355	470	335	450
S 420 M/ML	420	520	390	500
S 460 M/ML	460	540	430	530
UNI EN 10025-5				
S 235 W	235	360	215	340
S 355 W	355	510	335	490

$$f_{yd} = 261 \text{ MPa}$$

Acciaio per cemento armato B450C

L'acciaio per cemento armato B450C è caratterizzato dai seguenti valori nominali delle tensioni caratteristiche di snervamento e rottura da utilizzare nei calcoli:

f _{y nom}	450 N/mm ²
f _{t nom}	540 N/mm ²

CARATTERISTICHE	REQUISITI	FRATTILE (%)
Tensione caratteristica di snervamento f _{yk}	≥ f _{y nom}	5.0
Tensione caratteristica di rottura f _{tk}	≥ f _{t nom}	5.0
(f _t /f _y) _k	≥ 1.15	10.0
(f _t /f _y) _{0.95}	≥ 1.35	10.0
Allungamento (A _g) _k	≥ 7.5 %	10.0
Diametro del mandrino per prove di piegamento a 90 ° e successivo raddrizzamento senza cricche:		
φ < 12 mm	4φ	
12 ≤ φ ≤ 16 mm	5φ	
per 16 < φ ≤ 25 mm	8φ	
per 25 < φ ≤ 40 mm	10φ	

Classe acciaio	f _{yk} [MPa]	γ _s	f _{tk} [MPa]	E _s [MPa]	f _{yd} [MPa]	ε _{yd}	ε _{uk}	(f _t /f _{y nom}) _k	ε _{ud}	k = (f _t /f _y) _k	σ _{s, Rara} [MPa]	Diametro minimo mandrino di piegatura
B450C	450.00	1.15	540.00	210,000	391.30	0.00186	0.07500	≤ 1.25	0.06750	1.15 - 1.35	360.00	4φ

Fissaggi Tipo Fischer-Hilti

Le caratteristiche meccaniche delle barre filettate zincate – Classe 8.8 sono le seguenti:

Carico unitario a rottura: > 830 MPa

Carico unitario di scostamento dalla proporzionalità > 660 MPa

Allungamento dopo la rottura > 12%

Elaborato 4

ELABORATI GRAFICI ESECUTIVI E

PARTICOLARI COSTRUTTIVI

4. Elaborati grafici esecutivi e particolari costruttivi

4.1 Progetto esecutivo Nuova costruzione

Vedi tavole denominate:

- 4A.1 - FONDAZIONI - CONSOLIDAMENTI CON PALI IN GHIAIA
- 4A.2 - FONDAZIONI - PLATEA IN C.A.
- 4A.3 - FONDAZIONI - PLATEA IN C.A.- RAFFITTIMENTI
- 4A.4 - FONDAZIONI - TRAVI IN C.A.- I°PARTE
- 4A.5 - FONDAZIONI - TRAVI IN C.A.- II°PARTE
- 4A.6 - PIANTA PILASTRI E TRAVI PIANO 1°
- 4A.7 - PIANTA SOLAI PIANO 1°
- 4A.8 - PIANTA PILASTRI E TRAVI PIANO 2°
- 4A.9 - PIANTA SOLAI PIANO 2°
- 4A.10 - PIANTA PILASTRI E TRAVI PIANO 3°
- 4A.11 - PIANTA SOLAI PIANO 3°
- 4A.12 - PIANTA PILASTRI E TRAVI PIANO 4°
- 4A.13 - PIANTA SOLAI PIANO 4°
- 4A.14 - SVILUPPO ARMATURE PILASTRI IN C.A. FILI 1-2-5-6-7-9-17-54-56-69-70-73
- 4A.15 - SVILUPPO ARMATURE PILASTRI IN C.A. FILI 27-31-33-34-38-39-44-45-48-50-62
- 4A.16 - SVILUPPO ARMATURE PILASTRI IN C.A. FILI 35-37-40-41-43-51-52
- 4A.17 - SVILUPPO ARMATURE PARETI IN C.A. E SCALE
- 4A.18 - SEZIONI E PARTICOLARI ELEMENTI SECONDARI

Elaborato 5

*PIANO DI MANUTENZIONE DELLA PARTE
STRUTTURALE DELL'OPERA*

5. Piano di manutenzione della parte strutturale dell'opera

Il piano di manutenzione delle strutture è il documento complementare al progetto strutturale che ne prevede, pianifica e programma tenendo conto degli elaborati progettuali esecutivi dell'intera opera l'attività di manutenzione, al fine di mantenerne nel tempo la funzionalità, le caratteristiche di qualità l'efficienza ed il valore economico.

I manuali d'uso e di manutenzione rappresentano gli strumenti con cui l'utente si rapporta con l'immobile: direttamente utilizzandolo evitando comportamenti anomali che possano danneggiarne o comprometterne la durabilità e le caratteristiche; attraverso i manutentori che utilizzeranno così metodologie più confacenti ad una gestione che coniughi economicità e durabilità del bene.

A tal fine, i manuali definiscono le procedure di raccolta e di registrazione dell'informazione nonché le azioni necessarie per impostare il piano di manutenzione e per organizzare in modo efficiente, sia sul piano tecnico che su quello economico, il servizio di manutenzione.

Il manuale d'uso mette a punto una metodica di ispezione dei manufatti che individua sulla base dei requisiti fissati dal progettista in fase di redazione del progetto, la serie di guasti che possono influenzare la durabilità del bene e per i quali, un intervento manutentivo potrebbe rappresentare allungamento della vita utile e mantenimento del valore patrimoniale. Il manuale di manutenzione invece rappresenta lo strumento con cui l'esperto si rapporta con il bene in fase di gestione di un contratto di manutenzione programmata.

Il programma infine è lo strumento con cui, chi ha il compito di gestire il bene, riesce a programmare le attività in riferimento alla previsione del complesso di interventi inerenti la manutenzione di cui si presumono la frequenza, gli indici di costo orientativi e le strategie di attuazione nel medio e nel lungo periodo.

Il piano di manutenzione è organizzato nei tre strumenti individuati dall'art. 40 del regolamento LLPP ovvero:

- a. il manuale d'uso;
- b. il manuale di manutenzione;
- c. il programma di manutenzione:
- d. il sottoprogramma delle prestazioni, che prende in considerazione, per classe di requisito, le prestazioni fornite dal bene e dalle sue parti nel corso del suo ciclo di vita;
- e. il sottoprogramma dei controlli, che definisce il programma delle verifiche e dei controlli al fine di rilevare il livello prestazionale (qualitativo e quantitativo) nei successivi momenti della vita del bene, individuando la dinamica della caduta delle prestazioni aventi come estremi il valore di collaudo e quello minimo di norma;
- f. il sottoprogramma degli interventi di manutenzione, che riporta in ordine temporale i differenti interventi di manutenzione, al fine di fornire le informazioni per una corretta conservazione del bene.

Tali strumenti devono consentire di raggiungere, in accordo con quanto previsti dalla norma " UNI 10874 Criteri di stesura dei manuali d'uso e di manutenzione" almeno i seguenti obiettivi, raggruppati in base alla loro natura:

1. Obiettivi tecnico – funzionali:

- a. istituire un sistema di raccolta delle "informazioni di base" e di aggiornamento con le "informazioni di ritorno" a seguito degli interventi, che consenta, attraverso l'implementazione e il costante aggiornamento del "sistema informativo", di conoscere e mantenere correttamente l'immobile e le sue parti;
 - b. consentire l'individuazione delle strategie di manutenzione più adeguate in relazione alle caratteristiche del bene immobile ed alla più generale politica di gestione del patrimonio immobiliare;
 - c. istruire gli operatori tecnici sugli interventi di ispezione e manutenzione da eseguire, favorendo la corretta ed efficiente esecuzione degli interventi;
 - d. istruire gli utenti sul corretto uso dell'immobile e delle sue parti, su eventuali interventi di piccola manutenzione che possono eseguire direttamente; sulla corretta interpretazione degli indicatori di uno stato di guasto o di malfunzionamento e sulle procedure per la sua segnalazione alle competenti strutture di manutenzione;
 - e. definire le istruzioni e le procedure per controllare la qualità del servizio di manutenzione.
2. Obiettivi economici:
- a. ottimizzare l'utilizzo del bene immobile e prolungarne il ciclo di vita con l'effettuazione d'interventi manutentivi mirati;
 - b. conseguire il risparmio di gestione sia con il contenimento dei consumi energetici o di altra natura, sia con la riduzione dei guasti e del tempo di non utilizzazione del bene immobile;
 - c. consentire la pianificazione e l'organizzazione più efficiente ed economica del servizio di manutenzione.

Il presente "Piano di manutenzione della parte strutturale dell'opera" è redatto ai sensi del D.M. 14 gennaio 2008 art. 10.1.

Oggetto: Progetto per la costruzione di un nuovo fabbricato ad uso ricovero attrzzi agricoli in località san vittore via del rio 577

- ✈ Committente dei Lavori: ACER - Azienda Casa Emilia-Romagna della Provincia di Forlì-Cesena
- ✈ Ubicazione opere: Via G. Galilei - Cesenatico (FC)
- ✈ Foglio: 39
- ✈ P.IIa: 226
- ✈ Descrizione interventi: Nuova costruzione
- ✈ Progettista Architettonico: Arch. Paolo Severi
- ✈ Progettazione delle Strutture: Ing. Davide Neri P.zza Sciascia 51, 47522 Cesena (FC) iscritto all'Ordine degli Ingegneri della provincia di Forlì Cesena al n. 1002/A
- ✈ Direzione Lavori: Arch. Paolo Severi

Al termine dei lavori e del relativo certificato di collaudo le opere verranno consegnate al Committente dei Lavori. Restano a carico del Committente le attività di ispezione, gestione e manutenzione delle opere

realizzate, rimanendo altresì a carico dell'appaltatore la garanzia per le difformità e i vizi dell'opera.

Unità strutturali

Strutture di fondazione

1. Travi di fondazione in c.a.
3. Platee in c.a.

Strutture in elevazione

1. Pilastri in c.a.
4. Travi in c.a.
8. Murature in blocchi

Strutture orizzontali

2. Solette in c.a.

MANUALE D'USO

Travi di fondazione in c.a.

Descrizione

Elementi strutturali in conglomerato cementizio armato a sviluppo lineare orizzontale o sub-orizzontale con superfici a contatto con il terreno o magrone di cls.

Funzione

Ripartizione dei carichi della struttura sul terreno.

Modalità d'uso corretto

Le travi di fondazioni sono concepite per resistere ai carichi di progetto della struttura in elevazione.

Platea in c.a.

Descrizione

Elemento strutturale in conglomerato cementizio armato a sviluppo superficiale orizzontale o sub-orizzontale con superfici a contatto con il terreno o magrone di cls.

Funzione

Ripartizione dei carichi della struttura sul terreno.

Modalità d'uso corretto

La platea è concepita per resistere ai carichi di progetto della struttura in elevazione.

Pilastri in c.a.

Descrizione

Elementi strutturali in conglomerato cementizio armato a sviluppo lineare verticale o sub-verticale.

Funzione

Sostegno delle travi e dei solai.

Modalità d'uso corretto

I pilastri in c.a. sono concepiti per resistere ai carichi di progetto trasmessi dalle travi e dagli impalcati. Non ne deve essere compromessa l'integrità e la funzionalità. Controllo periodico del grado di usura con contestuale rilievo di eventuali anomalie.

Travi in c.a.

Descrizione

Elementi strutturali in conglomerato cementizio armato a sviluppo lineare orizzontale o sub-orizzontale.

Funzione

Sostegno delle murature di tamponamento e dei solai.

Modalità d'uso corretto

Le travi in c.a. sono concepite per resistere ai carichi di progetto trasmessi dai solai e dai tamponamenti. Non ne deve essere compromessa l'integrità e la funzionalità. Controllo periodico del grado di usura con contestuale rilievo di eventuali anomalie.

Murature in blocchi

Descrizione

Elementi strutturali in blocchi artificiali e malta a sviluppo superficiale verticale.

Funzione

Resistenza a carichi verticali e orizzontali. Sostegno solai.

Modalità d'uso corretto

Le murature in blocchi sono concepite per resistere ai carichi di progetto della struttura in elevazione. Non ne deve essere compromessa l'integrità e la funzionalità. Controllo periodico del grado di usura con contestuale rilievo di eventuali anomalie.

Solette in c.a.

Descrizione

Elementi strutturali costituiti da getti di c.a., con eventuale interposizione di blocchi di alleggerimento a sviluppo superficiale orizzontale o sub-orizzontale.

Funzione

Creazione di superfici resistenti eventualmente praticabili, con funzione di collegamento delle strutture verticali.

Modalità d'uso corretto

I solai sono concepiti per resistere ai carichi di progetto della struttura. Non ne deve essere compromessa l'integrità e la funzionalità. Controllo periodico del grado di usura con contestuale rilievo di eventuali anomalie.

MANUALE DI MANUTENZIONE

Travi di fondazione in c.a.

Livello minimo di prestazioni

Le travi di fondazione devono garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Anomalie riscontrabili

- ✈ Cedimenti differenziali con conseguenti abbassamenti del piano di imposta delle fondazioni
- ✈ Distacchi murari
- ✈ Lesioni in elementi direttamente connessi
- ✈ Comparsa di risalite di umidità
- ✈ Corrosione delle armature degli elementi verticali spiccati

Controlli

- ✈ Periodicità: annuale
- ✈ Esecutore: personale tecnico specializzato
- ✈ Forma di controllo: visivo, integrato da eventuali prove non distruttive

Interventi manutentivi

Esecutore: personale tecnico specializzato

Platee di fondazione in c.a.

Livello minimo di prestazioni

Le platee di fondazione devono garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Anomalie riscontrabili

- ✈ Cedimenti differenziali con conseguenti abbassamenti del piano di imposta delle fondazioni
- ✈ Distacchi murari
- ✈ Lesioni in elementi direttamente connessi
- ✈ Comparsa di risalite di umidità
- ✈ Corrosione delle armature degli elementi verticali spiccati

Controlli

- ✈ Periodicità: annuale

✈ Esecutore: personale tecnico specializzato

✈ Forma di controllo: visivo, integrato da eventuali prove non distruttive

Interventi manutentivi

Esecutore: personale tecnico specializzato

Pilastrini in c.a.

Livello minimo di prestazioni

I pilastri in c.a. devono garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Anomalie riscontrabili

✈ Distacchi

✈ Lesioni

✈ Cavillature

✈ Comparsa di macchie di umidità

✈ Difetti di verticalità

Controlli

✈ Periodicità: annuale

✈ Esecutore: personale tecnico specializzato

✈ Forma di controllo: visivo, integrato da eventuali prove non distruttive

Interventi manutentivi

Esecutore: personale tecnico specializzato

Travi in c.a.

Livello minimo di prestazioni

Le travi in c.a. devono garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Anomalie riscontrabili

✈ Distacchi

✈ Lesioni

✈ Cavillature

✈ Comparsa di macchie di umidità

Controlli

✈ Periodicità: annuale

✈ Esecutore: personale tecnico specializzato

✈ Forma di controllo: visivo, integrato da eventuali prove non distruttive

Interventi manutentivi

Esecutore: personale tecnico specializzato

Murature in blocchi

Livello minimo di prestazioni

Le murature in blocchi devono garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Anomalie riscontrabili

✈ Distacchi

✈ Fessurazioni

✈ Comparsa di macchie di umidità

✈ Eccessiva deformazione

✈ Difetti di verticalità

✈ Sbandamenti fuori piano

✈ Polverizzazione della malta

Controlli

✈ Periodicità: annuale

✈ Esecutore: personale tecnico specializzato

✈ Forma di controllo: visivo, integrato da eventuali prove non distruttive

Interventi manutentivi

Esecutore: personale tecnico specializzato

Solette in c.a.

Livello minimo di prestazioni

Le solette in c.a. devono garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Anomalie riscontrabili

✈ Distacchi

✈ Fessurazioni

✈ Comparsa di macchie di umidità

✈ Eccessiva deformazione

✈ Eccessiva vibrazione

Controlli

✈ Periodicità: annuale

✈ Esecutore: personale tecnico specializzato

✈ Forma di controllo: visivo, integrato da eventuali prove non distruttive

Interventi manutentivi

Esecutore: personale tecnico specializzato

PROGRAMMA DI MANUTENZIONE

Programma delle prestazioni

La vita nominale dell'opera è quella indicata nella apposita relazione di calcolo, pari a 50 anni.

Strutture di fondazione

1. Travi di fondazione in c.a.

3. Platee in c.a.

Le strutture di fondazione dovranno garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Strutture in elevazione

1. Pilastri in c.a.

4. Travi in c.a.

8. Murature in blocchi

Le strutture in elevazione dovranno garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Strutture orizzontali

2. Solette in c.a.

Le strutture orizzontali dovranno garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Programma dei controlli

L'esito di ogni ispezione deve formare oggetto di uno specifico rapporto da conservare insieme alla relativa documentazione tecnica. A conclusione di ogni ispezione, inoltre, il tecnico incaricato deve, se necessario, indicare gli eventuali interventi a carattere manutentorio da eseguire ed esprimere un giudizio riassuntivo sullo stato d'opera.

Strutture di fondazione

1. Travi di fondazione in c.a.

3. Platee in c.a.

Controlli

1. Periodicità: annuale. In caso di eventi eccezionali procedere al controllo
2. Esecutore: personale tecnico specializzato
3. Forma di controllo: visivo, integrato da eventuali prove non distruttive
4. Risorse: necessità di strumentazione tecnica a richiesta dell'Esecutore

Strutture in elevazione

1. Pilastri in c.a.
4. Travi in c.a.
8. Murature in blocchi

Controlli

1. Periodicità: annuale. In caso di eventi eccezionali procedere al controllo
2. Esecutore: personale tecnico specializzato
3. Forma di controllo: visivo, integrato da eventuali prove non distruttive
4. Risorse: necessità di strumentazione tecnica a richiesta dell'Esecutore

Strutture orizzontali

2. Solette in c.a.

Controlli

1. Periodicità: annuale. In caso di eventi eccezionali procedere al controllo
2. Esecutore: personale tecnico specializzato
3. Forma di controllo: visivo, integrato da eventuali prove non distruttive
4. Risorse: necessità di strumentazione tecnica a richiesta dell'Esecutore

Elaborato 6

*RELAZIONE SUI RISULTATI SPERIMENTALI –
INDAGINI SPECIALISTICHE*

6. Relazione sui risultati sperimentali – indagini specialistiche

Questo elaborato che contiene la relazione del progettista sui criteri seguiti per la definizione del piano delle indagini, con relativa motivazione delle scelte compiute.

6.1 Relazione geologica: indagini, caratterizzazione e modellazione geologica del sito

“Il moto sismico al suolo è fortemente influenzato dalle caratteristiche degli strati di terreno più superficiale e dalla morfologia del sito..... Gli effetti morfologici possono essere considerati incrementando l'azione sismica attraverso un coefficiente di amplificazione topografica o sulla base di studi di risposta sismica locale. In alcuni casi potrebbe risultare opportuno analizzare gli effetti di sito in modo più completo attraverso indagini di micro zonazione sismica"

La conoscenza delle caratteristiche del moto del terreno in superficie a seguito di un evento sismico risulta di fondamentale importanza per la zonazione sismica di un territorio e per la successiva progettazione di strutture in grado di resistere alle azioni sismiche.

Tutti i più importanti eventi hanno mostrato la grande influenza delle condizioni locali sul moto del terreno e, nel contempo, hanno evidenziato come tali fenomeni naturali siano in grado di vulnerare anche in modo grave aree densamente popolate; per tale motivo, è indispensabile conoscere le peculiarità geologiche territoriali.

6.2 Relazione geotecnica: indagini, caratterizzazione e modellazione del volume significativo di terreno

Si è valutata la portanza dei terreni di fondazione secondo quanto disposto dal testo unico DM 17/1/2018 e cioè sulla base della verifica agli stati limite ultimi. Per ogni stato limite ultimo deve essere rispettata la condizione $E_d < R_d$, dove E_d è il valore di progetto dell'azione e R_d è il valore di progetto della resistenza. La verifica di questa condizione deve essere fatta impiegando combinazioni di gruppi di coefficienti parziali, rispettivamente definiti per le azioni (A1 e A2), per i parametri geotecnici (M1 e M2) e per le resistenze (R1, R2 e R3). I diversi gruppi di coefficienti di sicurezza parziali sono scelti nell'ambito di due approcci progettuali distinti e alternativi. Nel primo approccio progettuale (Approccio n.1) sono previste due diverse combinazioni di gruppi di coefficienti, la prima più severa nei confronti del dimensionamento strutturale, la seconda più severa nei riguardi del dimensionamento geotecnico. Nel secondo approccio progettuale (Approccio n.2) è prevista un'unica combinazione di gruppi di coefficienti, da adottare sia nelle verifiche strutturali sia nelle verifiche geotecniche. Nella presente valutazione relativa al dimensionamento delle fondazioni è stata scelta la seconda combinazione unica.

DATI GENERALI		
COEFFICIENTI PARZIALI GEOTECNICA		
	TABELLA M1	TABELLA M2
Tangente Resist. Taglio	1.00	
Peso Specifico	1.00	
Coesione Efficace (c'k)	1.00	
Resist. a taglio NON drenata (cuk)	1.00	

DATI GENERALI			
COEFFICIENTI PARZIALI GEOTECNICA			
	TABELLA M1		TABELLA M2
Tipo Approccio	Combinazione Unica: (A1+M1+R3)		
Tipo di fondazione	Su Pali Infissi		
	COEFFICIENTE R1	COEFFICIENTE R2	COEFFICIENTE R3
Capacità Portante			2.30
Scorrimento			1.10
Resist. alla Base			1.15
Resist. Lat. a Compr.			1.15
Resist. Lat. a Traz.			1.25
Carichi Trasversali			1.30

Per i coefficienti parziali si sono utilizzate le tabelle presenti nelle NTC18 e si sono considerati terreni coesivi in superficie, poi sabbie e ghiaie più in profondità, con fondazioni aventi piani di posa orizzontale e carichi permanenti assiali.

Al fine di verificare le caratteristiche geomeccaniche del terreno interessato al progetto ed in considerazione del rilievo effettuato, sono state realizzate:

- n. 1 sondaggio a carotaggio continuo,
- n.3 prove CPTU,
- n.1 indagine geofisica,
- Prove di laboratorio su n. 3 campioni,
- Installazione di n. 3 piezometri

TABELLA N. 1 - LINEAMENTI STRATIGRAFICI E GEOTECNICI FORNITI DAL SONDAGGIO

Profondità (m)	Descrizione sintetica del terreno	Pocket (N/cm ²)		Vane Test (N/cm ²)	
		Min	Md	Min	Md
0,0 - 0,4	Sabbia fine con frustoli organici e presenza di ghiaietto arrotondato	-	-	-	-
0,4 - 5,2	Sabbia fine, talora fine-media, con un arricchimento in materia organica a tra 4,2 e 4,4 metri di profondità nel sottosuolo	-	-	-	-
5,2 - 8,2	Sabbia fine con abbondanti bioclasti con talvolta intercalati livelletti centimetrici di sabbia fine limosa	-	-	-	-
8,2-11,7	Limo argilloso e argilla limosa con presenza di calcinelli ad oltre 9,6 metri nel sottosuolo	0,3	1,3	0,1	0,6
11,7-12,7	Limo sabbioso	-	-	-	-
12,7-15,0	Limo argilloso e argilla limosa con presenza di calcinelli ed un livelletto di sabbia limosa tra 13,2 e 13,3 metri nel sottosuolo	1,7	2,0	0,9	1,0

TABELLA N. 4 - RISULTATI DELLE PROVE IN LABORATORIO

Campione			Proprietà indice			Taglio CD		Edometro ($\sigma = 1,0 \text{ kg/cm}^2$)		
Sond.	Camp.	Profondità	w	γ	γ_d	q'	c'	E	c_v	K
n°	n°	m	%	t/m ³	t/m ³	*	kg/cm ²	kg/cm ²	cm ² /s	cm/s
1	1	3,00-3,50	23,4	2,01	1,63	33,5	0,0	81	6,02E-03	7,43E-08
1	2	5,50-6,10	29,1	1,92	1,49	32	0,0	51	3,46E-03	6,79E-08
1	3	10,00-10,60	30,4	1,88	1,44	22	0,12	35	1,26E-04	3,66E-09

Di seguito si riporta la caratterizzazione geotecnica desunta dalle indagini specifiche:

TABELLA N. 5 - PARAMETRI GEOTECNICI CARATTERISTICI DEL TERRENO IN ESAME

Profondità (m)	Unità litostratigrafica	γ (t/mc)	Cu (kg/cm ²)	C' (kg/cm ²)	Φ' (°)	Mv (cm ² /kg)
0,0 - 5,0/5,2	A	2,00	-	-	33	0,012
5,0/5,2 - 7,6/8,2	B	1,95	-	-	30	0,020
7,6/8,2 - 12,6/12,7	C	1,90	0,60	0,10	22	0,028
12,6/12,7-15,9	D	1,95	0,75	0,15	24	0,016

Ai fini progettuali sono stati indagati i parametri geotecnici da utilizzare nelle verifiche:

GEOMETRIA TRAVI WINKLER																
IDENTIFICATIVO						COORDINATE 3D ESTREMI ASTA WINKLER						DATI IMPRONTA				
Trave N.ro	Ast3d N.ro	Fl In.	Fl Fin	Nod3d Iniz.	Nod3d Fin.	X3dIn. (m)	Y3dIn. (m)	Z3dIn. (m)	X3dFin (m)	Y3dFin (m)	Z3dFin (m)	Xfond (m)	Yfond (m)	Zfond (m)	Bfond (m)	Lfond (m)
1	43	29	12	14	42	-14.77	10.71	0.00	-11.52	11.80	0.00	-13.15	11.25	0.80	1.35	3.43
2	50	25	23	44	45	-13.20	7.07	0.00	-13.20	9.45	0.00	-13.20	8.26	0.80	1.35	2.38

STRATIGRAFIA TRAVI WINKLER															
Trave N.ro	Q.t.v. (m)	Q.t.d. (m)	Q.falda (m)	Incl Grd	Kw kg/cm ^c	Numero Strato	Sp.str. (m)	Peso Sp kg/m ^c	Fi' (Grd)	C' kg/cm ^q	Cu kg/cm ^q	Mod.El. kg/cm ^q	Poisson	Gr.Sovr	Mod.Ed. kg/cm ^q
1	0.80	0.00		0	1.00	1	5.20	2000	33.00	0.00	0.00	540.00	0.40	1.00	81.00
						2	3.00	1950	30.00	0.00	0.00	380.00	0.42	1.00	51.00
						3		1900	22.00	0.10	0.60	123.00	0.42	1.00	35.00
2	0.80	0.00		0	1.00	1	5.20	2000	33.00	0.00	0.00	540.00	0.40	1.00	81.00
						2	3.00	1950	30.00	0.00	0.00	380.00	0.42	1.00	51.00
						3		1900	22.00	0.10	0.60	123.00	0.42	1.00	35.00

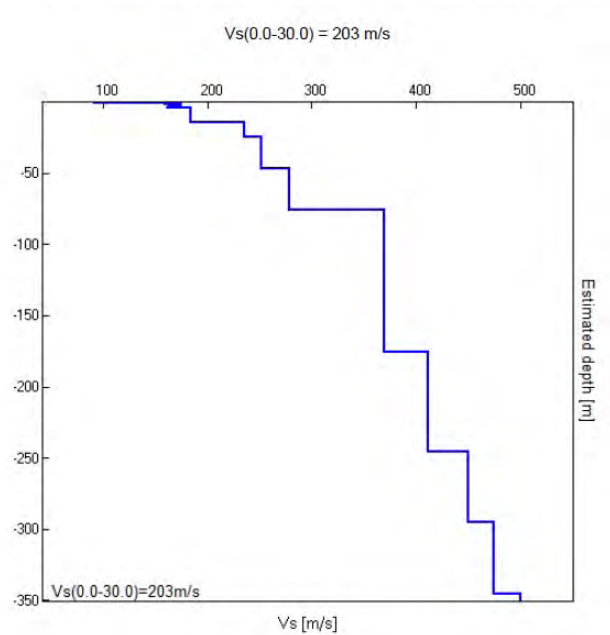
GEOMETRIA PLATEA																													
Shell N.ro	Nodo 1	Nodo 2	Nodo 3	Nodo 4	Sez Nro	Shell N.ro	Nodo 1	Nodo 2	Nodo 3	Nodo 4	Sez Nro	Shell N.ro	Nodo 1	Nodo 2	Nodo 3	Nodo 4	Sez Nro	Shell N.ro	Nodo 1	Nodo 2	Nodo 3	Nodo 4	Sez Nro	Shell N.ro	Nodo 1	Nodo 2	Nodo 3	Nodo 4	Sez Nro
1	1	15	17	17	1	2	2	1	17	17	1	3	20	3	17	17	1	4	3	2	17	17	1	5	3	20	21	21	1
5	3	20	21	21	1	6	4	3	21	21	1	7	5	4	21	21	1	8	16	5	21	21	1	9	7	1	50	50	1
9	7	1	50	50	1	10	1	2	50	50	1	11	2	3	50	50	1	12	9	7	50	50	1	13	3	40	50	50	1
13	3	40	50	50	1	14	40	11	50	50	1	15	11	12	50	50	1	16	12	13	50	50	1	17	13	14	50	50	1
17	13	14	50	50	1	18	14	9	50	50	1	19	40	3	51	51	1	20	3	4	51	51	1	21	4	5	51	51	1
21	4	5	51	51	1	22	5	6	51	51	1	23	11	40	51	51	1	24	6	8	51	51	1	25	10	11	51	51	1
25	10	11	51	51	1	26	8	10	51	51	1	27	22	19	31	31	1	28	23	22	31	31	1	29	27	23	31	31	1
29	27	23	31	31	1	30	25	27	31	31	1	31	24	25	31	31	1	32	19	18	31	31	1	33	26	24	31	31	1
33	26	24	31	31	1	34	30	26	31	31	1	35	28	30	31	31	1	36	29	28	31	31	1	37	18	29	31	31	1
37	18	29	31	31	1	38	29	18	45	45	1	39	18	42	45	45	1	40	42	41	45	45	1	41	41	14	45	45	1
41	41	14	45	45	1	42	14	13	45	45	1	43	12	44	45	13	1	44	29	45	44	28	1	45	30	28	44	44	1
45	30	28	44	44	1	46	12	11	44	44	1	47	11	30	44	44	1	48	30	11	43	43	1	49	26	30	43	43	1
49	26	30	43	43	1	50	11	10	43	43	1	51	22	32	33	33	1	52	19	22	33	33	1	53	18	19	33	33	1
53	18	19	33	33	1	54	37	18	33	33	1	55	37	42	18	18	1	56	37	38	42	42	1	57	38	9	42	42	1
57	38	9	42	42	1	58	14	41	9	9	1	59	41	42	9	9	1	60	10	46	43	43	1	61	47	46	10	10	1
61	47	46	10	10	1	62	10	8	47	47	1	63	8	35	47	47	1	64	49	47	35	35	1	65	36	49	35	35	1
65	36	49	35	35	1	66	36	24	49	49	1	67	24	48	49	49	1	68	24	26	48	48	1	69	26	43	48	48	1
69	26	43	48	48	1	70	43	46	48	48	1	71	48	46	47	49	1	72	25	24	39	39	1	73	24	36	39	39	1
73	24	36	39	39	1	74	27	25	39	39	1	75	34	27	39	39	1												

STRATIGRAFIA PLATEA															
Str. N.ro	Q.t.v. (m)	Q.t.d. (m)	Q.falda (m)	Incl Grd	Kw kg/cmc	Num Str	Sp.str. (m)	Peso Sp kg/mc	Fi' (Grd)	C' kg/cmq	Cu kg/cmq	Mod.El. kg/cmq	Poisson	Gr.Sovr (%)	Mod.Ed. kg/cmq
1	0.50	0.00		0	1.00	1	5.20	2000	33.00	0.00	0.00	540.00	0.40	1	81.00
						2	3.00	1950	30.00	0.00	0.00	380.00	0.42	1	51.00
						3		1900	22.00	0.10	0.60	123.00	0.42	1	35.00

6.3 Relazione sulla modellazione sismica concernente la "pericolosità sismica di base" del sito di costruzione

Al fine di identificare l'azione sismica agente ai vari stati limite è stato identificato un terreno di tipologia C tipico del territorio comunale di Cesena perchè sulla base della indagine eseguita da Geol. Dott. Aldo

Antoniazzi è stata registrata una velocità media di 203 m/s, con un primo strato con valori ridotti che corrispondono alla categoria appena descritta.



Cesena 22/07/2019

Ing. Davide Neri