

COMUNE DI COLONNA

CITTA' METROPOLITANA DI ROMA CAPITALE

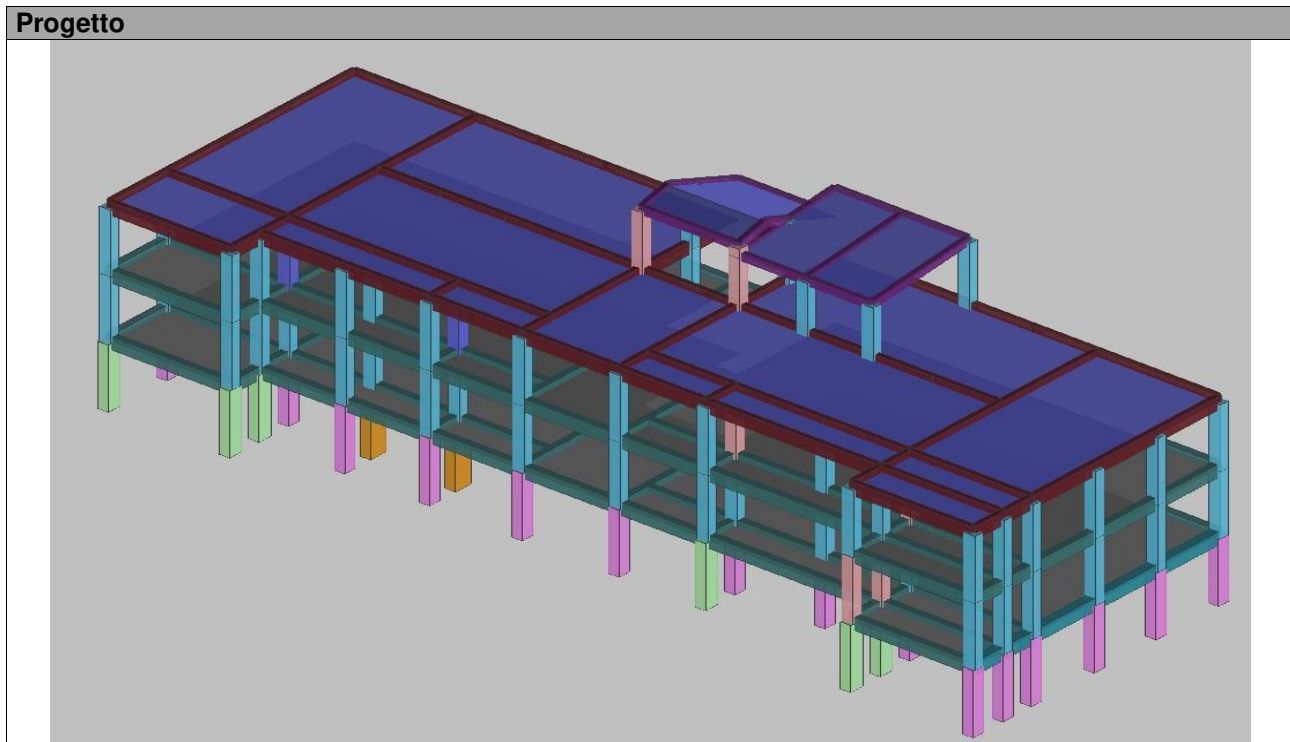
MANUTENZIONE STRAORDINARIA EDIFICI ANNESSI E SISTEMAZIONE AREE ESTERNE ISTITUTO SCOLASTICO

(Decreto Interministeriale n.47 del 03/01/2018)

PROGETTO ESECUTIVO

LIVELLO DI PROGETTAZIONE:	NOME FILE:	REVISIONE	DATA	SOSTITUISCE
PROGETTO ESECUTIVO	ALL.S	rev.00	10/08/2021	/
COMMESSA	E 1655			
<p>_____ Dott. Ing. Catia Bianchi</p>				
PROGETTO STRUTTURALE SCUOLA: RELAZIONE DI CALCOLO POST OPERAM			ALL.S.03	
COMMITTENTE	PROGETTAZIONE E OPERE DI INGEGNERIA			
Comune di Colonna				

INTESTAZIONE E CONTENUTI DELLA RELAZIONE



Contenuti della relazione:

RELAZIONE DI CALCOLO STRUTTURALE

- *Origine e Caratteristiche dei Codici di Calcolo*
- *Affidabilità dei codici utilizzati*
- *Validazione dei codici*
- *Tipo di analisi svolta*
- *Modalità di presentazione dei risultati*
- *Informazioni generali sull'elaborazione*
- *Giudizio motivato di accettabilità dei risultati*

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- *Normative prese a riferimento*
- *Criteri adottati per le misure di sicurezza*
- *Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconessioni*
- *Interazione tra terreno e struttura*
- *Legami costitutivi adottati per la modellazione dei materiali e dei terreni*
- *Schematizzazione delle azioni, condizioni e combinazioni di carico*
- *Metodologie numeriche utilizzate per l'analisi strutturale*
- *Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali*

STAMPA DEI RISULTATI

Il Progettista:

10 maggio 2019

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RELAZIONE DI CALCOLO STRUTTURALE

Premessa

La presente relazione di calcolo strutturale, in conformità al §10.1 del DM 14/01/08, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica. Segue inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

Analisi storico-critica ed esito del rilievo geometrico-strutturale

Per edifici esistenti, in coerenza con il paragrafo 8.2 delle NTC-08, l'analisi storico-critica ed il rilievo geometrico-strutturale devono evidenziare i seguenti aspetti: (a) la costruzione riflette lo stato delle conoscenze al tempo della sua realizzazione; (b) possono essere insiti e non palesi difetti di impostazione e di realizzazione; (c) la costruzione può essere stata soggetta ad azioni, anche eccezionali, i cui effetti non siano completamente manifesti; (d) le strutture possono presentare degrado e/o modificazioni significative rispetto alla situazione originaria.

Analisi storico-critica

Per edifici esistenti, viene indicata la documentazione reperita e vengono esplicitate le informazioni desunte da ciascuno dei documenti esaminati per le finalità indicate al paragrafo 8.5.1 delle NTC-08.

Esito del rilievo geometrico-strutturale

Per edifici esistenti, vengono descritte le modalità con cui è stato effettuato il rilievo geometrico strutturale e gli esiti di quest'ultimo, anche con riferimenti espliciti e puntuali agli elaborati grafici che saranno riportati nella parte "4.1. Rilievo geometrico-strutturale". Il rilievo delle strutture deve essere eseguito e restituito secondo le modalità e con le finalità riportate nei paragrafi 8.5.2 e 8.7 delle NTC-08.

Descrizione generale dell'opera

Descrizione generale dell'opera	
Fabbricato ad uso	
Ubicazione	Comune di COLONNA (RM) (Regione LAZIO) Località COLONNA (RM) Longitudine 12.752, Latitudine 41.835
Numero di piani	Fuori terra Interrati le dimensioni dell'opera in pianta sono racchiuse in un rettangolo di
Numero vani scale	1
Numero vani ascensore	
Tipo di fondazione	Indiretta su pali

Principali caratteristiche della struttura	
Struttura regolare in pianta	no
Struttura regolare in altezza	no
Classe di duttilità	CD "B"
Travi: ricalate o in spessore	no
Pilastrini	sì
Pilastrini in falso	no
Tipo di fondazione	Indiretta su pali
Condizioni per cui è necessario considerare la componente verticale del sisma	no

Parametri della struttura			
Classe d'uso	Vita V_n [anni]	Coeff. Uso	Periodo V_r [anni]
III	50.0	1.5	75.0

Fattore di struttura

Eseguita analisi pushover $q=1.00$

Quadro normativo di riferimento adottato

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati di seguito. Nel capitolo "normativa di riferimento" è comunque presente l'elenco completo delle normative disponibili.

Progetto-verifica degli elementi	
Progetto cemento armato	D.M. 14-01-2008
Progetto acciaio	D.M. 14-01-2008
Progetto legno	D.M. 14-01-2008
Progetto muratura	D.M. 14-01-2008
Azione sismica	
Norma applicata per l'azione sismica	D.M. 14-01-2008

Livelli di conoscenza e fattori di confidenza

Il livello di conoscenza, per edifici esistenti è LC2
Pertanto il fattore di confidenza è FC = 1.20

Azioni di progetto sulla costruzione

Nei capitoli "modellazione delle azioni" e "schematizzazione dei casi di carico" sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica.*

La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L'analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L'analisi strutturale è condotta con il metodo dell'analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

L'analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell'ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

$$\mathbf{K} * \mathbf{u} = \mathbf{F} \text{ dove}$$

\mathbf{K} = matrice di rigidezza
 \mathbf{u} = vettore spostamenti nodali
 \mathbf{F} = vettore forze nodali

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all'elemento stesso.

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l'asse Z verticale ed orientato verso l'alto.

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

Elemento tipo TRUSS	(biella-D2)
Elemento tipo BEAM	(trave-D2)
Elemento tipo MEMBRANE	(membrana-D3)
Elemento tipo PLATE	(piastra-guscio-D3)
Elemento tipo BOUNDARY	(molla)
Elemento tipo STIFFNESS	(matrice di rigidezza)
Elemento tipo BRICK	(elemento solido)
Elemento tipo SOLAIO	(macro elemento composto da più membrane)

Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l'analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 delle NTC-08, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

Tipo di analisi strutturale	
Carichi verticali	NO
Statica non lineare	SI
Sismica statica lineare	SI
Sismica dinamica lineare	NO
Sismica statica non lineare (prop. masse)	SI

Sismica statica non lineare (prop. modo)	NO
Sismica statica non lineare (triangolare)	SI
Non linearità geometriche (fattore P delta)	NO

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

Informazioni sul codice di calcolo	
Titolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2018-11-184)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara
Dati utente finale:	
Codice Utente:	
Codice Licenza:	Licenza dsi3814

Un attento esame preliminare della documentazione a corredo del software **ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico**. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

Affidabilità dei codici utilizzati
2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche. E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: http://www.2si.it/Software/Affidabilità.htm

Modellazione della geometria e proprietà meccaniche:	
nodi	212
elementi D2 (per aste, travi, pilastri...)	363
elementi D3 (per pareti, platee, gusci...)	0
elementi solaio	46
elementi solidi	0
Dimensione del modello strutturale [cm]:	
X min =	2320.22
Xmax =	6520.22
Ymin =	1272.81
Ymax =	2693.93
Zmin =	0.00
Zmax =	1465.00
Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	SI
Pareti	NO
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO
Orizzontamenti:	
Solai con la proprietà piano rigido	SI
Solai senza la proprietà piano rigido	NO
Tipo di vincoli:	
Nodi vincolati rigidamente	SI
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	NO

Fondazioni di tipo trave	NO
Fondazioni di tipo platea	NO
Fondazioni con elementi solidi	NO

Modellazione delle azioni

Si veda il capitolo **“Schematizzazione dei casi di carico”** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte *“2.6. Azioni di progetto sulla costruzione”*.

Combinazioni e/o percorsi di carico

Si veda il capitolo **“Definizione delle combinazioni”** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

Combinazioni dei casi di carico	
APPROCCIO PROGETTUALE	Approccio 1
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	SI
SLC	NO
SLD	SI
SLO	NO
SLU GEO A2 (per approccio 1)	SI
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	SI

Principali risultati

I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.

2.8.1. Risultati dell'analisi modale

Viene riportato il tipo di analisi modale condotta, restituiti i risultati della stessa e valutate le informazioni desumibili in merito al comportamento della struttura.

2.8.2. Deformate e sollecitazioni per condizioni di carico

Vengono riportati i principali risultati atti a descrivere il comportamento della struttura, in termini di stati di sollecitazione e di deformazione generalizzata, distinti per condizione elementare di carico o per combinazioni omogenee delle stesse.

2.8.3. Involuppo delle sollecitazioni maggiormente significative. L'analisi e la restituzione degli involuppi (nelle combinazioni considerate agli SLU e agli SLE) delle caratteristiche di sollecitazione devono essere finalizzate alla valutazione dello stato di sollecitazione nei diversi elementi della struttura.

2.8.4. Reazioni vincolari

Vengono riportate le reazioni dei vincoli nelle singole condizioni di carico e/o nelle combinazioni considerate.

2.8.5. Altri risultati significativi

Nella presente parte vengono riportati tutti gli altri risultati che il progettista ritiene di interesse per la descrizione e la comprensione del/i modello/i e del comportamento della struttura.

La presente relazione, oltre ad illustrare in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare, riporta una serie di immagini:

per i dati in ingresso:

- modello solido della struttura
- numerazione di nodi e ed elementi
- configurazioni di carico statiche
- configurazioni di carico sismiche con baricentri delle masse e eccentricità

per le combinazioni più significative (statisticamente più gravose per la struttura):

- configurazioni deformate
- diagrammi e involuppi delle azioni interne
- mappe delle tensioni
- reazioni vincolari
- mappe delle pressioni sul terreno

per il progetto-verifica degli elementi:

- diagrammi di armatura
- percentuali di sfruttamento
- mappe delle verifiche più significative per i vari stati limite

Informazioni generali sull'elaborazione e giudizio motivato di accettabilità dei risultati.

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni anormali. Si può pertanto asserire che l'elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.) .

Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

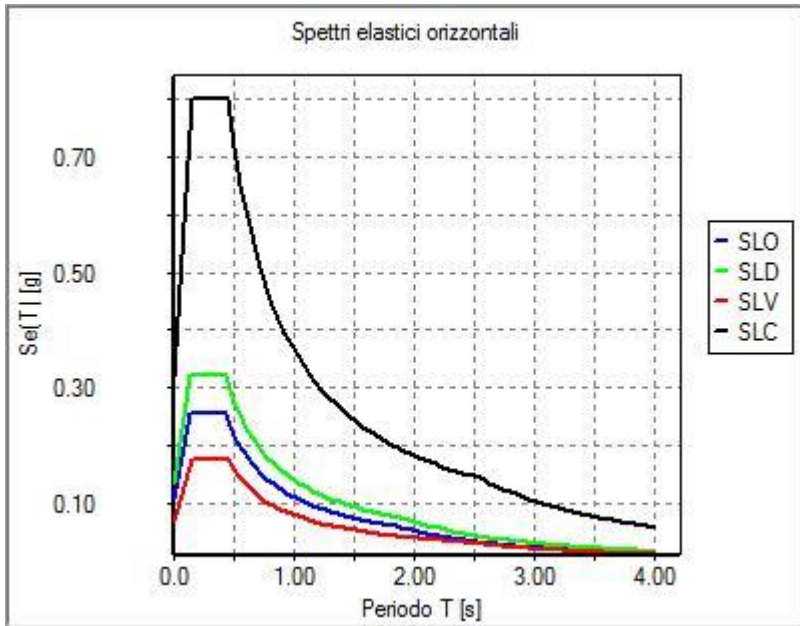
RELAZIONE SUI MATERIALI

Il capitolo Materiali riporta informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di posa in opera e ai valori di calcolo. Vedi allegato denominato "Relazione Materiali"

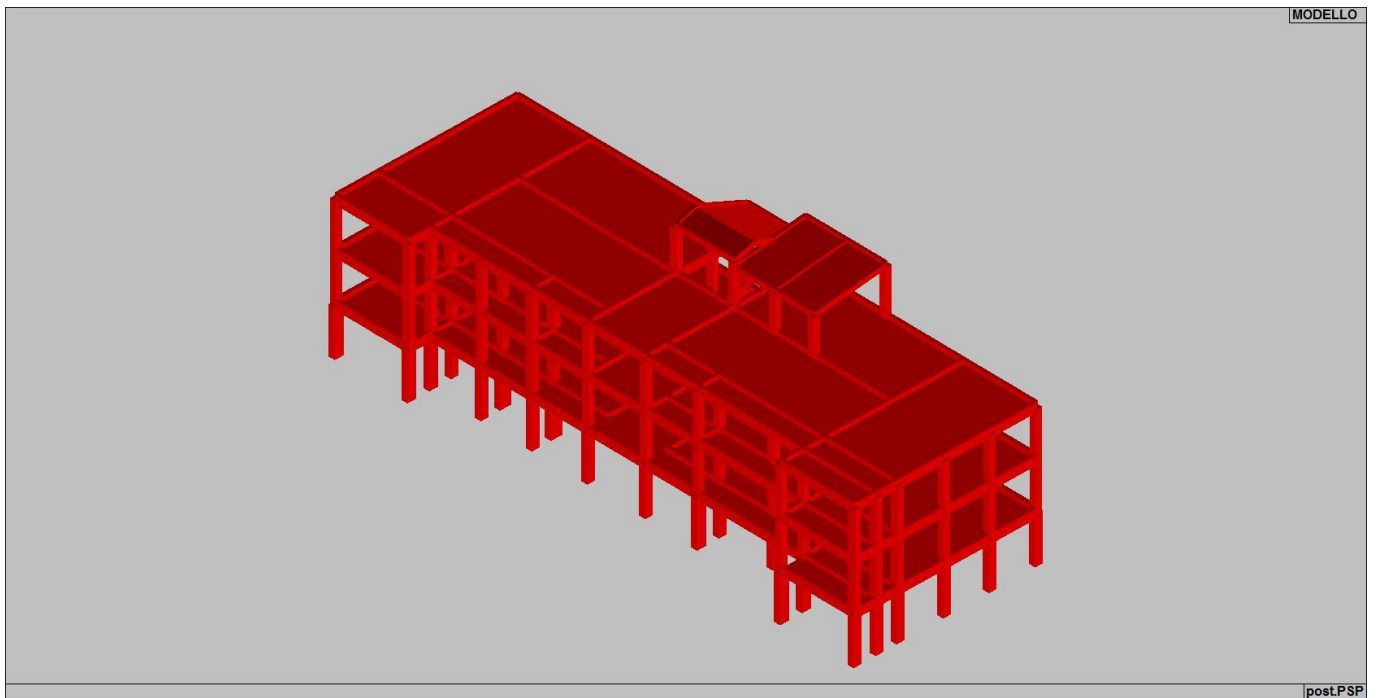
NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 14 Gennaio 2008 e allegate "Norme tecniche per le costruzioni".
 2. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
 3. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
 4. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
 5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
 6. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
 7. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
 8. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
 9. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
 10. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
 11. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
 12. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
 13. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
 14. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
 15. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesì per unità di volume, pesì propri e sovraccarichi per gli edifici.
 16. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
 17. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
 18. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
 19. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
 20. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
 21. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
 22. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
 23. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
 24. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
 25. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
 26. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali - Regole comuni e regole per gli edifici.
 27. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
 28. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
 29. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.
 30. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
 31. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
 32. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
- UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

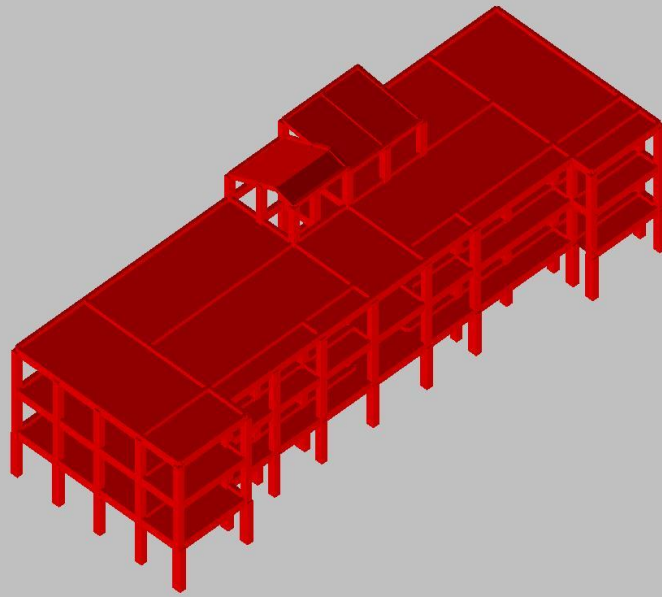
NOTA sul capitolo "normativa di riferimento": riporta l'elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO". Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 14.01.08 è dovuto a o a progettazione simulata di edificio esistente o ad applicazione del punto 2.7 del DM 14.01.08



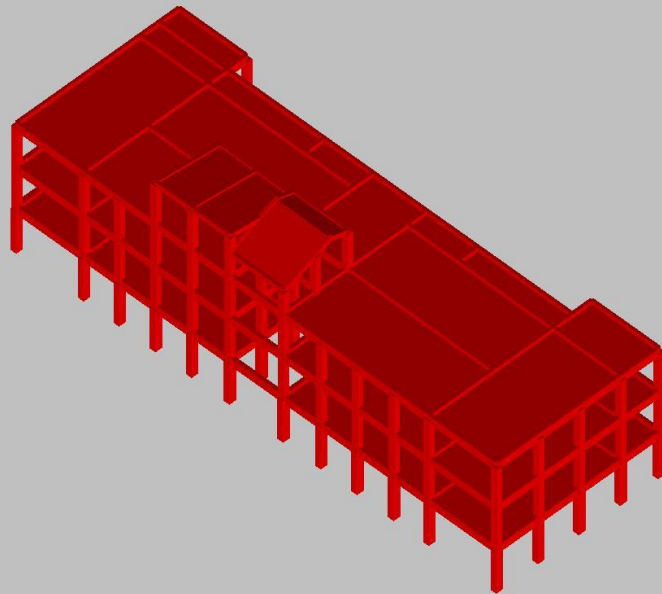
01_INT_SPETTRI_ELASTICI_O



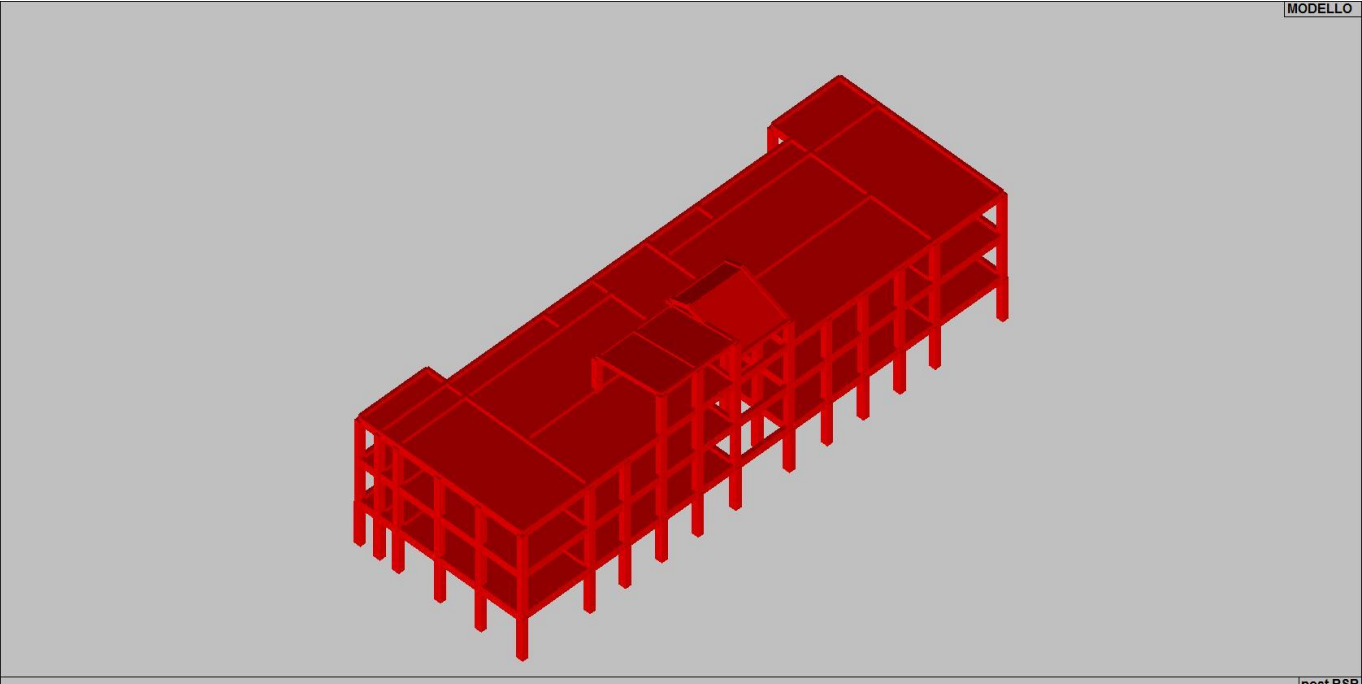
01_INT_VISTA_SOLIDATA_001



01_INT_VISTA_SOLIDATA_002



01_INT_VISTA_SOLIDATA_003



01_INT_VISTA_SOLIDATA_004

CARATTERISTICHE MATERIALI UTILIZZATI

LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale E
Poisson	coefficiente di contrazione trasversale ν
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica
Fattore di confidenza FC m	Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura)
Fattore di confidenza FC a	Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura)
Elasto-plastico	Materiale elastico perfettamente plastico per aste non lineari
Massima compressione	Massima tensione di compressione per aste non lineari
Massima trazione	Massima tensione di trazione per aste non lineari
Fattore attrito	Coefficiente di attrito per aste non lineari
Rapporto HRDb	Rapporto di hardening a flessione
Rapporto HRDv	Rapporto di hardening a taglio

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

1	cemento armato	Resistenza Rc Resistenza fctm Coefficiente ksb	resistenza a compressione cubica resistenza media a trazione semplice Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
2	acciaio	Tensione ft Tensione fy Resistenza fd Resistenza (>40) Tensione ammissibile Tensione ammissibile (>40)	Valore della tensione di rottura Valore della tensione di snervamento Resistenza di calcolo per SL CNR-UNI 10011 Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm Tensione ammissibile CNR-UNI 10011 Tensione ammissibile CNR-UNI 10011 per spessori > 40mm
3	muratura	Muratura consolidata Incremento resistenza Incremento rigidezza Resistenza f Resistenza fv0 Resistenza fh Resistenza fb	Muratura per la quale si prevedono interventi di rinforzo" Incremento conseguito in termini di resistenza Incremento conseguito in termini di rigidezza Valore della resistenza a compressione Valore della resistenza a taglio in assenza di tensioni normali Valore della resistenza a compressione orizzontale Valore della resistenza a compressione dei blocchi

Resistenza fbh	Valore della resistenza a compressione dei blocchi in direzione orizzontale
Resistenza fv0h	Valore della resistenza a taglio in assenza di tensioni normali per le travi
Resistenza ft	Valore della resistenza a trazione per fessurazione diagonale
Resistenza fvlim	Valore della massima resistenza a taglio
Resistenza fbt	Valore della resistenza a trazione dei blocchi
Coefficiente mu	Coefficiente d'attrito utilizzato per la resistenza a taglio (tipicamente 0.4)
Coefficiente fi	Coefficiente d'ingranamento utilizzato per la resistenza a taglio
Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
4	legno
E0,05	Modulo di elasticità corrispondente ad un frattile del 5%
Resistenza fc0	Valore della resistenza a compressione parallela
Resistenza ft0	Valore della resistenza a trazione parallela
Resistenza fm	Valore della resistenza a flessione
Resistenza fv	Valore della resistenza a taglio
Resist. ft0k	Resistenza caratteristica (tensione amm. per REGLES) per trazione
Resist. fmk	Resistenza caratteristica (tensione amm. per REGLES) per flessione
Resist. fvk	Resistenza caratteristica (tensione amm. per REGLES) per taglio
Modulo E0,05	Modulo elastico parallelo caratteristico
Lamellare	lamellare o massiccio

Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

Con riferimento al **Documento di Affidabilità** "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Maggio 2011, disponibile per il download sul sito www.2si.it, si segnalano i seguenti esempi applicativi:

Modellazione di strutture in c.a.

Test N°	Titolo
41	GERARCHIA DELLE RESISTENZE PER TRAVI IN C.A.
42	GERARCHIA DELLE RESISTENZE PER PILASTRI IN C.A.
43	VERIFICA ALLE TA DI STRUTTURE IN C.A.
44	VERIFICA AGLI SLU DI STRUTTURE IN C.A.
45	VERIFICA A PUNZONAMENTO ALLO SLU DI PIASTRE IN C.A.
46	VERIFICA A PUNZONAMENTO ALLO SLU DI TRAVI IN C.A.
47	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 9/1/96
48	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 14/1/2008
49	VERIFICA ALLO SLE (TENSIONI E FESSURAZIONE) DI STRUTTURE IN C.A.
50	VERIFICA ALLO SLE (DEFORMAZIONE) DI STRUTTURE IN C.A.
51	FATTORE DI STRUTTURA
52	SOVRARESISTENZE
53	DETTAGLI COSTRUTTIVI C.A.: LIMITI D'ARMATURA PILASTRI E NODI TRAVE-PILASTRO
54	PARETI IN C.A. SNELLE IN ZONA SISMICA
80	ANALISI PUSHOVER DI UN EDIFICIO IN C.A.
120	PROGETTO E VERIFICA DI TRAVI PREM

Modellazione di strutture in acciaio

Test N°	Titolo
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55	VERIFICA DI STABILITA' DI ASTE COMPRESSE IN ACCIAIO – METODO OMEGA
56	LUCE LIBERA DI TRAVI E ASTE IN ACCIAIO
57	LUCE LIBERA DI COLONNE IN ACCIAIO
58	SVERGOLAMENTO DI TRAVI IN ACCIAIO
59	FATTORE DI STRUTTURA
60	ACCIAIO D.M.2008
61	ACCIAIO EC3
62	GERARCHIA RESISTENZE STRUTTURE IN ACCIAIO
63	STABILITA' DI ASTE COMPOSTE IN ACCIAIO
73	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO CON PRESENZA IRRIGIDIMENTI TRASVERSALI
74	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO CON PRESENZA DI UN PIATTO DI RINFORZO SALDATO ALL'ANIMA DELLA COLONNA
75	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO CON PRESENZA DI DUE PIATTI DI RINFORZO SALDATI ALL'ANIMA DELLA COLONNA
76	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO A DUE VIE SU ALI COLONNA
77	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO A UNA VIA CON DUE COMBINAZIONI DI CARICO
78	COLLEGAMENTI IN ACCIAIO: NODO TRAVE COLONNA FLANGIATO SU ANIMA SENZA RINFORZI A QUATTRO FILE DI BULLONI DI CUI UNA SU PIASTRA INFERIORE E UNA SU PIASTRA SUPERIORE
79	VERIFICA DELLA PIASTRA NODO TRAVE COLONNA
85	TELAIO ACCIAIO: CONTROVENTI CONCENTRICI

Modellazione di strutture in muratura

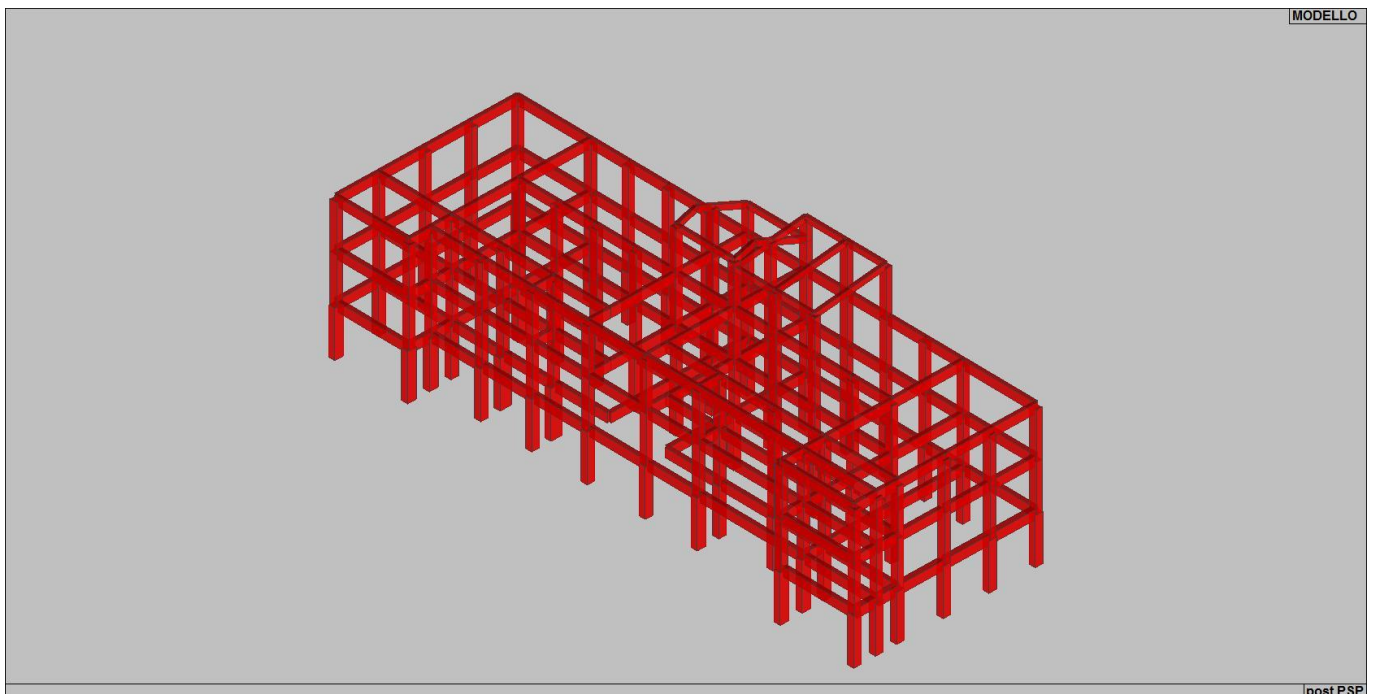
Test N°	Titolo
81	ANALISI PUSHOVER DI UNA STRUTTURA IN MURATURA
84	ANALISI ELASTO PLASTICA INCREMENTALE, PARETE IN MURATURA
86	VERIFICA NON SISMICA DELLE MURATURE (D.M. 87 TA)
87	VERIFICA NON SISMICA DELLE MURATURE (D.M. 2005 SL)
88	FATTORE DI STRUTTURA

Modellazione di strutture in legno

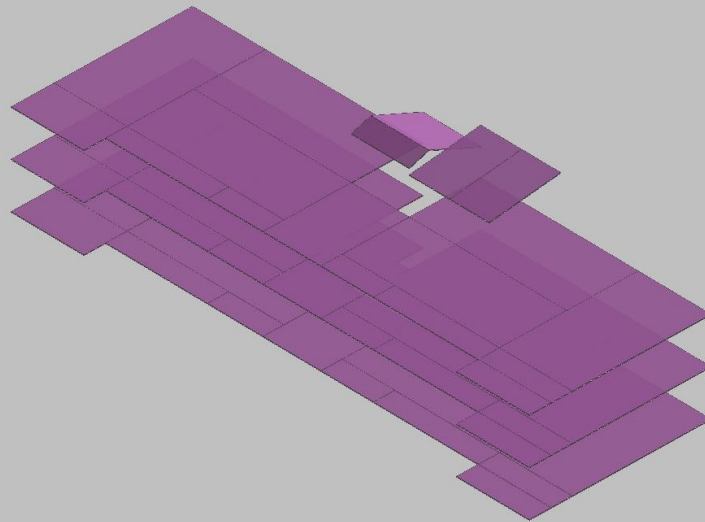
Test N°	Titolo
17	SOLAIO: MISTO LEGNO-CALCESTRUZZO
89	VERIFICA ALLO SLU DI STRUTTURE IN LEGNO SECONDO EC5
90	VERIFICA ALLO SLE DI STRUTTURE IN LEGNO SECONDO EC5
91	FATTORE DI STRUTTURA
92	VERIFICHE EC5
93	SNELLEZZE EC5
94	VERIFICA AL FUOCO DI STRUTTURE IN LEGNO SECONDO EC5
117	PROGETTO E VERIFICA DI GUSCI IN MATERIALE XLAM
118	PROGETTO E VERIFICA DI PARETI IN MATERIALE XLAM E RELATIVI COLLEGAMENTI
119	PROGETTO E VERIFICA DI SOLAI IN MATERIALE XLAM

Id	Tipo / Note	V. caratt.	V. medio	Young	Poisson	G	Gamma	Alfa	Altri
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm3		
1	Calcestruzzo Classe C9/11			3.145e+05	0.20	1.310e+05	2.50e-03	1.00e-05	
	Resistenza Rc	8.6	105.0						
	Resistenza fctm		8.9						
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05
54	C12/15			2.700e+05	0.20	1.310e+05	2.50e-03	1.00e-05	
	Resistenza Rc	53.6	150.0						
	Resistenza fctm		16.0						
	Coefficiente ksb								0.85
	Rapporto HRDb								1.00e-05
	Rapporto HRDv								1.00e-05

Si specifica che il materiale 1 (C9/11) è stato utilizzato esclusivamente per i pilastri, in quanto deriva da prove effettuate sui pilastri. Il materiale 54 (C12/15) invece, è stato utilizzato per la restante parte degli elementi strutturali (travi e solai), in quanto è stato ottenuto dalle prove effettuate appunto su questi ultimi elementi.



11_MOD_MATERIALI_D2



11_MOD_MATERIALI_SOLAI

Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetta a filo	No					
Af inf: da q*L*L /	0.0					
Armatura						
Minima tesa	0.31					
Minima compressa	0.31					
Massima tesa	0.78					
Da sezione	Si					
Usa armatura teorica	No					
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00					
Tensione fy staffe [daN/cm2]	4500.00					
Tipo acciaio	tipo C					
Coefficiente gamma s	1.15					
Coefficiente gamma c	1.50					
Verifiche con N costante	Si					
Fattore di redistribuzione	0.0					
Modello per il confinamento						
Relazione tensio-deformativa	Mander					
Incrudimento acciaio	5.000e-03					
Fattore lambda	1.00					
epsilon max,s	4.000e-02					
epsilon cu2	4.500e-03					
epsilon c2	0.0					
epsilon cy	0.0					
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50					
Tensione amm. acciaio [daN/cm2]	2600.00					
Rapporto omogeneizzazione N	15.00					
Massimo rapporto area compressa/tesa	1.00					
Staffe						
Diametro staffe	8.00					
Passo minimo [cm]	4.00					
Passo massimo [cm]	30.00					
Passo raffittito [cm]	15.00					
Lunghezza zona raffittita [cm]	50.00					
Ctg(Teta) Max	2.50					
Percentuale sagomati	0.0					
Luce di taglio per GR [cm]	1.00					
Adotta scorrimento medio	No					
Torsione non essenziale inclusa	Si					

Pilastrì c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Progetto armatura	Privilegia lati					
Progetta a filo	No					
Effetti del 2 ordine	Si					
Beta per 2-2	1.00					
Beta per 3-3	1.00					
Armatura						
Massima tesa	4.00					
Minima tesa	1.00					
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00					
Tensione fy staffe [daN/cm2]	4500.00					
Tipo acciaio	tipo C					
Coefficiente gamma s	1.15					
Coefficiente gamma c	1.50					
Verifiche con N costante	Si					
Modello per il confinamento						
Relazione tensio-deformativa	Mander					
Incrudimento acciaio	5.000e-03					
Fattore lambda	1.00					
epsilon max,s	4.000e-02					
epsilon cu2	4.500e-03					
epsilon c2	0.0					
epsilon cy	0.0					
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	97.50					
Tensione amm. acciaio [daN/cm2]	2600.00					
Rapporto omogeneizzazione N	15.00					
Staffe						
Diametro staffe	8.00					
Passo minimo [cm]	5.00					
Passo massimo [cm]	25.00					
Passo raffittito [cm]	15.00					
Lunghezza zona raffittita [cm]	45.00					
Ctg(Teta) Max	2.50					
Luca di taglio per GR [cm]	1.00					
Massimizza gerarchia	Si					

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Generalità						
Usa tensioni ammissibili	No					
Af inf: da traliccio	Si					
Consenti armatura a taglio	No					
Incrementa armatura longitudinale per taglio	Si					
Af inf: da $q \cdot L \cdot L /$	20.00					
Incremento fascia piena [cm]	5.00					
Armatura						
Minima tesa	0.15					
Massima tesa	3.00					
Minima compressa	0.0					
Af/h [cm]	7.000e-02					
Stati limite ultimi						
Tensione fy [daN/cm2]	4500.00					
Tipo acciaio	tipo C					
Coefficiente gamma s	1.15					
Coefficiente gamma c	1.50					
Fattore di redistribuzione	0.0					
Tensioni ammissibili						
Tensione amm. cls [daN/cm2]	85.00					
Tensione amm. acciaio [daN/cm2]	2600.00					
Rapporto omogeneizzazione N	15.00					
Massimo rapporto area compressa/tesa	1.00					
Verifica freccia						
Infinita	250.00					
Istantanea	500.00					
Fattore viscosità	3.00					
Usa J non fessurato	No					
Elementi non strutturali						
Tamponatura antiespulsione	No					
Tamponatura con armatura	No					

Solai e pannelli	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
Fattore di struttura/comportamento	2.00					
Coefficiente gamma m	0.0					
Periodo Ta	0.0					
Altezza pannello	0.0					

EDIFICI ESISTENTI: INTERVENTI DI RINFORZO

LEGENDA TABELLE INTERVENTI DI RINFORZO

Per le verifiche da condurre sugli elementi rinforzati il programma attinge le informazioni da archivi di rinforzi. Gli archivi utilizzati e la modalità di applicazione della specifica tecnica dipendono ovviamente dal tipo e materiale dell'elemento strutturale. In particolare nelle tabelle successive vengono dettagliati:

- I rinforzi tipo CAM o angolari con calastrelli (implementati secondo il punto C8A.7.2 INCAMICIATURA IN ACCIAIO)

Titolo colonna	Descrizione	Nota
Id	Indice nell'archivio	
Sigla CAM	Nome nell'archivio o riferimento al prodotto commerciale	Utilizzato anche per incamiciatura in acciaio con profili generici.
Sez.	Angolare utilizzato	Nel caso il profilo non sia presente nell'archivio delle sezioni si riporta "altro"
A	Area dell'angolare	
L	Lato dell'angolare	
s L	Spessore dell'angolare	
fyk	Tensione caratteristica di snervamento angolare	
s cal.	Spessore dei nastri o calastrelli	
L cal.	Altezza dei nastri o calastrelli	
P cal.	Passo dei nastri o calastrelli	
M nas.	Numero dei nastri	Utilizzato nel caso in cui si utilizzino più nastri sovrapposti
fyk c	Tensione caratteristica di snervamento dei nastri o calastrelli	
ftk c	Tensione caratteristica di rottura dei nastri o calastrelli	
R curv.	Raggio di curvatura utilizzato nell'arrotondamento degli spigoli	

Per i materiali degli elementi in muratura consolidata, in relazione alla Tabella C8A.2.2 "Coefficienti correttivi dei parametri meccanici (indicati in Tabella C8A.2.1) da applicarsi in presenza di: malta di caratteristiche buone o ottime; giunti sottili; ricorsi o listature; sistematiche connessioni trasversali; nucleo interno particolarmente scadente e/o ampio; consolidamento con iniezioni di malta; consolidamento con intonaco armato" si riportano le informazioni atte a definire la tecnica di rinforzo adottata e gli eventuali incrementi in termini di rigidità e resistenza conseguiti. Una specifica tabella di immediata lettura ne consente l'agevole lettura.

A seguire vengono dettagliati gli interventi per le strutture in c.a. con la seguente suddivisione tabellare :

- Nodi: con gli interventi applicati in ottemperanza ai punti C8A.7.1 INCAMICIATURA IN C.A. ;
- Pilastri: con gli interventi applicati in ottemperanza ai punti C8A.7.1 INCAMICIATURA IN C.A. ;
- Travi: con gli interventi applicati in ottemperanza ai punti C8A.7.2 INCAMICIATURA IN ACCIAIO

Titolo colonna	Descrizione	Nota
Pilas. I	Pilastro sottostante il nodo rinforzato	
Nodo	Numero del nodo rinforzato	
sez a-o	Sezione del pilastro sottostante ante-operam	
sez p-o	Sezione del pilastro sottostante post-operam	Il nodo viene verificato con la sezione del pilastro post-operam se il pilastro ha camicia con continuità flessionale. L'incremento di capacità si cumula a quello di eventuali altri rinforzi, ma per la verifica si considera il coeff. riduttivo 0.9
Diam.	Diametro della armatura orizzontale aggiuntiva nel nodo	L'armatura è riferita a una sola faccia
Passo	Passo dell'armatura orizzontale aggiuntiva nel nodo	
fyk arm.	Tensione caratteristica di snervamento dell'armatura orizzontale aggiuntiva nel nodo	
Spess.	Spessore della piastra di rinforzo applicata nel nodo	La piastra è applicata a una sola faccia
fyk plt.	Tensione caratteristica di snervamento per la piastra di rinforzo applicata nel nodo	
rinforzo frp	Nome nell'archivio o riferimento al prodotto commerciale	Il rinforzo è applicato a una sola faccia

Titolo colonna	Descrizione	Nota
Pilas.	Pilastro di interesse	Gli interventi con tecnologie diverse sono esclusivi, per l'intervento con FRP è prevista la possibilità di attivare separatamente il rinforzo FRP V per taglio e duttilità (*) e quello FRP F per capacità flessionale (**). (*) incremento di duttilità considerato solo nelle verifiche con $q=1$. (**) incremento di capacità considerato solo nelle verifiche con $q>1$
sez a-o	Sezione del pilastro ante-operam	
sez p-o	Sezione del pilastro post-operam	Differente se l'intervento consiste in C8A.7.1 INCAMICIATURA IN C.A
Cont. fless.	Armature longitudinali o angolari opportunamente ancorati alla base	Per la camicia in c.a. e acciaio è possibile considerare la continuità del rinforzo interpiano e in questo caso l'incremento di capacità flessionale

	e in sommità	
Titolo colonna	Descrizione	Nota
Trave	Trave di interesse	
sez a-o	Sezione della trave ante-operam	
rinf. CAM	Nome nell'archivio o riferimento al prodotto commerciale	In applicazione del C8A.7.2 INCAMICIATURA IN ACCIAIO
li V, lc V, lf V	Suddivisione in tre tratti per l'applicazione dei rinforzi CAM	Assegnato uno o più tratti i restanti vengono definiti per differenza. Se tutti i valori sono nulli (non riportati) si intende applicato per l'intera lunghezza

C8A (APPENDICE AL CAPITOLO C8) - MATERIALI DI RINFORZO UTILIZZATI

Id	Sigla CAM	Sez.	A	L	s L	fyk	s cal.	L cal.	P cal.	M nas.	fyk c	ftk c	R curv.
			mm ²	mm	mm	N/mm ²	mm	mm	mm		N/mm ²	N/mm ²	mm
1	Rinforzo incamiciatura acciaio	travi in LU 60x6	690.0	60.0	6.00	275.0	0.90	19.0	50.0	1	275.0	430.0	30.0

NODI: C8A.7.1 INCAMICIATURA IN C.A.

Pilas.l	Nodo	sez a-o	sez p-o	Diam.	Passo	fyk arm.	Spess.	fyk plt.	rinforzo frp
				mm	mm	N/mm ²	mm	N/mm ²	
1	2	7	7	8	50.00	450.00			
2	4	7	7	8	50.00	450.00			
3	6	7	7	8	50.00	450.00			
4	8	7	7	8	50.00	450.00			
5	10	7	7	8	50.00	450.00			
6	12	7	7	8	50.00	450.00			
7	14	7	7	8	50.00	450.00			
8	16	7	7	8	50.00	450.00			
9	18	7	7	8	50.00	450.00			
10	20	7	7	8	50.00	450.00			
11	22	7	7	8	50.00	450.00			
12	24	7	7	8	50.00	450.00			
13	26	7	7	8	50.00	450.00			
14	28	7	7	8	50.00	450.00			
15	30	7	7	8	50.00	450.00			
16	32	7	7	8	50.00	450.00			
17	34	7	7	8	50.00	450.00			
18	36	7	7	8	50.00	450.00			
19	38	7	7	8	50.00	450.00			
20	40	7	7	8	50.00	450.00			
21	42	7	7	8	50.00	450.00			
22	44	7	7	8	50.00	450.00			
23	46	7	7	8	50.00	450.00			
24	48	7	7	8	50.00	450.00			
25	50	7	7	8	50.00	450.00			
26	52	7	7	8	50.00	450.00			
27	54	7	7	8	50.00	450.00			
28	56	7	7	8	50.00	450.00			
29	58	4	4	8	50.00	450.00			
30	60	7	7	8	50.00	450.00			
31	62	7	7	8	50.00	450.00			
32	64	4	4	8	50.00	450.00			
33	66	7	7	8	50.00	450.00			
34	68	7	7	8	50.00	450.00			
35	70	7	7	8	50.00	450.00			
36	72	10	10	8	50.00	450.00			
37	74	10	10	8	50.00	450.00			
38	76	7	7	8	50.00	450.00			
39	78	4	4	8	50.00	450.00			
40	80	4	4	8	50.00	450.00			
41	82	7	7	8	50.00	450.00			
42	84	4	4	8	50.00	450.00			
43	86	7	7	8	50.00	450.00			

Pilas.l	Nodo	sez a-o	sez p-o	Diam.	Passo	fyk arm.	Spess.	fyk plt.	rinforzo frp
44	88	7	7	8	50.00	450.00			
103	92	5	5	8	50.00	450.00			
104	94	5	5	8	50.00	450.00			
105	96	5	5	8	50.00	450.00			
106	98	5	5	8	50.00	450.00			
107	100	11	11	8	50.00	450.00			
108	102	5	5	8	50.00	450.00			
109	104	5	5	8	50.00	450.00			
110	106	5	5	8	50.00	450.00			
111	108	5	5	8	50.00	450.00			
112	110	5	5	8	50.00	450.00			
113	112	5	5	8	50.00	450.00			
114	114	5	5	8	50.00	450.00			
115	116	5	5	8	50.00	450.00			
116	118	5	5	8	50.00	450.00			
117	120	5	5	8	50.00	450.00			
118	122	5	5	8	50.00	450.00			
119	124	5	5	8	50.00	450.00			
120	126	5	5	8	50.00	450.00			
121	128	5	5	8	50.00	450.00			
122	130	11	11	8	50.00	450.00			
123	132	11	11	8	50.00	450.00			
124	134	11	11	8	50.00	450.00			
125	136	5	5	8	50.00	450.00			
126	138	5	5	8	50.00	450.00			
127	140	5	5	8	50.00	450.00			
128	142	5	5	8	50.00	450.00			
129	144	5	5	8	50.00	450.00			
130	146	5	5	8	50.00	450.00			
131	148	8	8	8	50.00	450.00			
132	150	5	5	8	50.00	450.00			
133	152	5	5	8	50.00	450.00			
134	154	5	5	8	50.00	450.00			
135	156	5	5	8	50.00	450.00			
136	158	5	5	8	50.00	450.00			
137	160	5	5	8	50.00	450.00			
138	162	5	5	8	50.00	450.00			
139	164	5	5	8	50.00	450.00			
140	166	5	5	8	50.00	450.00			
141	168	5	5	8	50.00	450.00			
142	170	5	5	8	50.00	450.00			
143	172	5	5	8	50.00	450.00			
144	174	5	5	8	50.00	450.00			
145	176	5	5	8	50.00	450.00			
146	178	5	5	8	50.00	450.00			
205	182	5	5	8	50.00	450.00			
206	184	5	5	8	50.00	450.00			
207	186	5	5	8	50.00	450.00			
208	188	5	5	8	50.00	450.00			
209	190	5	5	8	50.00	450.00			
210	192	5	5	8	50.00	450.00			
211	194	5	5	8	50.00	450.00			
212	196	5	5	8	50.00	450.00			
213	198	5	5	8	50.00	450.00			
214	200	5	5	8	50.00	450.00			
215	93	5	5	8	50.00	450.00			
216	97	5	5	8	50.00	450.00			
217	101	5	5	8	50.00	450.00			
218	105	5	5	8	50.00	450.00			
219	109	5	5	8	50.00	450.00			
220	113	5	5	8	50.00	450.00			
221	117	5	5	8	50.00	450.00			
222	121	5	5	8	50.00	450.00			
223	125	5	5	8	50.00	450.00			
224	129	8	8	8	50.00	450.00			
225	133	8	8	8	50.00	450.00			
226	137	5	5	8	50.00	450.00			
227	141	5	5	8	50.00	450.00			
228	145	5	5	8	50.00	450.00			
229	149	5	5	8	50.00	450.00			
230	153	5	5	8	50.00	450.00			
231	157	5	5	8	50.00	450.00			
232	161	8	8	8	50.00	450.00			

Pilas.l	Nodo	sez a-o	sez p-o	Diam.	Passo	fyk arm.	Spess.	fyk plt.	rinforzo frp
233	165	5	5	8	50.00	450.00			
234	169	5	5	8	50.00	450.00			
235	173	8	8	8	50.00	450.00			
236	177	5	5	8	50.00	450.00			
237	183	5	5	8	50.00	450.00			
238	187	5	5	8	50.00	450.00			
239	191	5	5	8	50.00	450.00			
240	195	6	6	8	50.00	450.00			
241	199	5	5	8	50.00	450.00			
242	95	5	5	8	50.00	450.00			
243	103	5	5	8	50.00	450.00			
244	111	5	5	8	50.00	450.00			
245	119	6	6	8	50.00	450.00			
246	127	5	5	8	50.00	450.00			
247	135	5	5	8	50.00	450.00			
248	143	5	5	8	50.00	450.00			
317	175	5	5	8	50.00	450.00			
319	123	7	7	8	50.00	450.00			
321	139	5	5	8	50.00	450.00			
323	131	5	5	8	50.00	450.00			
328	155	8	8	8	50.00	450.00			
329	185	8	8	8	50.00	450.00			
330	159	8	8	8	50.00	450.00			
331	171	5	5	8	50.00	450.00			
332	107	5	5	8	50.00	450.00			
333	167	5	5	8	50.00	450.00			
334	163	5	5	8	50.00	450.00			
335	99	5	5	8	50.00	450.00			
336	181	5	5	8	50.00	450.00			
337	91	5	5	8	50.00	450.00			
338	197	5	5	8	50.00	450.00			
343	202	4	4	8	50.00	450.00			
346	206	8	8	8	50.00	450.00			
349	210	5	5	8	50.00	450.00			
352	203	7	7	8	50.00	450.00			
354	207	5	5	8	50.00	450.00			
356	211	5	5	8	50.00	450.00			
358	209	7	7	8	50.00	450.00			
359	212	5	5	8	50.00	450.00			
360	204	5	5	8	50.00	450.00			

PILASTRI: C8A.7.1 INCAMICIATURA IN C.A.

Pilas.	sez a-o	sez p-o	Cont. fless.	rinf. CAM	rinf. FRP V	rinf. FRP F	li V	lc V	lf V	li F	lc F	lf F
							cm	cm	cm	cm	cm	cm
1	7	7	Si									
2	7	7	Si									
3	7	7	Si									
4	7	7	Si									
5	7	7	Si									
6	7	7	Si									
7	7	7	Si									
8	7	7	Si									
9	7	7	Si									
10	7	7	Si									
11	7	7	Si									
12	7	7	Si									
13	7	7	Si									
14	7	7	Si									
15	7	7	Si									
16	7	7	Si									
17	7	7	Si									
18	7	7	Si									
19	7	7	Si									
20	7	7	Si									
21	7	7	Si									
22	7	7	Si									
23	7	7	Si									
24	7	7	Si									
25	7	7	Si									

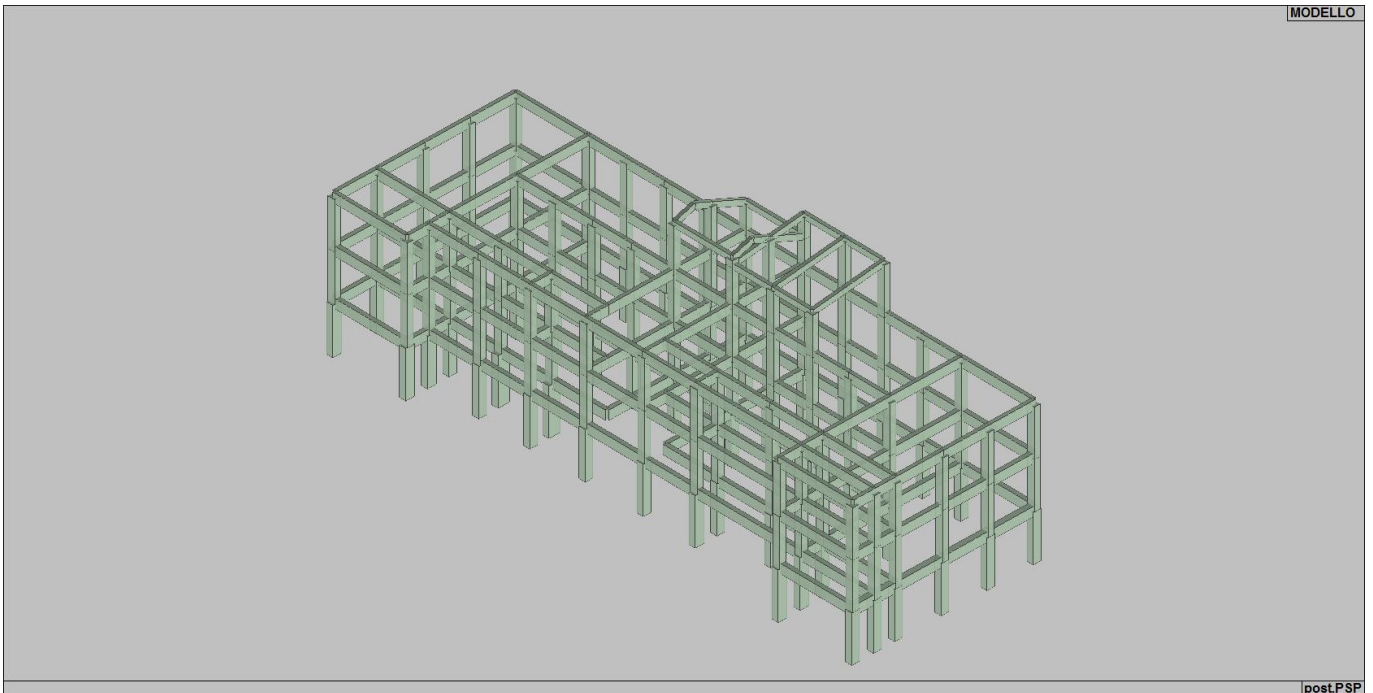
Pilas.	sez a-o	sez p-o	Cont. fless.	rinf. CAM	rinf. FRP V	rinf. FRP F	li V	lc V	lf V	li F	lc F	lf F
26	7	7	Si									
27	7	7	Si									
28	7	7	Si									
29	4	4	Si									
30	7	7	Si									
31	7	7	Si									
32	4	4	Si									
33	7	7	Si									
34	7	7	Si									
35	7	7	Si									
36	10	10	Si									
37	10	10	Si									
38	7	7	Si									
39	4	4	Si									
40	4	4	Si									
41	7	7	Si									
42	4	4	Si									
43	7	7	Si									
44	7	7	Si									
103	5	5	Si									
104	5	5	Si									
105	5	5	Si									
106	5	5	Si									
107	11	11	Si									
108	5	5	Si									
109	5	5	Si									
110	5	5	Si									
111	5	5	Si									
112	5	5	Si									
113	5	5	Si									
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117	5	5	Si									
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119	5	5	Si									
120	5	5	Si									
121	5	5	Si									
122	11	11	Si									
123	11	11	Si									
124	11	11	Si									
125	5	5	Si									
126	5	5	Si									
127	5	5	Si									
128	5	5	Si									
129	5	5	Si									
130	5	5	Si									
131	8	8	Si									
132	5	5	Si									
133	5	5	Si									
134	5	5	Si									
135	5	5	Si									
136	5	5	Si									
137	5	5	Si									
138	5	5	Si									
139	5	5	Si									
140	5	5	Si									
141	5	5	Si									
142	5	5	Si									
143	5	5	Si									
144	5	5	Si									
145	5	5	Si									
146	5	5	Si									
205	5	5	Si									
206	5	5	Si									
207	5	5	Si									
208	5	5	Si									
209	5	5	Si									
210	5	5	Si									
211	5	5	Si									
212	5	5	Si									
213	5	5	Si									
214	5	5	Si									

Pilas.	sez a-o	sez p-o	Cont. fless.	rinf. CAM	rinf. FRP V	rinf. FRP F	li V	lc V	lf V	li F	lc F	lf F
215	5	5	Si									
216	5	5	Si									
217	5	5	Si									
218	5	5	Si									
219	5	5	Si									
220	5	5	Si									
221	5	5	Si									
222	5	5	Si									
223	5	5	Si									
224	8	8	Si									
225	8	8	Si									
226	5	5	Si									
227	5	5	Si									
228	5	5	Si									
229	5	5	Si									
230	5	5	Si									
231	5	5	Si									
232	8	8	Si									
233	5	5	Si									
234	5	5	Si									
235	8	8	Si									
236	5	5	Si									
237	5	5	Si									
238	5	5	Si									
239	5	5	Si									
240	6	6	Si									
241	5	5	Si									
242	5	5	Si									
243	5	5	Si									
244	5	5	Si									
245	6	6	Si									
246	5	5	Si									
247	5	5	Si									
248	5	5	Si									
317	5	5	Si									
319	7	7	Si									
321	5	5	Si									
323	5	5	Si									
328	8	8	Si									
329	8	8	Si									
330	8	8	Si									
331	5	5	Si									
332	5	5	Si									
333	5	5	Si									
334	5	5	Si									
335	5	5	Si									
336	5	5	Si									
337	5	5	Si									
338	5	5	Si									
343	4	4	Si									
346	8	8	Si									
349	5	5	Si									
352	7	7	Si									
354	5	5	Si									
356	5	5	Si									
358	7	7	Si									
359	5	5	Si									
360	5	5	Si									

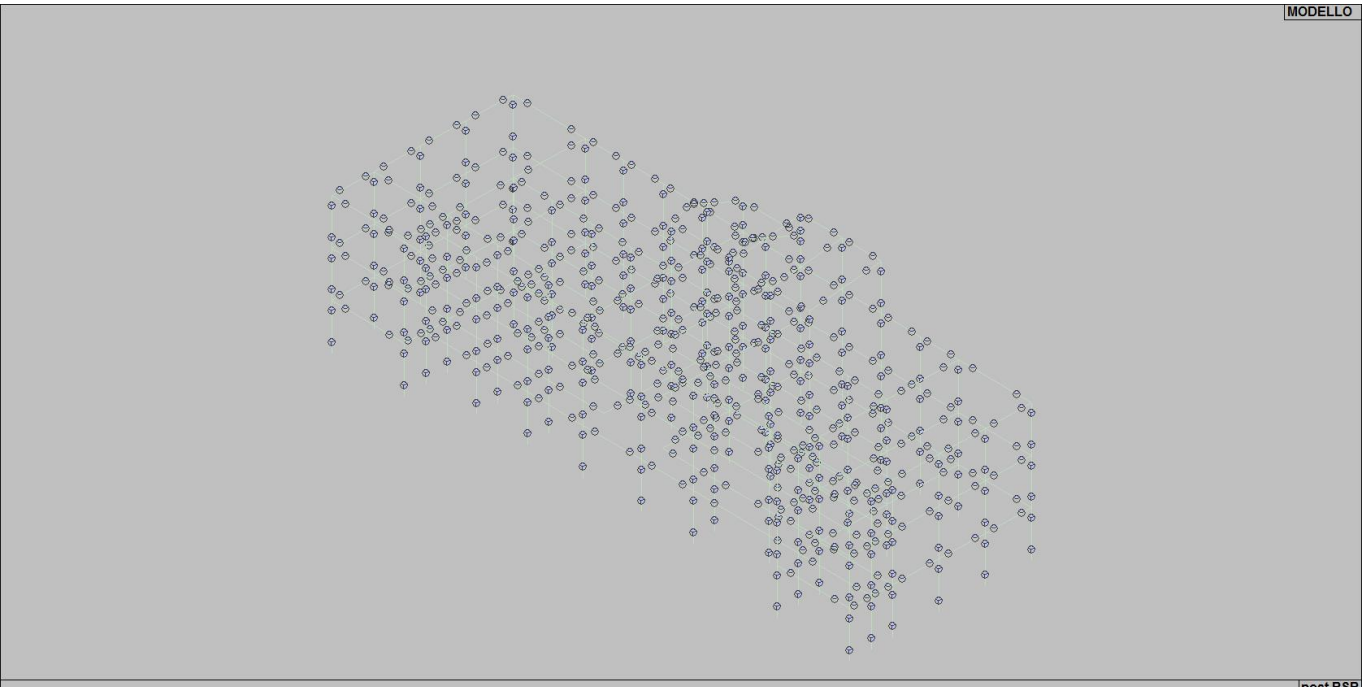
TRAVI: C8A.7.1 INCAMICIATURA IN C.A. - C8A.7.2 INCAMICIATURA IN ACCIAIO

Trave	sez a-o	sez p-o	Cont. fless.	rinf. CAM	li V cm	lc V cm	lf V cm
91	3	3	Si	Rinforzo travi			
92	3	3	Si	Rinforzo travi			
93	3	3	Si	Rinforzo travi			
94	3	3	Si	Rinforzo travi			
95	3	3	Si	Rinforzo travi			
96	3	3	Si	Rinforzo travi			
97	3	3	Si	Rinforzo travi			

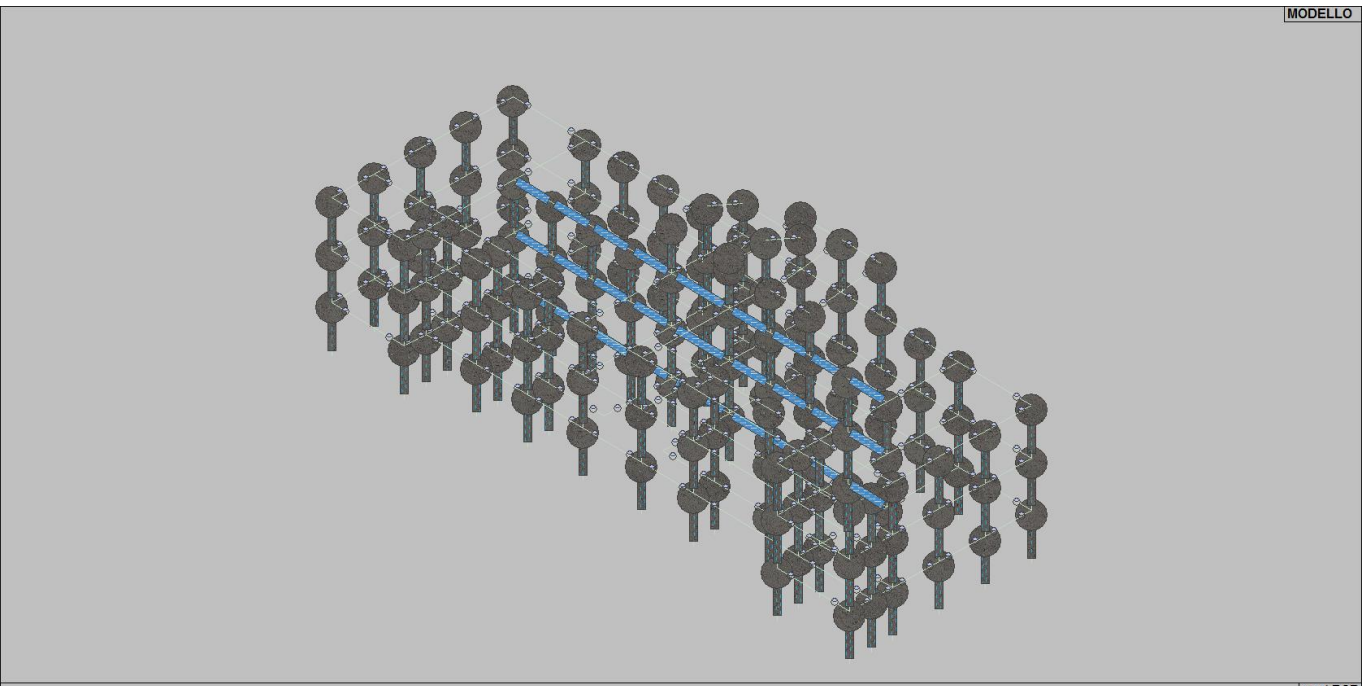
Trave	sez a-o	sez p-o	Cont. fless.	rinf. CAM	li V	lc V	lf V
98	3	3	Si	Rinforzo travi			
193	3	3	Si	Rinforzo travi			
194	3	3	Si	Rinforzo travi			
195	3	3	Si	Rinforzo travi			
196	3	3	Si	Rinforzo travi			
197	3	3	Si	Rinforzo travi			
198	3	3	Si	Rinforzo travi			
199	3	3	Si	Rinforzo travi			
200	3	3	Si	Rinforzo travi			
295	23	23	Si	Rinforzo travi			
296	23	23	Si	Rinforzo travi			
297	23	23	Si	Rinforzo travi			
298	23	23	Si	Rinforzo travi			
299	23	23	Si	Rinforzo travi			
300	23	23	Si	Rinforzo travi			
301	23	23	Si	Rinforzo travi			
302	23	23	Si	Rinforzo travi			
361	3	3	Si	Rinforzo travi			
362	3	3	Si	Rinforzo travi			
363	23	23	Si	Rinforzo travi			



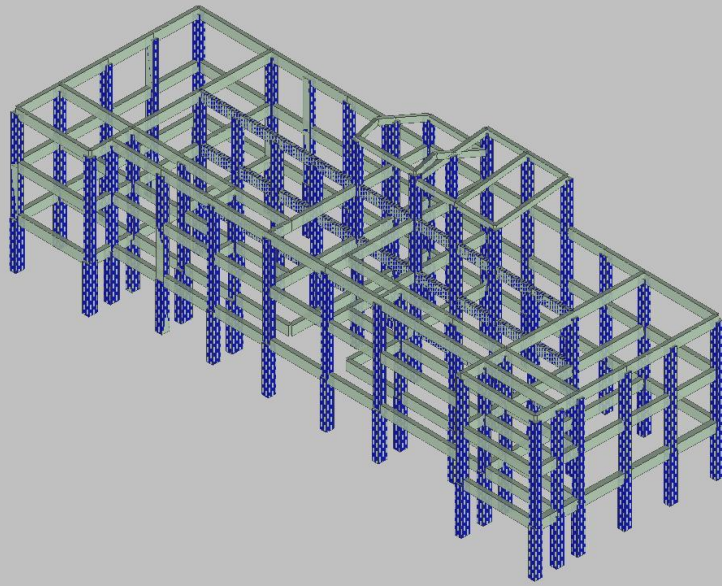
12_MOD_RINFORZI_D2_AO



12_MOD_RINFORZI_D2_FILO_AO



12_MOD_RINFORZI_D2_FILO_PO



12_MOD_RINFORZI_D2_PO

MODELLAZIONE DELLE SEZIONI

LEGENDA TABELLA DATI SEZIONI

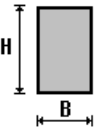
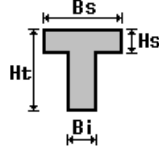
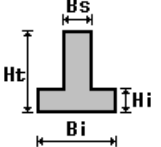
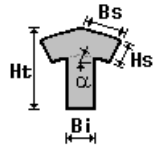
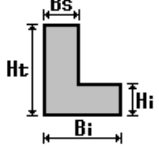
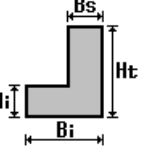
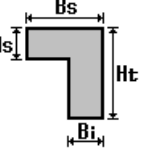
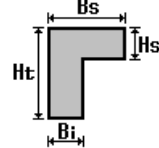
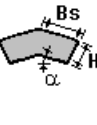
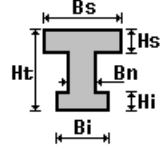
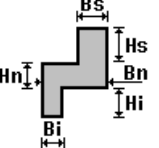
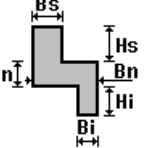
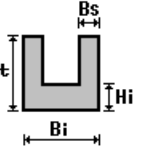
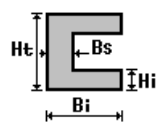
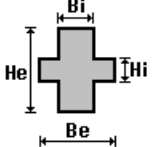
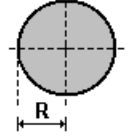
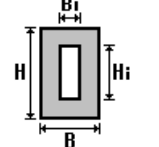
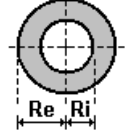
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

Area	area della sezione
A V2	area della sezione/fattore di taglio (per il taglio in direzione 2)
A V3	area della sezione/fattore di taglio (per il taglio in direzione 3)
Jt	fattore torsionale di rigidezza
J2-2	momento d'inerzia della sezione riferito all'asse 2
J3-3	momento d'inerzia della sezione riferito all'asse 3
W2-2	modulo di resistenza della sezione riferito all'asse 2
W3-3	modulo di resistenza della sezione riferito all'asse 3
Wp2-2	modulo di resistenza plastico della sezione riferito all'asse 2
Wp3-3	modulo di resistenza plastico della sezione riferito all'asse 3

I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

 rettangolare	 a T	 a T rovescia	 a T di colmo	 a L	 a L specchiata
 a L rovescia	 a L specchiata	 a L di colmo	 a doppio T	 a quattro specchiata	 a quattro
 a U	 a C	 a croce	 circolare	 rettangolare cava	 circolare cava

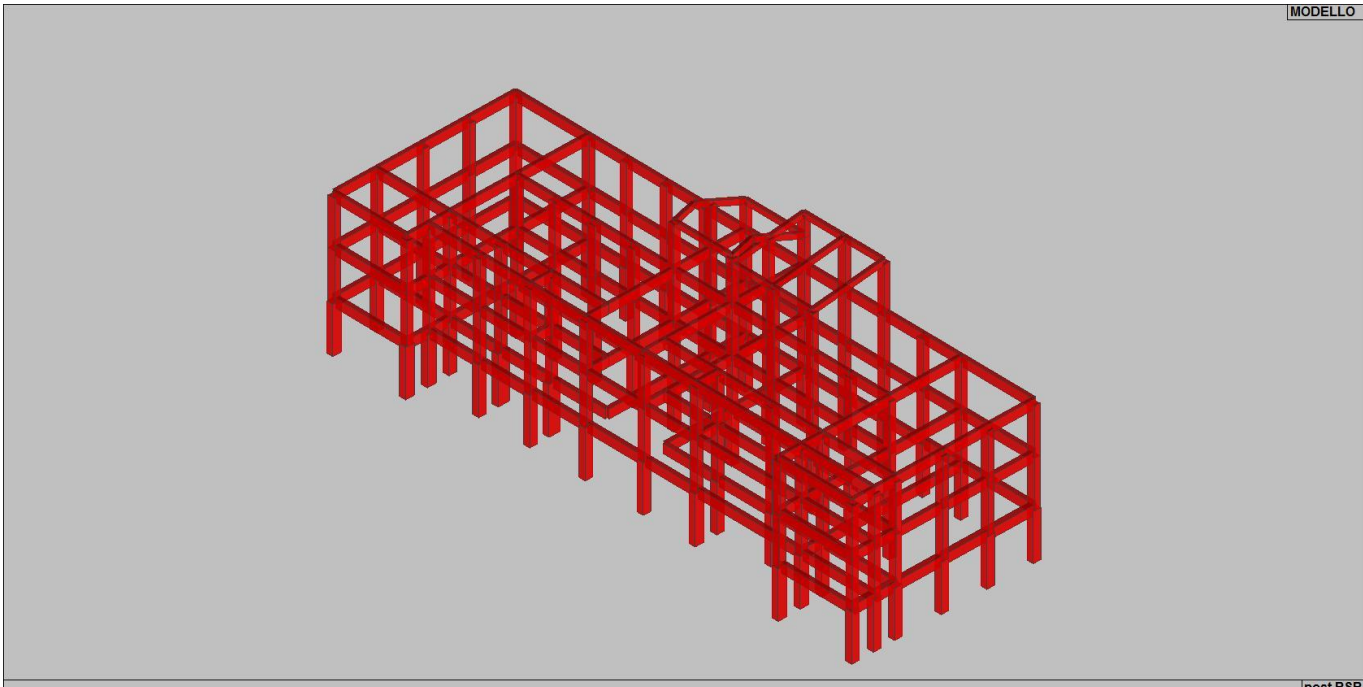
Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilati.

Per quanto concerne le sezioni di tipo generico (tipo 1.):
i valori dimensionali con prefisso B sono riferiti all'asse 2
i valori dimensionali con prefisso H sono riferiti all'asse 3

Con riferimento al Documento di Affidabilità "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Settembre 2014, disponibile per il download sul sito www.2si.it, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
1	CARATTERISTICHE GEOMETRICHE E INERZIALI
45	VERIFICA AGLI SLU DI STRUTTURE IN C.A.
48	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 9/1/96
49	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 14/1/2008
50	VERIFICA ALLO SLE (TENSIONI E FESSURAZIONE) DI STRUTTURE IN C.A.
51	VERIFICA ALLO SLE (DEFORMAZIONE) DI STRUTTURE IN C.A.
104	ANALISI DI RESISTENZA AL FUOCO

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
3	Rettangolare: b=30.00 h=70.00	2100.00	1750.00	1750.00	4.599e+05	1.575e+05	8.575e+05	1.050e+04	2.450e+04	1.575e+04	3.675e+04
4	post50x70	3500.00	2916.67	2916.67	1.636e+06	7.292e+05	1.429e+06	2.917e+04	4.083e+04	4.375e+04	6.125e+04
5	post55x45	2475.00	2062.50	2062.50	8.450e+05	6.239e+05	4.177e+05	2.269e+04	1.856e+04	3.403e+04	2.784e+04
6	post55x55	3025.00	2520.83	2520.83	1.286e+06	7.626e+05	7.626e+05	2.773e+04	2.773e+04	4.159e+04	4.159e+04
7	post50x60	3000.00	2500.00	2500.00	1.246e+06	6.250e+05	9.000e+05	2.500e+04	3.000e+04	3.750e+04	4.500e+04
8	post50x50	2500.00	2083.33	2083.33	8.785e+05	5.208e+05	5.208e+05	2.083e+04	2.083e+04	3.125e+04	3.125e+04
10	post50x90	4500.00	3750.00	3750.00	2.438e+06	9.375e+05	3.038e+06	3.750e+04	6.750e+04	5.625e+04	1.013e+05
11	post50x45	2250.00	1875.00	1875.00	7.077e+05	4.688e+05	3.797e+05	1.875e+04	1.688e+04	2.813e+04	2.531e+04
13	T ribassata: bi=10 ht=20 bs=50 hs=4	360.00	0.0	0.0	5579.57	4.300e+04	1.257e+04	1720.00	927.21	2900.00	1672.00
20	Rettangolare: b=40 h=70	2800.00	2333.33	2333.33	9.557e+05	3.733e+05	1.143e+06	1.867e+04	3.267e+04	2.800e+04	4.900e+04
22	Rettangolare: b=25 h=40	1000.00	833.33	833.33	1.263e+05	5.208e+04	1.333e+05	4166.67	6666.67	6250.00	1.000e+04
23	Rettangolare: b=25 h=70	1750.00	1458.33	1458.33	2.826e+05	9.115e+04	7.146e+05	7291.67	2.042e+04	1.094e+04	3.062e+04



13_MOD_SEZIONI

MODELLAZIONE STRUTTURA: NODI

LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.

Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).

Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

Nodo	numero del nodo.
X	valore della coordinata X
Y	valore della coordinata Y
Z	valore della coordinata Z
Note	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
Note	(FS = 1, 2,...) eventuale codice del tipo di fondazione speciale (1, 2,... fanno riferimento alle tipologie: plinto, palo, plinto su pali,...) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
Rig. TX	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

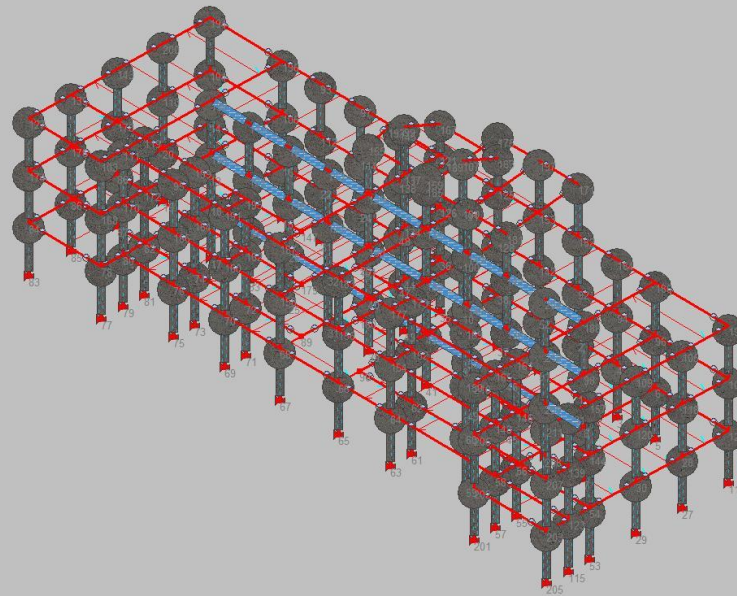
Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 14/01/08

TABELLA DATI NODI

Nodo	X cm	Y cm	Z cm	Nodo	X cm	Y cm	Z cm	Nodo	X cm	Y cm	Z cm
2	5302.7	2693.9	360.0	4	5620.2	2693.9	360.0	6	5930.2	2693.9	360.0
8	5930.2	2134.1	360.0	10	4655.2	2416.5	360.0	12	6520.2	2693.9	360.0
14	2320.2	2693.9	360.0	16	2910.2	2693.9	360.0	18	2910.2	2134.1	360.0
20	2320.2	2328.9	360.0	22	3217.7	2693.9	360.0	24	3537.7	2693.9	360.0
26	3537.7	2134.1	360.0	28	6520.2	2331.4	360.0	30	6520.2	1973.9	360.0
32	3855.2	2134.1	360.0	34	3217.7	2134.1	360.0	36	4185.2	2693.9	360.0
38	4655.2	2693.9	360.0	40	4185.2	2134.1	360.0	42	4655.2	2134.1	360.0
44	4185.2	2416.5	360.0	46	5302.7	2134.1	360.0	48	3855.2	2693.9	360.0
50	4985.2	2134.1	360.0	52	4985.2	2693.9	360.0	54	6520.2	1608.9	360.0
56	5930.2	1608.9	360.0	58	5930.2	1443.8	360.0	60	5517.7	1608.9	360.0
62	5080.2	1608.9	360.0	64	5080.2	1443.8	360.0	66	4655.2	1443.8	360.0
68	4185.2	1443.8	360.0	70	3735.2	1443.8	360.0	72	3735.2	1608.9	360.0
74	3322.7	1608.9	360.0	76	3322.7	1443.8	360.0	78	2910.2	1273.9	360.0
80	2910.2	1443.8	360.0	82	2910.2	1608.9	360.0	84	2320.2	1273.9	360.0
86	2320.2	1608.9	360.0	88	2320.2	1971.4	360.0	89	4185.2	1608.9	360.0
90	4655.2	1608.9	360.0	91	4985.2	2134.1	1370.0	92	5302.7	2693.9	720.0
93	3217.7	2693.9	1080.0	94	5620.2	2693.9	720.0	95	3322.7	1443.8	1080.0
96	5930.2	2693.9	720.0	97	3537.7	2693.9	1080.0	98	5930.2	2134.1	720.0
99	4185.2	2416.5	1410.6	100	4655.2	2416.5	720.0	101	3537.7	2134.1	1080.0
102	6520.2	2693.9	720.0	103	2910.2	1273.9	1080.0	104	2320.2	2693.9	720.0
105	6520.2	2331.4	1080.0	106	2910.2	2693.9	720.0	107	4655.2	2416.5	1410.6
108	2910.2	2134.1	720.0	109	6520.2	1973.9	1080.0	110	2320.2	2328.9	720.0
111	2910.2	1443.8	1080.0	112	3217.7	2693.9	720.0	113	3855.2	2134.1	1080.0
114	3537.7	2693.9	720.0	116	3537.7	2134.1	720.0	117	3217.7	2134.1	1080.0
118	6520.2	2331.4	720.0	119	2910.2	1608.9	1080.0	120	6520.2	1973.9	720.0
121	4185.2	2693.9	1080.0	122	3855.2	2134.1	720.0	123	6520.2	1443.8	360.0
124	3217.7	2134.1	720.0	125	4655.2	2693.9	1080.0	126	4185.2	2693.9	720.0
127	2320.2	1273.9	1080.0	128	4655.2	2693.9	720.0	129	4185.2	2134.1	1080.0
130	4185.2	2134.1	720.0	131	6520.2	1443.8	1080.0	132	4655.2	2134.1	720.0
133	4655.2	2134.1	1080.0	134	4185.2	2416.5	720.0	135	2320.2	1608.9	1080.0
136	5302.7	2134.1	720.0	137	4185.2	2416.5	1080.0	138	3855.2	2693.9	720.0
139	6520.2	1443.8	720.0	140	4985.2	2134.1	720.0	141	5302.7	2134.1	1080.0
142	4985.2	2693.9	720.0	143	2320.2	1971.4	1080.0	144	6520.2	1608.9	720.0
145	3855.2	2693.9	1080.0	146	5930.2	1608.9	720.0	147	4185.2	1608.9	1080.0
148	5930.2	1443.8	720.0	149	4985.2	2134.1	1080.0	150	5517.7	1608.9	720.0
151	4655.2	1608.9	1080.0	152	5080.2	1608.9	720.0	153	4985.2	2693.9	1080.0

154	5080.2	1443.8	720.0	155	4185.2	2134.1	1417.0	156	4655.2	1443.8	720.0
157	6520.2	1608.9	1080.0	158	4185.2	1443.8	720.0	159	4655.2	2134.1	1417.0
160	3735.2	1443.8	720.0	161	5930.2	1608.9	1080.0	162	3735.2	1608.9	720.0
163	4655.2	2693.9	1293.0	164	3322.7	1608.9	720.0	165	5930.2	1443.8	1080.0
166	3322.7	1443.8	720.0	167	4185.2	2693.9	1293.0	168	2910.2	1273.9	720.0
169	5517.7	1608.9	1080.0	170	2910.2	1443.8	720.0	171	5302.7	2693.9	1440.0
172	2910.2	1608.9	720.0	173	5080.2	1608.9	1080.0	174	2320.2	1273.9	720.0
175	4655.2	2693.9	1440.0	176	2320.2	1608.9	720.0	177	5080.2	1443.8	1080.0
178	2320.2	1971.4	720.0	179	4185.2	1608.9	720.0	180	4655.2	1608.9	720.0
181	5302.7	2134.1	1370.0	182	5302.7	2693.9	1080.0	183	4655.2	1443.8	1080.0
184	5620.2	2693.9	1080.0	185	4655.2	2134.1	1370.0	186	5930.2	2693.9	1080.0
187	4185.2	1443.8	1080.0	188	5930.2	2134.1	1080.0	189	4655.2	2288.1	1465.0
190	4655.2	2416.5	1080.0	191	3735.2	1443.8	1080.0	192	6520.2	2693.9	1080.0
193	4185.2	2288.1	1465.0	194	2320.2	2693.9	1080.0	195	3735.2	1608.9	1080.0
196	2910.2	2693.9	1080.0	197	4985.2	2693.9	1440.0	198	2910.2	2134.1	1080.0
199	3322.7	1608.9	1080.0	200	2320.2	2328.9	1080.0	202	5930.2	1272.8	360.0
203	6520.2	1272.8	360.0	204	5612.7	2134.1	1080.0	206	5930.2	1272.8	720.0
207	6520.2	1272.8	720.0	209	5612.7	2134.1	360.0	210	5930.2	1272.8	1080.0
211	6520.2	1272.8	1080.0	212	5612.7	2134.1	720.0				

Nodo	X cm	Y cm	Z cm	Note	Rig. TX daN/cm	Rig. TY daN/cm	Rig. TZ daN/cm	Rig. RX cm/rad	Rig. RY daN cm/rad	Rig. RZ daN cm/rad
1	5302.7	2693.9	0.0	v=111111						
3	5620.2	2693.9	0.0	v=111111						
5	5930.2	2693.9	0.0	v=111111						
7	5930.2	2134.1	0.0	v=111111						
9	4655.2	2416.5	0.0	v=111111						
11	6520.2	2693.9	0.0	v=111111						
13	2320.2	2693.9	0.0	v=111111						
15	2910.2	2693.9	0.0	v=111111						
17	2910.2	2134.1	0.0	v=111111						
19	2320.2	2328.9	0.0	v=111111						
21	3217.7	2693.9	0.0	v=111111						
23	3537.7	2693.9	0.0	v=111111						
25	3537.7	2134.1	0.0	v=111111						
27	6520.2	2331.4	0.0	v=111111						
29	6520.2	1973.9	0.0	v=111111						
31	3855.2	2134.1	0.0	v=111111						
33	3217.7	2134.1	0.0	v=111111						
35	4185.2	2693.9	0.0	v=111111						
37	4655.2	2693.9	0.0	v=111111						
39	4185.2	2134.1	0.0	v=111111						
41	4655.2	2134.1	0.0	v=111111						
43	4185.2	2416.5	0.0	v=111111						
45	5302.7	2134.1	0.0	v=111111						
47	3855.2	2693.9	0.0	v=111111						
49	4985.2	2134.1	0.0	v=111111						
51	4985.2	2693.9	0.0	v=111111						
53	6520.2	1608.9	0.0	v=111111						
55	5930.2	1608.9	0.0	v=111111						
57	5930.2	1443.8	0.0	v=111111						
59	5517.7	1608.9	0.0	v=111111						
61	5080.2	1608.9	0.0	v=111111						
63	5080.2	1443.8	0.0	v=111111						
65	4655.2	1443.8	0.0	v=111111						
67	4185.2	1443.8	0.0	v=111111						
69	3735.2	1443.8	0.0	v=111111						
71	3735.2	1608.9	0.0	v=111111						
73	3322.7	1608.9	0.0	v=111111						
75	3322.7	1443.8	0.0	v=111111						
77	2910.2	1273.9	0.0	v=111111						
79	2910.2	1443.8	0.0	v=111111						
81	2910.2	1608.9	0.0	v=111111						
83	2320.2	1273.9	0.0	v=111111						
85	2320.2	1608.9	0.0	v=111111						
87	2320.2	1971.4	0.0	v=111111						
115	6520.2	1443.8	0.0	v=111111						
201	5930.2	1272.8	0.0	v=111111						
205	6520.2	1272.8	0.0	v=111111						
208	5612.7	2134.1	0.0	v=111111						



14_MOD_NUMERAZIONE_NODI

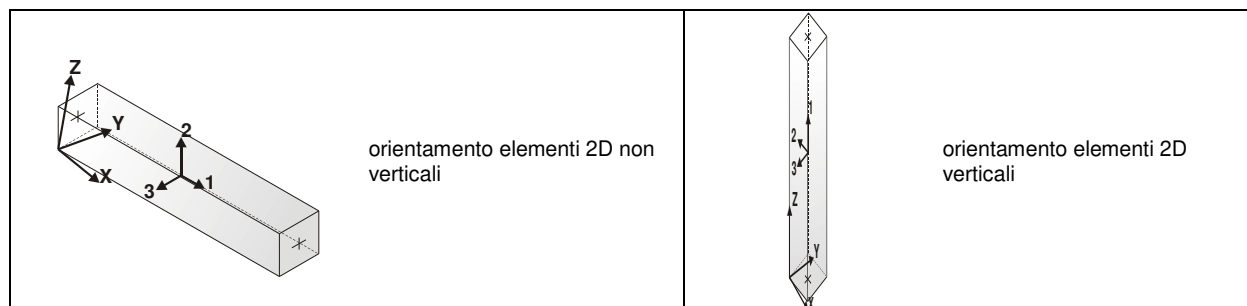
MODELLAZIONE STRUTTURALE: ELEMENTI TRAVE

TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.

Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



In particolare per ogni elemento viene indicato in tabella:

Elem.	numero dell'elemento
Note	codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa,
Nodo I (J)	numero del nodo iniziale (finale)
Mat.	codice del materiale assegnato all'elemento
Sez.	codice della sezione assegnata all'elemento
Rotaz.	valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo
Svincolo I (J)	codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva)
Wink V	costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico
Wink O	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale

Con riferimento al **Documento di Affidabilità** "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Settembre 2014, disponibile per il download sul sito www.2si.it, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
2	TRAVI A UNA CAMPATA
3	TRAVE A PIU' CAMPATE
4	TRAVE A UNA CAMPATA SU TERRENO ALLA WINKLER
5	TRAVI SU TERRENO ALLA WINKLER CON CARICO TRASVERSALE
6	TELAI PIANI CON CERNIERE ALLA BASE
7	TELAI PIANI CON INCASTRI ALLA BASE
11	STRUTTURE SOGGETTE A VARIAZIONI TERMICHE
12	STRUTTURE SU TERRENO ALLA WINKLER SOTTOPOSTE A CARICHI DISTRIBUITI TRIANGOLARI
21	DRILLING
24	TENSIONI E ROTAZIONI RISPETTO ALLA CORDA DI ELEMENTI TRAVE
27	FRECCIA DI ELEMENTI TRAVE
42	GERARCHIA DELLE RESISTENZE PER TRAVI IN C.A.
43	GERARCHIA DELLE RESISTENZE PER PILASTRI IN C.A.
44	VERIFICA ALLE TA DI STRUTTURE IN C.A.
45	VERIFICA AGLI SLU DI STRUTTURE IN C.A.
47	VERIFICA A PUNZONAMENTO ALLO SLU DI TRAVI IN C.A.
48	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 9/1/96
49	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 14/1/2008
50	VERIFICA ALLO SLE (TENSIONI E FESSURAZIONE) DI STRUTTURE IN C.A.
51	VERIFICA ALLO SLE (DEFORMAZIONE) DI STRUTTURE IN C.A.
52	FATTORE DI STRUTTURA
53	SOVRARESISTENZE
54	DETTAGLI COSTRUTTIVI C.A.: LIMITI D'ARMATURA PILASTRI E NODI TRAVE-PILASTRO
56	VERIFICA DI STABILITA' DI ASTE COMPRESSE IN ACCIAIO - METODO OMEGA
57	LUCE LIBERA DI TRAVI E ASTE IN ACCIAIO
58	LUCE LIBERA DI COLONNE IN ACCIAIO
59	SVERGOLAMENTO DI TRAVI IN ACCIAIO
64	STABILITA' DI ASTE COMPOSTE IN ACCIAIO
73	VALUTAZIONE EFFETTO P- δ SU PILASTRATA
74	VALUTAZIONE EFFETTO P- δ SU TELAIO 3D
85	ANALISI PUSHOVER DI UN EDIFICIO IN C.A.
87	ANALISI ELASTO PLASTICA INCREMENTALE
88	ANALISI ELASTO PLASTICA INCREMENTALE
98	VERIFICA ALLO SLU DI STRUTTURE IN LEGNO SECONDO EC5
99	VERIFICA ALLO SLE DI STRUTTURE IN LEGNO SECONDO EC5
102	SNELLEZZE EC5
130	PROGETTO E VERIFICA DI TRAVI PREM

Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Rotaz. gradi	Svincolo I	Svincolo J	Wink V daN/cm3	Wink O daN/cm3
1	Pilas.	1	2	1	7	90.00				
2	Pilas.	3	4	1	7	90.00				
3	Pilas.	5	6	1	7	90.00				
4	Pilas.	7	8	1	7	90.00				
5	Pilas.	9	10	1	7	90.00				
6	Pilas.	11	12	1	7	90.00				
7	Pilas.	13	14	1	7	90.00				
8	Pilas.	15	16	1	7	90.00				
9	Pilas.	17	18	1	7	90.00				
10	Pilas.	19	20	1	7	90.00				
11	Pilas.	21	22	1	7	90.00				

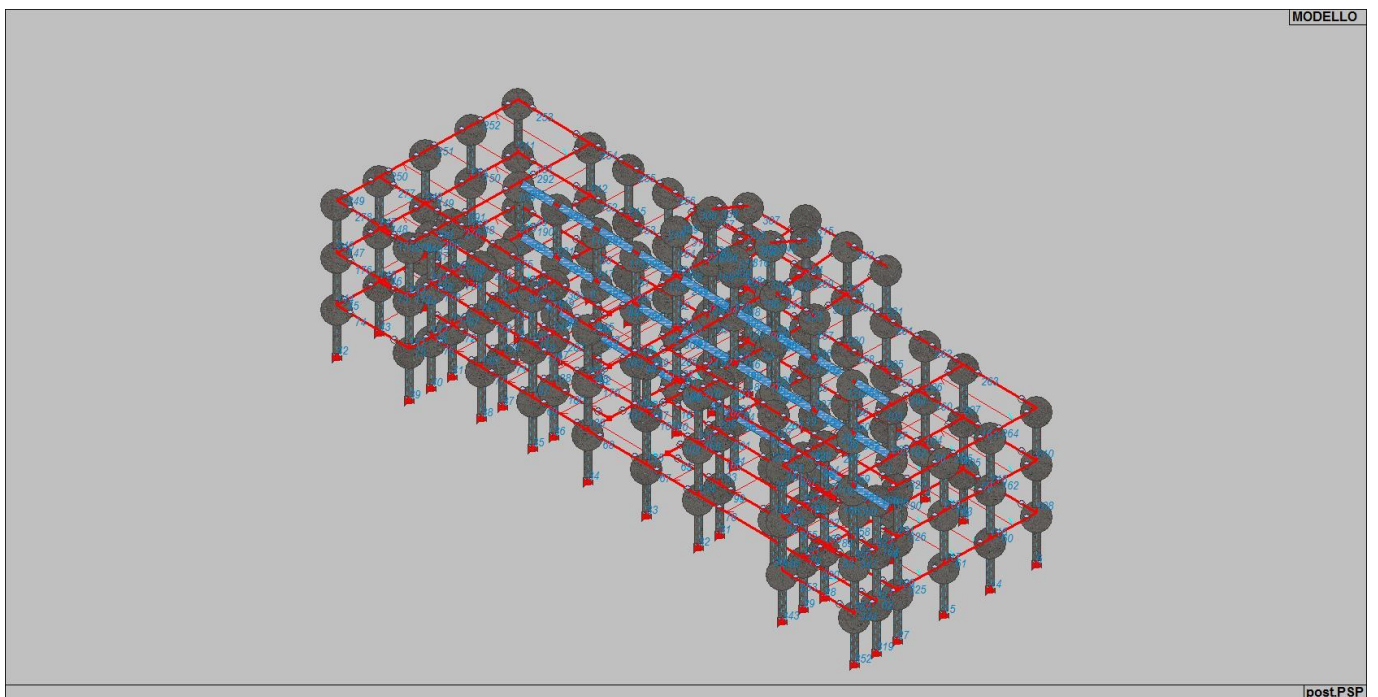
12	Pilas.	23	24	1	7	90.00
13	Pilas.	25	26	1	7	90.00
14	Pilas.	27	28	1	7	90.00
15	Pilas.	29	30	1	7	90.00
16	Pilas.	31	32	1	7	90.00
17	Pilas.	33	34	1	7	90.00
18	Pilas.	35	36	1	7	90.00
19	Pilas.	37	38	1	7	90.00
20	Pilas.	39	40	1	7	90.00
21	Pilas.	41	42	1	7	90.00
22	Pilas.	43	44	1	7	90.00
23	Pilas.	45	46	1	7	90.00
24	Pilas.	47	48	1	7	90.00
25	Pilas.	49	50	1	7	90.00
26	Pilas.	51	52	1	7	90.00
27	Pilas.	53	54	1	7	90.00
28	Pilas.	55	56	1	7	90.00
29	Pilas.	57	58	1	4	90.00
30	Pilas.	59	60	1	7	90.00
31	Pilas.	61	62	1	7	90.00
32	Pilas.	63	64	1	4	90.00
33	Pilas.	65	66	1	7	90.00
34	Pilas.	67	68	1	7	90.00
35	Pilas.	69	70	1	7	90.00
36	Pilas.	71	72	1	10	90.00
37	Pilas.	73	74	1	10	90.00
38	Pilas.	75	76	1	7	90.00
39	Pilas.	77	78	1	4	90.00
40	Pilas.	79	80	1	4	90.00
41	Pilas.	81	82	1	7	90.00
42	Pilas.	83	84	1	4	90.00
43	Pilas.	85	86	1	7	90.00
44	Pilas.	87	88	1	7	90.00
45	Trave	84	86	54	3	
46	Trave	86	88	54	3	
47	Trave	88	20	54	3	
48	Trave	20	14	54	3	
49	Trave	14	16	54	3	
50	Trave	16	22	54	3	
51	Trave	22	24	54	3	
52	Trave	24	48	54	3	
53	Trave	48	36	54	3	
54	Trave	36	38	54	3	
55	Trave	38	52	54	3	
56	Trave	52	2	54	3	
57	Trave	2	4	54	3	
58	Trave	4	6	54	3	
59	Trave	6	12	54	3	
60	Trave	28	12	54	20	
61	Trave	30	28	54	20	
62	Trave	123	54	54	20	
63	Trave	56	54	54	3	
64	Trave	60	56	54	3	
65	Trave	90	62	54	3	
67	Trave	66	64	54	3	
68	Trave	68	66	54	3	
69	Trave	70	68	54	3	
71	Trave	74	72	54	3	
72	Trave	82	74	54	3	
73	Trave	86	82	54	3	
74	Trave	84	78	54	3	
75	Trave	78	80	54	3	
76	Trave	80	76	54	3	
77	Trave	76	70	54	3	
78	Trave	64	58	54	3	
79	Trave	58	56	54	3	
81	Trave	40	44	54	3	
82	Trave	44	36	54	3	
83	Trave	10	38	54	3	
84	Trave	42	10	54	3	
86	Trave	80	82	54	3	
87	Trave	82	18	54	3	
88	Trave	18	16	54	3	
89	Trave	56	8	54	3	
90	Trave	8	6	54	3	
91	Trave	18	34	54	3	

92	Trave	34	26	54	3	
93	Trave	26	32	54	3	
94	Trave	32	40	54	3	
95	Trave	40	42	54	3	
96	Trave	42	50	54	3	
97	Trave	50	46	54	3	
98	Trave	46	209	54	3	
99	Trave	62	60	54	3	
100	Trave	72	89	54	3	
101	Trave	89	40	54	3	
102	Trave	90	42	54	3	
103	Pilas.	2	92	1	5	90.00
104	Pilas.	4	94	1	5	90.00
105	Pilas.	6	96	1	5	90.00
106	Pilas.	8	98	1	5	90.00
107	Pilas.	10	100	1	11	90.00
108	Pilas.	12	102	1	5	90.00
109	Pilas.	14	104	1	5	90.00
110	Pilas.	16	106	1	5	90.00
111	Pilas.	18	108	1	5	90.00
112	Pilas.	20	110	1	5	90.00
113	Pilas.	22	112	1	5	90.00
114	Pilas.	24	114	1	5	90.00
115	Pilas.	26	116	1	5	90.00
116	Pilas.	28	118	1	5	90.00
117	Pilas.	30	120	1	5	90.00
118	Pilas.	32	122	1	5	90.00
119	Pilas.	34	124	1	5	90.00
120	Pilas.	36	126	1	5	90.00
121	Pilas.	38	128	1	5	90.00
122	Pilas.	40	130	1	11	90.00
123	Pilas.	42	132	1	11	90.00
124	Pilas.	44	134	1	11	90.00
125	Pilas.	46	136	1	5	90.00
126	Pilas.	48	138	1	5	90.00
127	Pilas.	50	140	1	5	90.00
128	Pilas.	52	142	1	5	90.00
129	Pilas.	54	144	1	5	90.00
130	Pilas.	56	146	1	5	90.00
131	Pilas.	58	148	1	8	90.00
132	Pilas.	60	150	1	5	90.00
133	Pilas.	62	152	1	5	90.00
134	Pilas.	64	154	1	5	90.00
135	Pilas.	66	156	1	5	90.00
136	Pilas.	68	158	1	5	90.00
137	Pilas.	70	160	1	5	90.00
138	Pilas.	72	162	1	5	90.00
139	Pilas.	74	164	1	5	90.00
140	Pilas.	76	166	1	5	90.00
141	Pilas.	78	168	1	5	90.00
142	Pilas.	80	170	1	5	90.00
143	Pilas.	82	172	1	5	90.00
144	Pilas.	84	174	1	5	90.00
145	Pilas.	86	176	1	5	90.00
146	Pilas.	88	178	1	5	90.00
147	Trave	174	176	54	3	
148	Trave	176	178	54	3	
149	Trave	178	110	54	3	
150	Trave	110	104	54	3	
151	Trave	104	106	54	3	
152	Trave	106	112	54	3	
153	Trave	112	114	54	3	
154	Trave	114	138	54	3	
155	Trave	138	126	54	3	
156	Trave	126	128	54	3	
157	Trave	128	142	54	3	
158	Trave	142	92	54	3	
159	Trave	92	94	54	3	
160	Trave	94	96	54	3	
161	Trave	96	102	54	3	
162	Trave	118	102	54	3	
163	Trave	120	118	54	3	
164	Trave	139	144	54	3	
165	Trave	146	144	54	3	
166	Trave	150	146	54	3	
167	Trave	180	152	54	3	

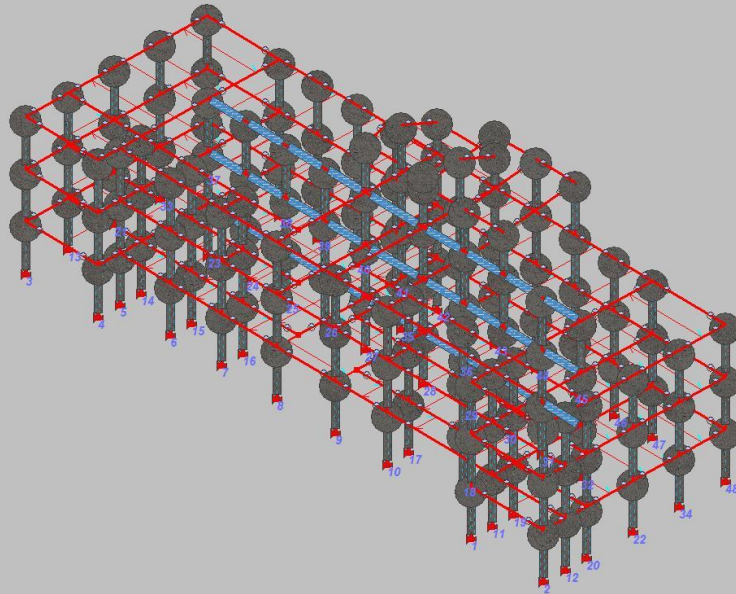
168	Trave	154	152	54	3	
169	Trave	156	154	54	3	
170	Trave	158	156	54	3	
171	Trave	160	158	54	3	
172	Trave	160	162	54	3	
173	Trave	164	162	54	3	
174	Trave	172	164	54	3	
175	Trave	176	172	54	3	
176	Trave	174	168	54	3	
177	Trave	168	170	54	3	
178	Trave	170	166	54	3	
179	Trave	166	160	54	3	
180	Trave	154	148	54	3	
181	Trave	148	146	54	3	
182	Trave	158	179	54	3	
183	Trave	130	134	54	3	
184	Trave	134	126	54	3	
185	Trave	100	128	54	3	
186	Trave	132	100	54	3	
187	Trave	156	180	54	3	
188	Trave	170	172	54	3	
189	Trave	172	108	54	3	
190	Trave	108	106	54	3	
191	Trave	146	98	54	3	
192	Trave	98	96	54	3	
193	Trave	108	124	54	3	
194	Trave	124	116	54	3	
195	Trave	116	122	54	3	
196	Trave	122	130	54	3	
197	Trave	130	132	54	3	
198	Trave	132	140	54	3	
199	Trave	140	136	54	3	
200	Trave	136	212	54	3	
201	Trave	152	150	54	3	
202	Trave	162	179	54	3	
203	Trave	179	130	54	3	
204	Trave	180	132	54	3	
205	Pilas.	92	182	1	5	90.00
206	Pilas.	94	184	1	5	90.00
207	Pilas.	96	186	1	5	90.00
208	Pilas.	98	188	1	5	90.00
209	Pilas.	100	190	1	5	90.00
210	Pilas.	102	192	1	5	90.00
211	Pilas.	104	194	1	5	90.00
212	Pilas.	106	196	1	5	90.00
213	Pilas.	108	198	1	5	90.00
214	Pilas.	110	200	1	5	90.00
215	Pilas.	112	93	1	5	90.00
216	Pilas.	114	97	1	5	90.00
217	Pilas.	116	101	1	5	90.00
218	Pilas.	118	105	1	5	90.00
219	Pilas.	120	109	1	5	90.00
220	Pilas.	122	113	1	5	90.00
221	Pilas.	124	117	1	5	90.00
222	Pilas.	126	121	1	5	90.00
223	Pilas.	128	125	1	5	90.00
224	Pilas.	130	129	1	8	90.00
225	Pilas.	132	133	1	8	90.00
226	Pilas.	134	137	1	5	90.00
227	Pilas.	136	141	1	5	90.00
228	Pilas.	138	145	1	5	90.00
229	Pilas.	140	149	1	5	90.00
230	Pilas.	142	153	1	5	90.00
231	Pilas.	144	157	1	5	90.00
232	Pilas.	146	161	1	8	90.00
233	Pilas.	148	165	1	5	90.00
234	Pilas.	150	169	1	5	90.00
235	Pilas.	152	173	1	8	90.00
236	Pilas.	154	177	1	5	90.00
237	Pilas.	156	183	1	5	90.00
238	Pilas.	158	187	1	5	90.00
239	Pilas.	160	191	1	5	90.00
240	Pilas.	162	195	1	6	90.00
241	Pilas.	164	199	1	5	90.00
242	Pilas.	166	95	1	5	90.00
243	Pilas.	168	103	1	5	90.00

244	Pilas.	170	111	1	5	90.00
245	Pilas.	172	119	1	6	90.00
246	Pilas.	174	127	1	5	90.00
247	Pilas.	176	135	1	5	90.00
248	Pilas.	178	143	1	5	90.00
249	Trave	127	135	54	23	
250	Trave	135	143	54	23	
251	Trave	143	200	54	23	
252	Trave	200	194	54	23	
253	Trave	194	196	54	23	
254	Trave	196	93	54	23	
255	Trave	93	97	54	23	
256	Trave	97	145	54	23	
257	Trave	145	121	54	23	
258	Trave	121	125	54	23	
259	Trave	125	153	54	23	
260	Trave	153	182	54	23	
261	Trave	182	184	54	23	
262	Trave	184	186	54	23	
263	Trave	186	192	54	23	
264	Trave	105	192	54	23	
265	Trave	109	105	54	23	
266	Trave	131	157	54	23	
267	Trave	161	157	54	23	
268	Trave	169	161	54	23	
269	Trave	151	173	54	23	
270	Trave	177	173	54	23	
271	Trave	183	177	54	23	
272	Trave	187	183	54	23	
273	Trave	191	187	54	23	
274	Trave	191	195	54	23	
275	Trave	199	195	54	23	
276	Trave	119	199	54	23	
277	Trave	135	119	54	23	
278	Trave	127	103	54	23	
279	Trave	103	111	54	23	
280	Trave	111	95	54	23	
281	Trave	95	191	54	23	
282	Trave	177	165	54	23	
283	Trave	165	161	54	23	
284	Trave	187	147	54	23	
285	Trave	129	137	54	23	
286	Trave	137	121	54	23	
287	Trave	190	125	54	23	
288	Trave	133	190	54	23	
289	Trave	183	151	54	23	
290	Trave	111	119	54	23	
291	Trave	119	198	54	23	
292	Trave	198	196	54	23	
293	Trave	161	188	54	23	
294	Trave	188	186	54	23	
295	Trave	198	117	54	23	
296	Trave	117	101	54	23	
297	Trave	101	113	54	23	
298	Trave	113	129	54	23	
299	Trave	129	133	54	23	
300	Trave	133	149	54	23	
301	Trave	149	141	54	23	
302	Trave	141	204	54	23	
303	Trave	173	169	54	23	
304	Trave	195	147	54	23	
305	Trave	147	129	54	23	
306	Trave	151	133	54	23	
307	Trave	167	163	54	22	
308	Trave	193	99	54	22	
309	Trave	155	193	54	22	
310	Trave	155	159	54	22	
311	Trave	159	189	54	22	
312	Trave	189	107	54	22	
313	Trave	185	91	54	22	
314	Trave	181	171	54	22	
315	Trave	175	197	54	22	
316	Trave	185	175	54	22	
317	Pilas.	163	175	1	5	90.00
319	Pilas.	115	123	1	7	90.00
320	Trave	58	123	54	3	

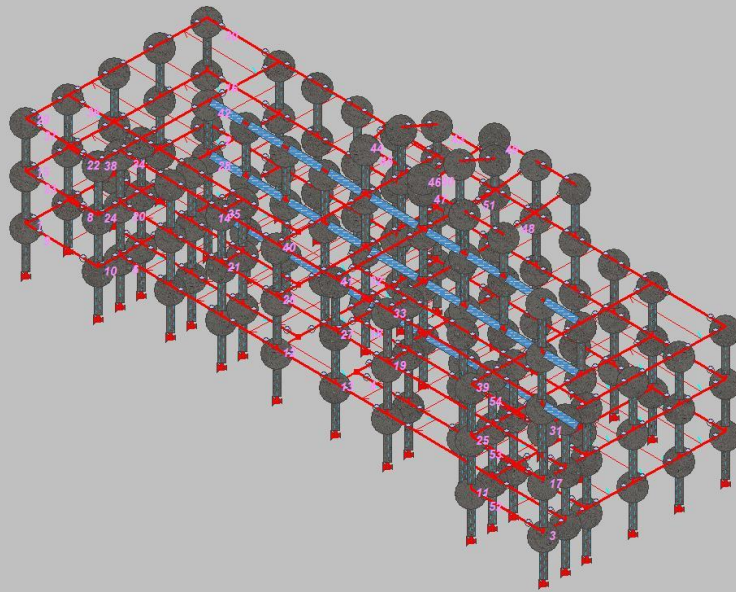
321	Pilas.	123	139	1	5	90.00
322	Trave	148	139	54	3	
323	Pilas.	139	131	1	5	90.00
324	Trave	165	131	54	23	
325	Trave	54	30	54	20	
326	Trave	144	120	54	3	
327	Trave	157	109	54	23	
328	Pilas.	129	155	1	8	90.00
329	Pilas.	133	185	1	8	90.00
330	Pilas.	185	159	1	8	90.00
331	Pilas.	182	171	1	5	90.00
332	Pilas.	190	107	1	5	90.00
333	Pilas.	121	167	1	5	90.00
334	Pilas.	125	163	1	5	90.00
335	Pilas.	137	99	1	5	90.00
336	Pilas.	141	181	1	5	90.00
337	Pilas.	149	91	1	5	90.00
338	Pilas.	153	197	1	5	90.00
339	Trave	99	167	54	22	
340	Trave	107	163	54	22	
341	Trave	91	181	54	22	
342	Trave	197	171	54	22	
343	Pilas.	201	202	1	4	90.00
344	Trave	203	123	54	20	
346	Pilas.	202	206	1	8	90.00
347	Trave	207	139	54	3	
348	Trave	206	148	54	3	
349	Pilas.	206	210	1	5	90.00
350	Trave	211	131	54	23	
351	Trave	210	165	54	23	
352	Pilas.	205	203	1	7	90.00
353	Trave	202	203	54	3	
354	Pilas.	203	207	1	5	90.00
355	Trave	206	207	54	3	
356	Pilas.	207	211	1	5	90.00
357	Trave	210	211	54	23	
358	Pilas.	208	209	1	7	90.00
359	Pilas.	209	212	1	5	90.00
360	Pilas.	212	204	1	5	90.00
361	Trave	209	8	54	3	
362	Trave	212	98	54	3	
363	Trave	204	188	54	23	



15_MOD_NUMERAZIONE_D2



15_MOD_NUMERAZIONE_D2_PILASTRATE



15_MOD_NUMERAZIONE_D2_TRAVATE

MODELLAZIONE DELLA STRUTTURA: ELEMENTI SOLAIO-PANNELLO

LEGENDA TABELLA DATI SOLAI-PANNELLI

Il programma utilizza per la modellazione elementi a tre o più nodi denominati in generale solaio o pannello.

Ogni elemento solaio-pannello è individuato da una poligonale di nodi 1,2, ..., N.

L'elemento solaio è utilizzato in primo luogo per la modellazione dei carichi agenti sugli elementi strutturali. In secondo luogo può essere utilizzato per la corretta ripartizione delle forze orizzontali agenti nel proprio piano. L'elemento balcone è derivato dall'elemento solaio.

I carichi agenti sugli elementi solaio, raccolti in un archivio, sono direttamente assegnati agli elementi utilizzando le informazioni raccolte nell'archivio (es. i coefficienti combinatori). La tabella seguente riporta i dati utilizzati per la definizione dei carichi e delle masse.

L'elemento pannello è utilizzato solo per l'applicazione dei carichi, quali pesi delle tamponature o spinte dovute al vento o terre. In questo caso i carichi sono applicati in analogia agli altri elementi strutturali (si veda il cap. SCHEMATIZZAZIONE DEI CASI DI CARICO).

Id.Arch.	Identificativo dell' archivio
Tipo	Tipo di carico Variab. Carico variabile generico Var. rid. Carico variabile generico con riduzione in funzione dell' area (c.5.5. ...) Neve Carico di neve
G1k	carico permanente (comprensivo del peso proprio)
G2k	carico permanente non strutturale e non compiutamente definito
Qk	carico variabile
Fatt. A	fattore di riduzione del carico variabile (0.5 o 0.75) per tipo "Var.rid."
S sis.	fattore di riduzione del carico variabile per la definizione delle masse sismiche per D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento")
Psi 0	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: per valore raro
Psi 1	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: per valore frequente
Psi 2	Coefficiente combinatorio dei valori caratteristici delle azioni variabili: per valore quasi permanente
Psi S 2	Coefficiente di combinazione che fornisce il valore quasi-permanente dell'azione variabile: per la definizione delle masse sismiche
Fatt. Fi	Coefficiente di correlazione dei carichi per edifici

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione. In particolare per ogni elemento viene indicato in tabella:

Elem	numero dell'elemento
Tipo	codice di comportamento S elemento utilizzato solo per scarico C elemento utilizzato per scarico e per modellazione piano rigido P elemento utilizzato come pannello M scarico monodirezionale B scarico bidirezionale
Id.Arch.	Identificativo dell' archivio
Mat	codice del materiale assegnato all'elemento
Spessore	spessore dell'elemento (costante)
Orditura	angolo (rispetto all'asse X) della direzione dei travetti principali
Gk	carico permanente solaio (comprensivo del peso proprio)
Qk	carico variabile solaio
Nodi	numero dei nodi che definiscono l'elemento (5 per riga)

Nel caso in cui si sia proceduto alla progettazione dei solai con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale); nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d e le verifiche per sollecitazioni proporzionali nonché le verifiche in esercizio.

In particolare i simboli utilizzati in tabella assumono il seguente significato:

Elem.	numero identificativo dell'elemento
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m);
Pos.	Ascissa del punto di verifica
F ist, F infi	Frecce istantanee e a tempo infinito
Momento	Momento flettente
Taglio	Sollecitazione di taglio
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup.	Area di armatura longitudinale posta all'estradosso della trave
AfV	Area dell'armatura atta ad assorbire le azioni di taglio
Beff	Base della sezione di cls per l'assorbimento del taglio
	simboli utilizzati con il metodo delle tensioni ammissibili:
sc max	Massima tensione di compressione del calcestruzzo
sf max	Massima tensione nell'acciaio
tau max	Massima tensione tangenziale nel cls

simboli utilizzati con il metodo degli stati limite:	
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
verif.	rapporto Sd/Su con sollecitazioni ultime proporzionali: valore minore o uguale a 1 per verifica positiva
Verif.V	rapporto Sd/Su con sollecitazioni taglianti proporzionali: valore minore o uguale a 1 per verifica positiva
rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
rFfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni frequenti [normalizzato a 1]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni frequenti [normalizzato a 1]
rFyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
rPfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni quasi permanenti [normalizzato a 1]
wR	apertura caratteristica delle fessure in combinazioni rare [mm]
wF	apertura caratteristica delle fessure in combinazioni frequenti [mm]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]

Nel caso in cui si sia proceduto alla verifica delle tamponature secondo il D.M. 14.01.2008 - §7.2.3 viene riportata una tabella riassuntiva delle verifiche degli elementi pannello. La verifica confronta i momenti sollecitanti indotti dal sisma con i momenti resistenti, secondo tre ipotesi, due basate sulla resistenza a pressoflessione della tamponatura ed una basata sul cinematismo a seguito della formazione di tre cerniere plastiche sulla tamponatura (rif. Ufficio di Vigilanza sulle Costruzioni, Provincia di Terni).

Qualora la tamponatura sia di tipo antiespulsione (nelle due possibili varianti ordinaria o armata) viene condotta una verifica con meccanismo ad arco con degrado di resistenza. La verifica confronta le pressioni sollecitanti indotte dal sisma con le pressioni resistenti che la tamponatura sviluppa attraverso il meccanismo ad arco. La verifica considera anche il degrado di resistenza dovuto al danneggiamento nel piano della tamponatura.

Per quest'ultima tamponatura sono disponibili, in funzione del materiale impiegato (materiale [52] o materiale [53]):

- **Tamponatura Antiespulsione ordinaria Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova. Utilizzabile per il materiale [52].
- **Tamponatura Antiespulsione armata Poroton® Cis Edil** sp.30 cm; con metodo di verifica per meccanismo ad arco con degrado di resistenza, sviluppato attraverso i risultati di un progetto di ricerca sperimentale condotto dall'Università degli Studi di Padova. Utilizzabile per il materiale [53].

La verifica è stata calibrata sulla base di prove sperimentali sul sistema di Tamponatura Antiespulsione anche in presenza di aperture. (rif. Rapporti di Prova redatti dal Dipartimento ICEA - Università degli Studi di Padova di test sperimentali condotti sul sistema Tamponatura Antiespulsione di Cis Edil)

In particolare i simboli utilizzati in tabella assumono il seguente significato:

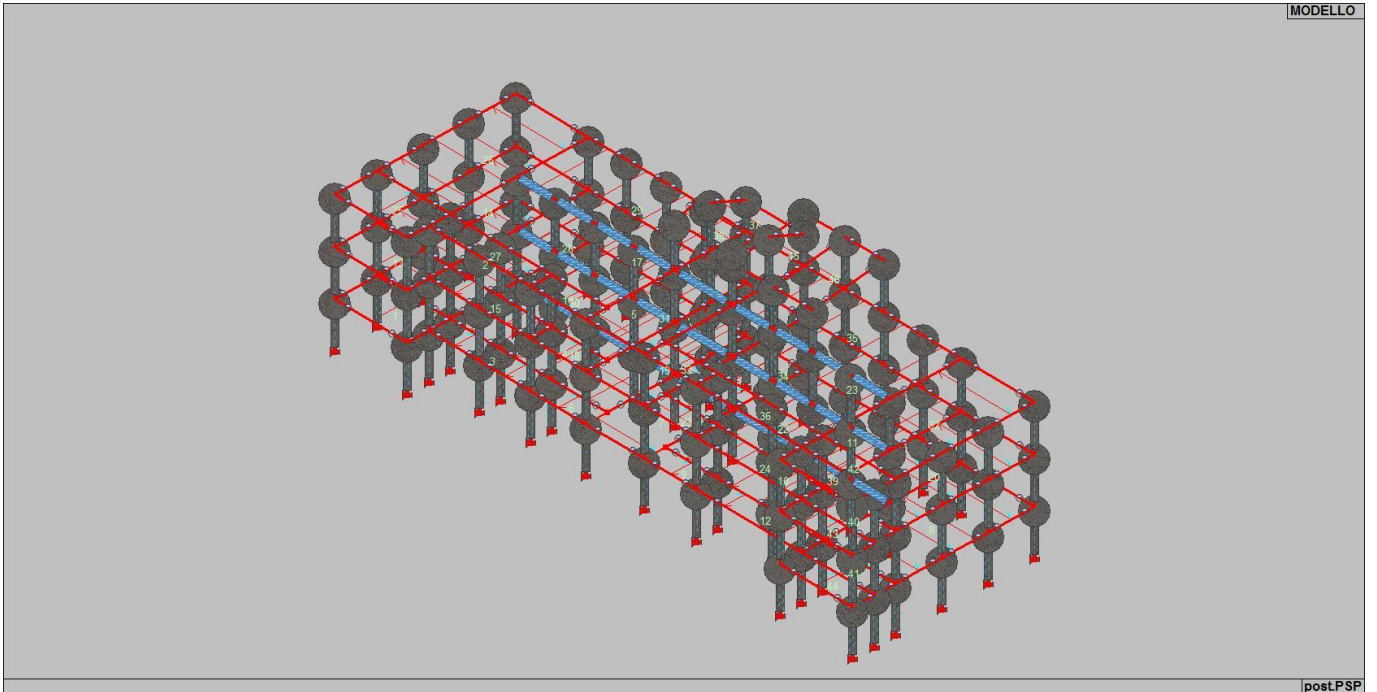
Elem.	Numero identificativo dell'elemento
Stato	Codice di verifica
Ver. c.c.	Verifica nell'ipotesi di trave appoggiata con carico concentrato in mezzzeria
Ver. c.d.	Verifica nell'ipotesi di trave appoggiata con carico distribuito
Ver. c.cin.	Verifica nell'ipotesi di cinematismo con formazione di cerniere plastiche in appoggio e mezzzeria
Ver. CIS	Rapporto pa/pr (valore minore o uguale a 1 per verifica positiva)
Z	Quota del baricentro dell'elemento
T1	Periodo proprio dell'edificio nella direzione di interesse (ortogonale al pannello)
Ta	Periodo proprio della parete
Sa	Accelerazione massima, adimensionalizzata allo SLV
pa	Pressione sulla parete causata dall'azione sismica
pr	Pressione resistente del meccanismo ad arco
Drift	Spostamento relativo interpiano allo SLV valutato secondo il D.M. 14.01.2008 - § 7.3.3.3
Beta a	Coef. riduttivo per tener conto del danneggiamento del piano dipendente dallo spostamento, ottenuto sperimentalmente

Con riferimento al **Documento di Affidabilità "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST"** - versione Maggio 2011, disponibile per il download sul sito www.2si.it, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
14	ANALISI DEI CARICHI PER UN SOLAIO DI COPERTURA
15	EFFETTI DELLO SPESSORE SULLA RIGIDEZZA DEI SOLAI
16	SOLAIO: CONFRONTO FRA RIGIDO E DEFORMABILE
17	SOLAIO: MISTO LEGNO-CALCESTRUZZO
28	FRECCIA DI SOLAI IN C.A.
119	PROGETTO E VERIFICA DI SOLAI IN MATERIALE XLAM

ID Arch.	Tipo	G1k daN/cm2	G2k daN/cm2	Qk daN/cm2	Fatt. A	s sis.	Psi 0	Psi 1	Psi 2	Psi S 2	Fatt. Fi		
1	Variab.	2.50e-02	2.00e-02	3.00e-02		1.00	0.70	0.70	0.60	0.60	1.00		
6	Neve	5.00e-02		1.00e-02		1.00	0.50	0.20	0.0	0.0	1.00		
Elem.	Tipo	ID Arch.	Mat.	Spessore	Orditura	G1k daN/cm2	G2k daN/cm2	Qk daN/cm2	Nodo 1/6..	Nodo 2/7..	Nodo 3/8..	Nodo..	Nodo..
1	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	78	80	82	86	84
2	CM	1	m=54	4.0	0.0	2.50e-02	2.00e-02	3.00e-02	82	18	16	14	20
3	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	88	86			
4	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	76	70	72	74	82
5	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	80				
6	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	74	72	89	40	32
7	CM	1	m=54	4.0	0.0	2.50e-02	2.00e-02	3.00e-02	26	34	18	82	
8	CM	1	m=54	4.0	0.0	2.50e-02	2.00e-02	3.00e-02	34	26	32	40	44
9	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	36	48	24	22	16
10	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	18				
11	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	68	89	72	70	
12	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	66	90	42	40	89
13	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	68				
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15	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	8	56			
16	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	64	62	90	66	
17	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	62	60	56	8	46
18	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	50	42	90		
19	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	50	46	8	6	4
20	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	2	52	38	10	42
21	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	58	56	60	62	64
22	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	168	170	172	176	174
23	CM	1	m=54	4.0	0.0	2.50e-02	2.00e-02	3.00e-02	172	108	106	104	110
24	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	178	176			
25	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	166	160	162	164	172
26	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	170				
27	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	164	162	179	130	122
28	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	116	124	108	172	
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38	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	152	150	146	98	136
39	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	140	132	180		
40	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	140	136	98	96	94
41	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	92	142	128	100	132
42	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	148	146	150	152	154
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47	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	111				
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49	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	101	117	198	119	
50	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	117	101	113	129	137
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52	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	198				
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54	CM	6	m=54	4.0	0.0	5.00e-02	1.00e-02	1.00e-02	183	151	133	129	147
55	CM	6	m=54	4.0	0.0	5.00e-02	1.00e-02	1.00e-02	187				
56	CM	6	m=54	4.0	0.0	5.00e-02	1.00e-02	1.00e-02	157	109	105	192	186
57	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	188	161			
58	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	177	173	151	183	
59	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	173	169	161	188	141
60	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	149	133	151		
61	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	149	141	188	186	184
62	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	182	153	125	190	133
63	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	165	161	169	173	177
64	CM	6	m=54	4.0	0.0	5.00e-02	1.00e-02	1.00e-02	193	189	163	167	
65	CM	6	m=54	4.0	0.0	5.00e-02	1.00e-02	1.00e-02	155	159	189	193	
66	CM	6	m=54	4.0	90.0	5.00e-02	1.00e-02	1.00e-02	131	165	210	211	

40	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	144	146	148	139
41	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	54	56	58	123
42	CM	6	m=54	4.0	90.0	5.00e-02		1.00e-02	157	161	165	131
43	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	139	148	206	207
44	CM	1	m=54	4.0	90.0	2.50e-02	2.00e-02	3.00e-02	123	58	202	203
45	CM	6	m=54	4.0	0.0	5.00e-02		1.00e-02	91	197	175	185
46	CM	6	m=54	4.0	0.0	5.00e-02		1.00e-02	181	171	197	91



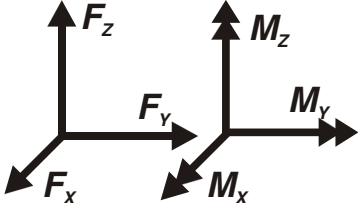
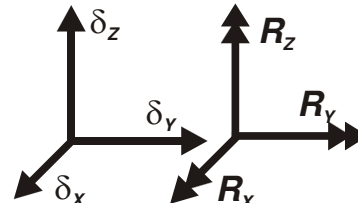
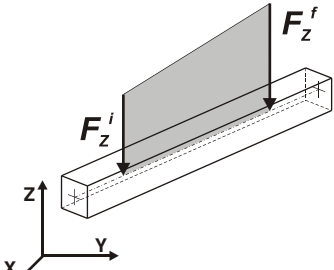
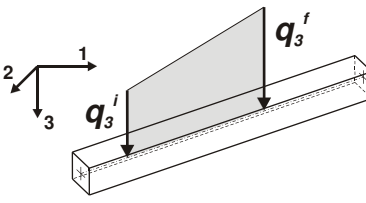
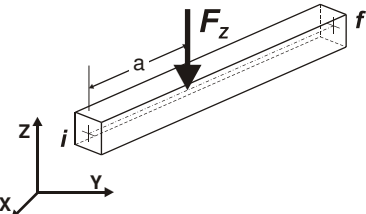
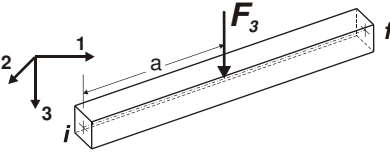
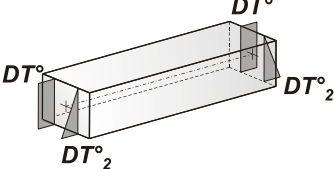
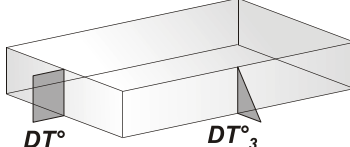
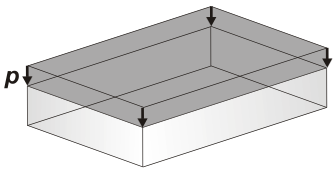
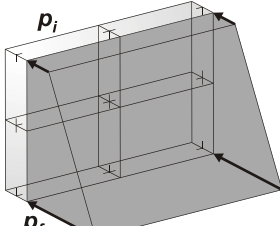
17_MOD_NUMERAZIONE_SOLAI

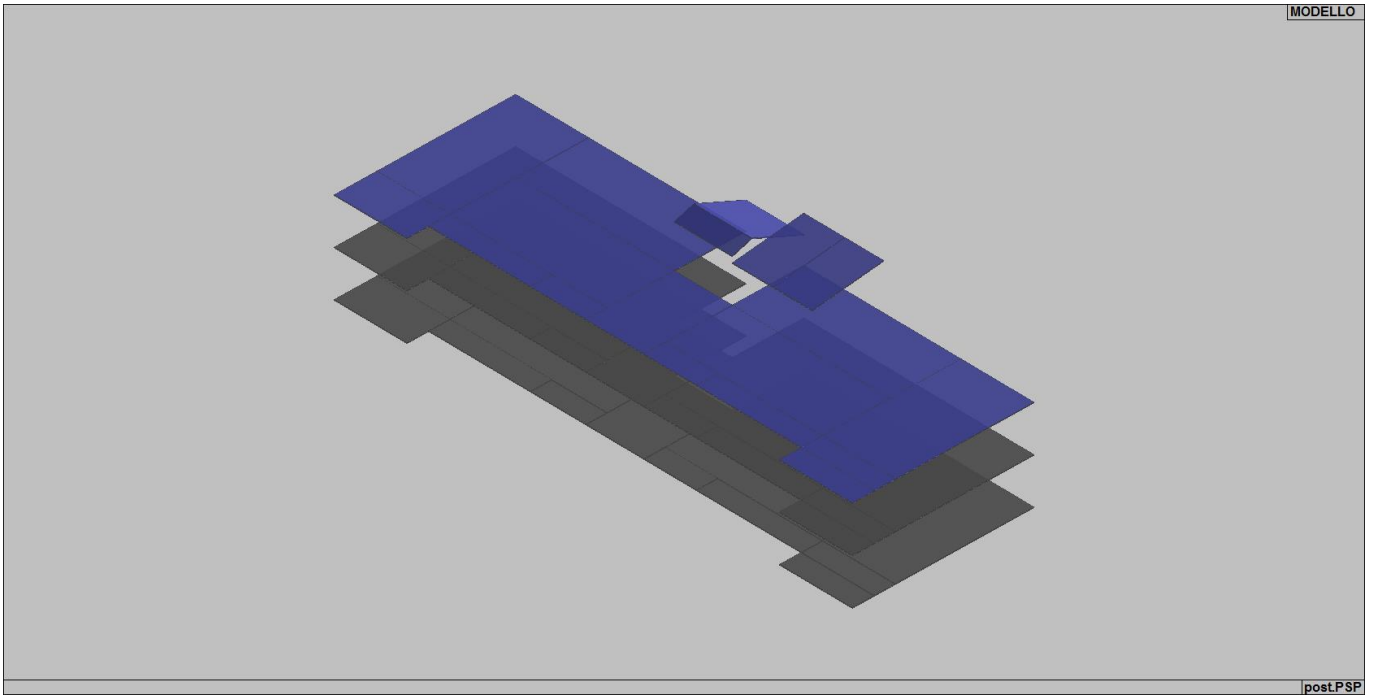
MODELLAZIONE DELLE AZIONI

LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

1	carico concentrato nodale 6 dati (forza F_x, F_y, F_z , momento M_x, M_y, M_z)
2	spostamento nodale impresso 6 dati (spostamento T_x, T_y, T_z , rotazione R_x, R_y, R_z)
3	carico distribuito globale su elemento tipo trave 7 dati ($f_x, f_y, f_z, m_x, m_y, m_z$, ascissa di inizio carico) 7 dati ($f_x, f_y, f_z, m_x, m_y, m_z$, ascissa di fine carico)
4	carico distribuito locale su elemento tipo trave 7 dati ($f_1, f_2, f_3, m_1, m_2, m_3$, ascissa di inizio carico) 7 dati ($f_1, f_2, f_3, m_1, m_2, m_3$, ascissa di fine carico)
5	carico concentrato globale su elemento tipo trave 7 dati ($F_x, F_y, F_z, M_x, M_y, M_z$, ascissa di carico)
6	carico concentrato locale su elemento tipo trave 7 dati ($F_1, F_2, F_3, M_1, M_2, M_3$, ascissa di carico)
7	variazione termica applicata ad elemento tipo trave 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
8	carico di pressione uniforme su elemento tipo piastra 1 dato (pressione)
9	carico di pressione variabile su elemento tipo piastra 4 dati (pressione, quota, pressione, quota)
10	variazione termica applicata ad elemento tipo piastra 2 dati (variazioni termiche: media e differenza nello spessore)
11	carico variabile generale su elementi tipo trave e piastra 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
12	gruppo di carichi con impronta su piastra 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell'impronta, interasse tra i carichi)

 <p>Carico concentrato nodale</p>	 <p>Spostamento impresso</p>
 <p>Carico distribuito globale</p>	 <p>Carico distribuito locale</p>
 <p>Carico concentrato globale</p>	 <p>Carico concentrato locale</p>
 <p>Carico termico 2D</p>	 <p>Carico termico 3D</p>
 <p>Carico pressione uniforme</p>	 <p>Carico pressione variabile</p>



21_CAR_CARICHI_SOLAI

SCHEMATIZZAZIONE DEI CASI DI CARICO

LEGENDA TABELLA CASI DI CARICO

Il programma consente l'applicazione di diverse tipologie di casi di carico.
Sono previsti i seguenti 11 tipi di casi di carico:

	Sigla	Tipo	Descrizione
1	Ggk	A	caso di carico comprensivo del peso proprio struttura
2	Gk	NA	caso di carico con azioni permanenti
3	Qk	NA	caso di carico con azioni variabili
4	Gsk	A	caso di carico comprensivo dei carichi permanenti sui solai e sulle coperture
5	Qsk	A	caso di carico comprensivo dei carichi variabili sui solai
6	Qnk	A	caso di carico comprensivo dei carichi di neve sulle coperture
7	Qtk	SA	caso di carico comprensivo di una variazione termica agente sulla struttura
8	Qvk	NA	caso di carico comprensivo di azioni da vento sulla struttura
9	Esk	SA	caso di carico sismico con analisi statica equivalente
10	Edk	SA	caso di carico sismico con analisi dinamica
11	EtK	NA	caso di carico comprensivo di azioni derivanti dall' incremento di spinta delle terre in condizione sismica
12	Pk	NA	caso di carico comprensivo di azioni derivanti da coazioni, cedimenti e precompressioni

Sono di tipo automatico A (ossia non prevedono introduzione dati da parte dell'utente) i seguenti casi di carico: 1-Ggk; 4-Gsk; 5-Qsk; 6-Qnk.

Sono di tipo semi-automatico SA (ossia prevedono una minima introduzione dati da parte dell'utente) i seguenti casi di carico:

7-Qtk, in quanto richiede solo il valore della variazione termica;

9-Esk e 10-Edk, in quanto richiedono il valore dell'angolo di ingresso del sisma e l'individuazione dei casi di carico partecipanti alla definizione delle masse.

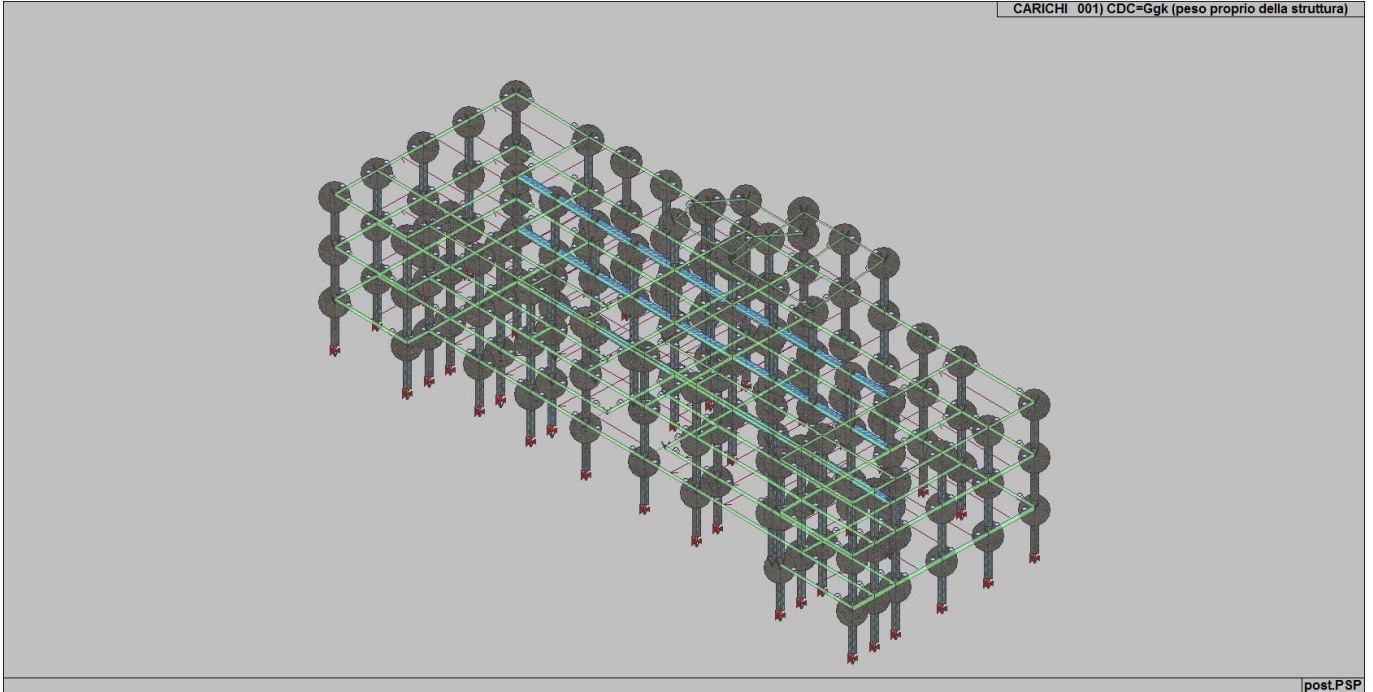
Sono di tipo non automatico NA ossia prevedono la diretta applicazione di carichi generici agli elementi strutturali (si veda il precedente punto Modellazione delle Azioni) i restanti casi di carico.

Nella tabella successiva vengono riportati i casi di carico agenti sulla struttura, con l'indicazione dei dati relativi al caso di carico stesso: *Numero Tipo e Sigla identificativa, Valore di riferimento* del caso di carico (se previsto).

In successione, per i casi di carico non automatici, viene riportato l'elenco di nodi ed elementi direttamente caricati con la sigla identificativa del carico.

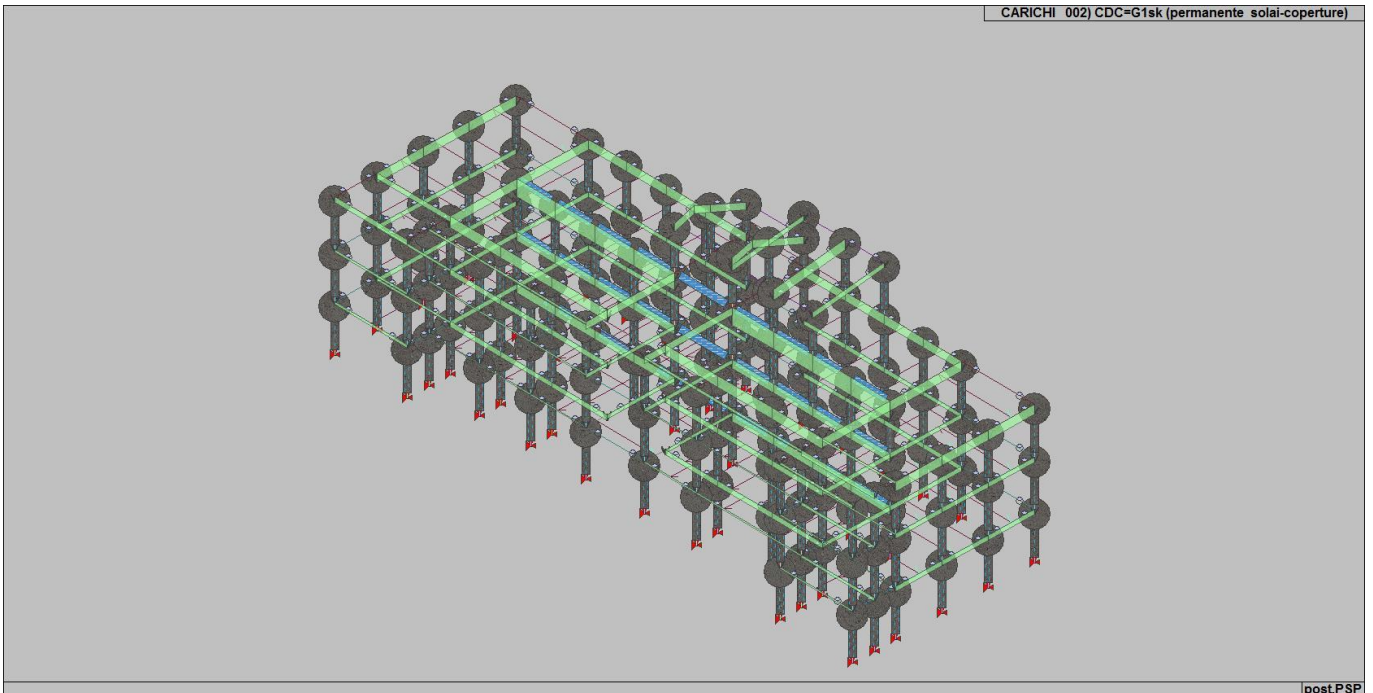
Per i casi di carico di tipo sismico (9-Esk e 10-Edk), viene riportata la tabella di definizione delle masse: per ogni caso di carico partecipante alla definizione delle masse viene indicata la relativa aliquota (partecipazione) considerata. Si precisa che per i caso di carico 5-Qsk e 6-Qnk la partecipazione è prevista localmente per ogni elemento solaio o copertura presente nel modello (si confronti il valore Sksol nel capitolo relativo agli elementi solai) e pertanto la loro partecipazione è di norma pari a uno.

CDC	Tipo	Sigla Id	Note
1	Ggk	CDC=Ggk (peso proprio della struttura)	
2	Gsk	CDC=G1sk (permanente solai-coperture)	
3	Gsk	CDC=G2sk (permanente solai-coperture n.c.d.)	
4	Qsk	CDC=Qsk (variabile solai)	
5	Qnk	CDC=Qnk (carico da neve)	
6	Esk	CDC=Es (statico SLU non lin.) - (prop. masse) alfa=0.0 (ecc. 0)	partecipazione:1.00 per 1 CDC=Ggk (peso proprio della struttura) partecipazione:1.00 per 2 CDC=G1sk (permanente solai-coperture) partecipazione:1.00 per 3 CDC=G2sk (permanente solai-coperture n.c.d.) partecipazione:1.00 per 4 CDC=Qsk (variabile solai) partecipazione:1.00 per 5 CDC=Qnk (carico da neve)
7	Esk	CDC=Es (statico SLU non lin.) - [prop. statica] alfa=0.0 (ecc. 0)	come precedente CDC sismico
8	Esk	CDC=Es (statico SLU non lin.) - (prop. masse) alfa=90.00 (ecc. 0)	come precedente CDC sismico
9	Esk	CDC=Es (statico SLU non lin.) - [prop. statica] alfa=90.00 (ecc. 0)	come precedente CDC sismico
10	Esk	CDC=Es (statico SLD non lin.)- (prop. masse) alfa=0.0 (ecc. 0)	come precedente CDC sismico
11	Esk	CDC=Es (statico SLD non lin.)- [prop. statica] alfa=0.0 (ecc. 0)	come precedente CDC sismico
12	Esk	CDC=Es (statico SLD non lin.)- (prop. masse) alfa=90.00 (ecc. 0)	come precedente CDC sismico
13	Esk	CDC=Es (statico SLD non lin.)- [prop. statica] alfa=90.00 (ecc. 0)	come precedente CDC sismico



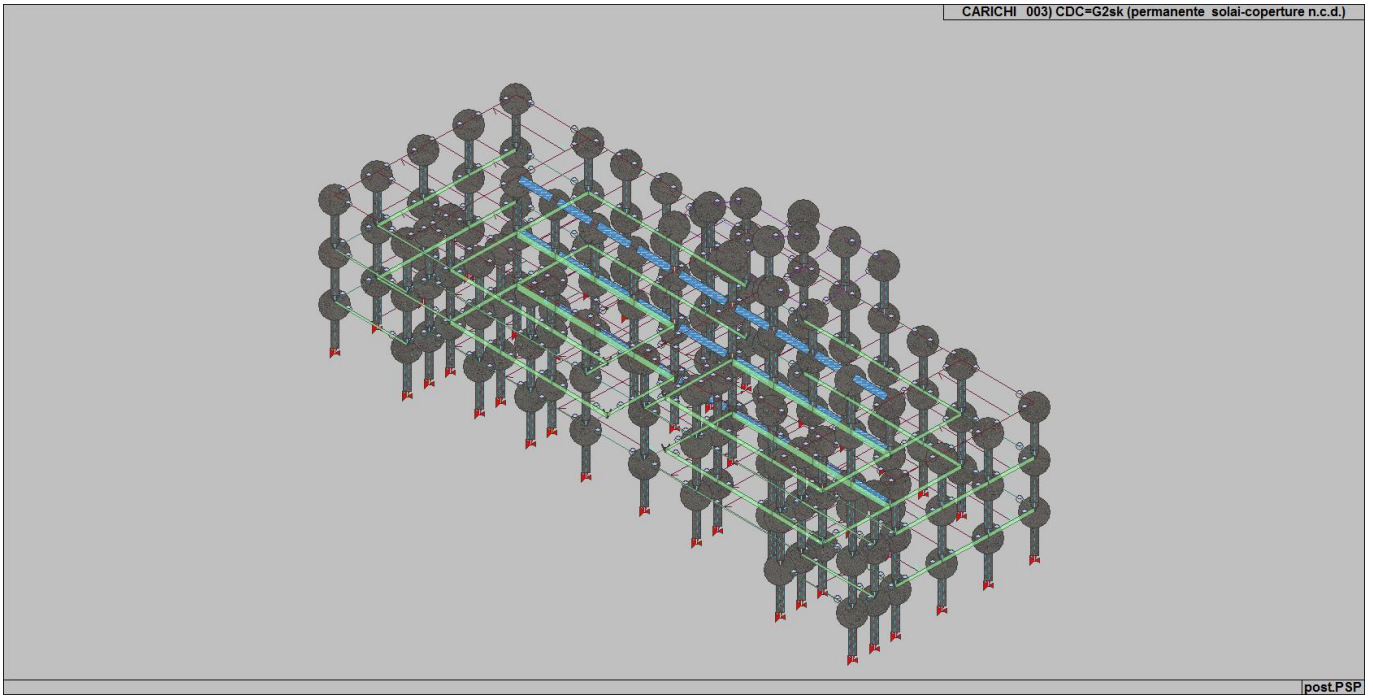
22_CDC_001_CDC=Ggk (peso proprio della struttura)

post.PSP

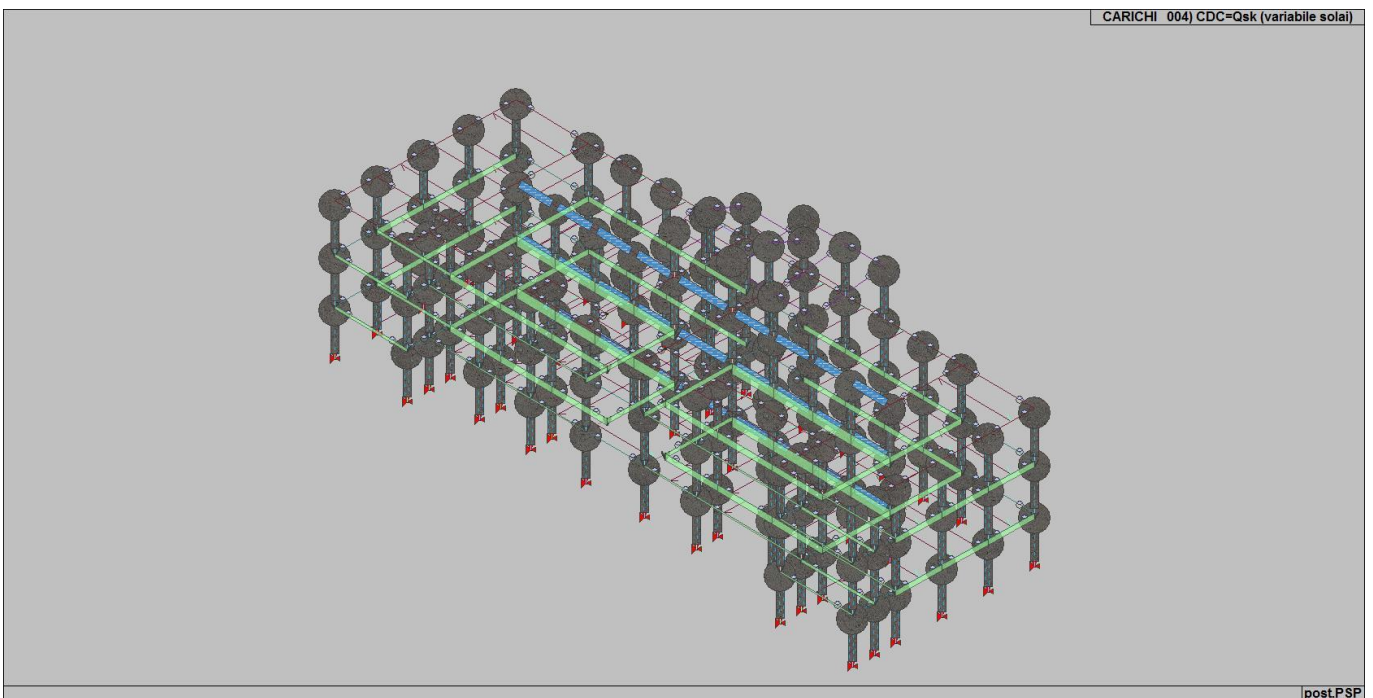


22_CDC_002_CDC=G1sk (permanente solai-coperture)

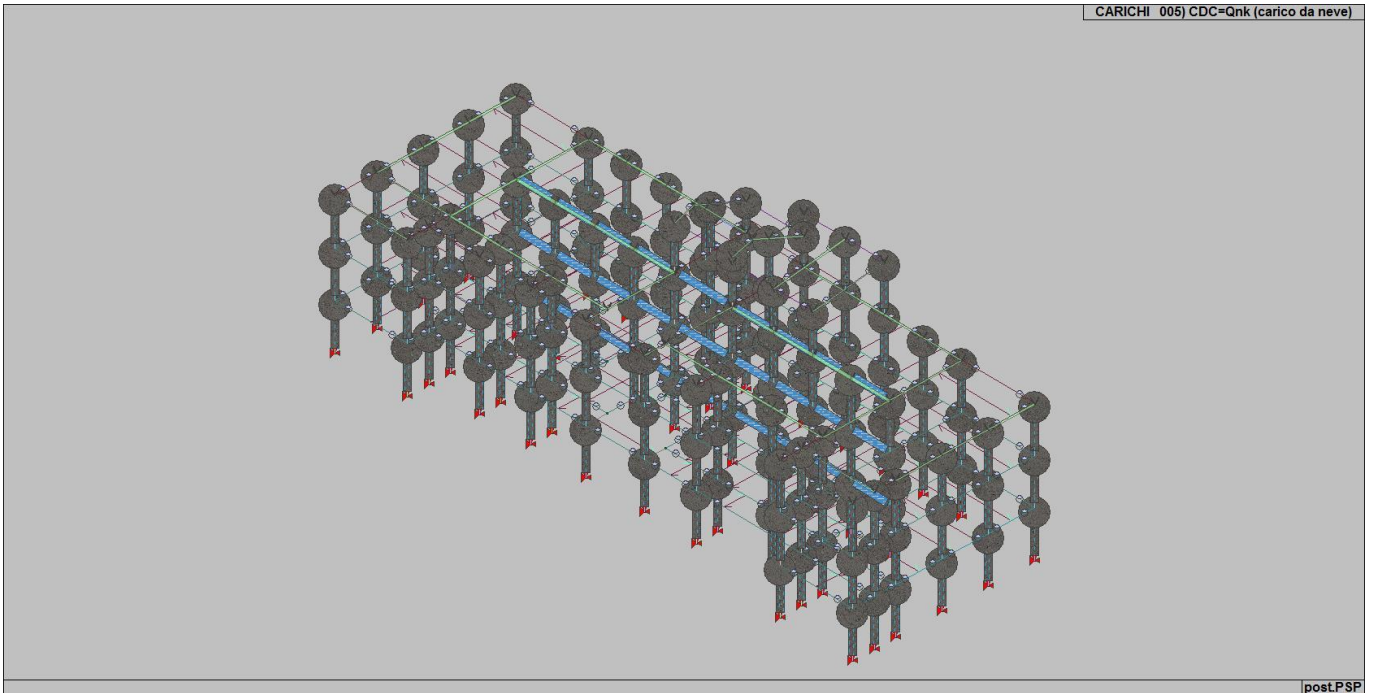
post.PSP



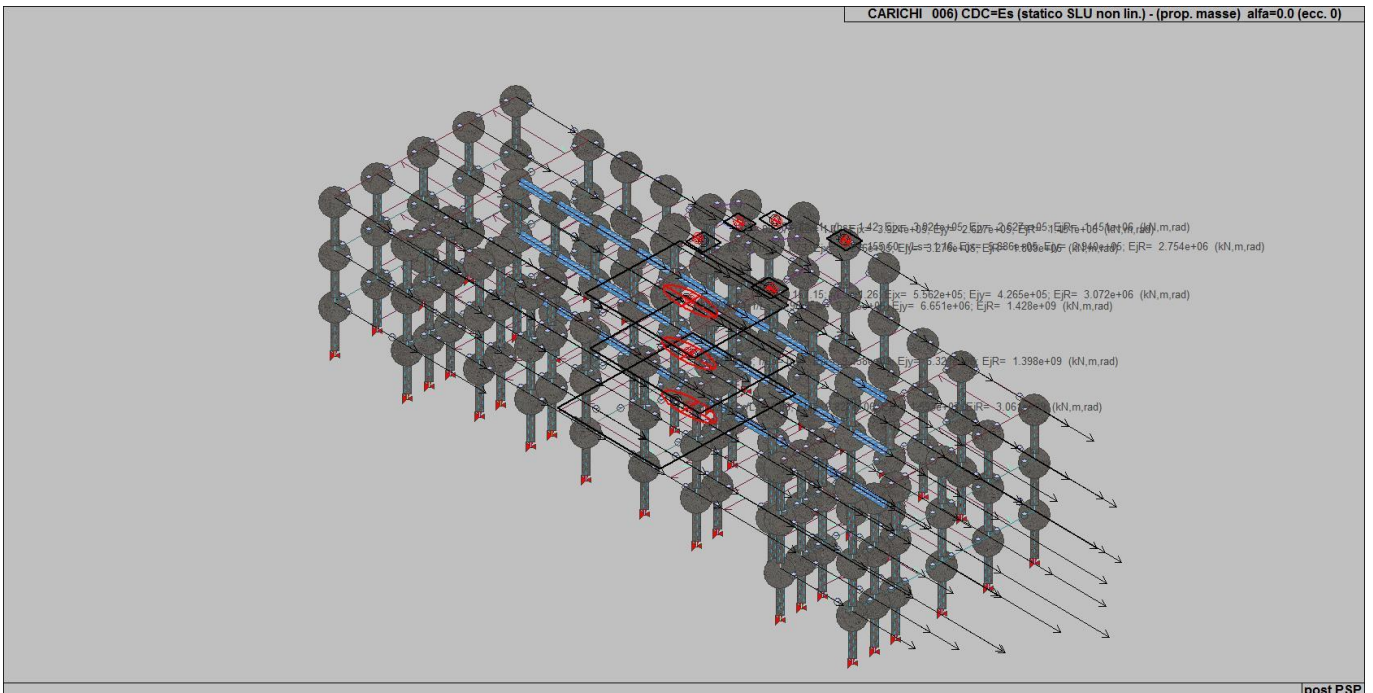
22_CDC_003_CDC=G2sk (permanente solai-coperture n.c.d.)



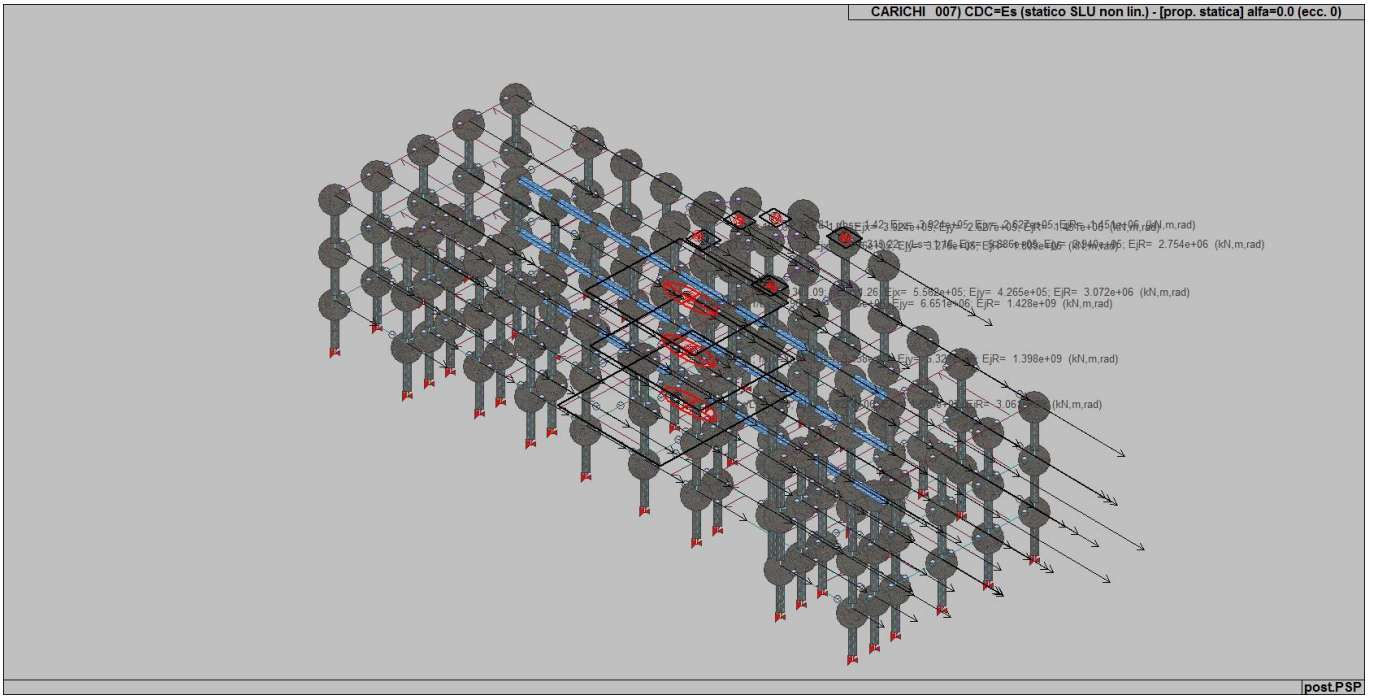
22_CDC_004_CDC=Qsk (variabile solai)



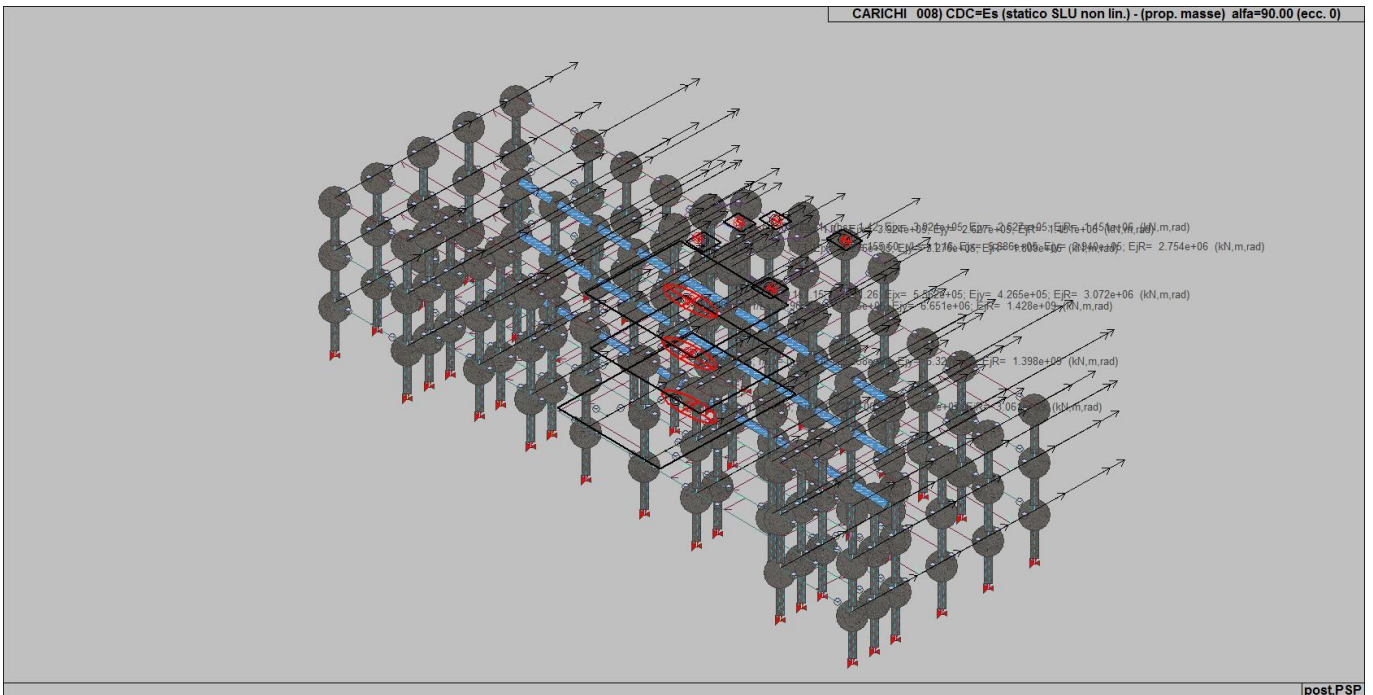
22_CDC_005_CDC=Qnk (carico da neve)



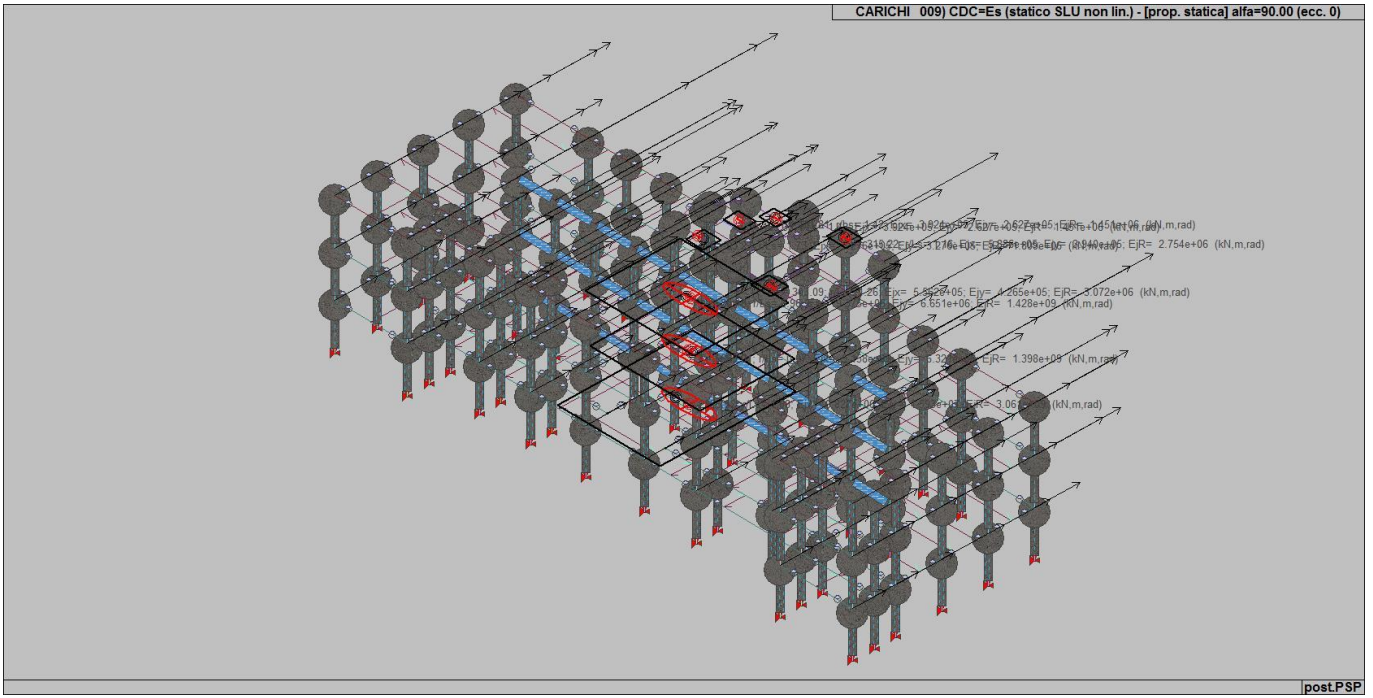
22_CDC_006_CDC=Es (statico SLU non lin.) - (prop. masse) alfa=0.0 (ecc. 0)



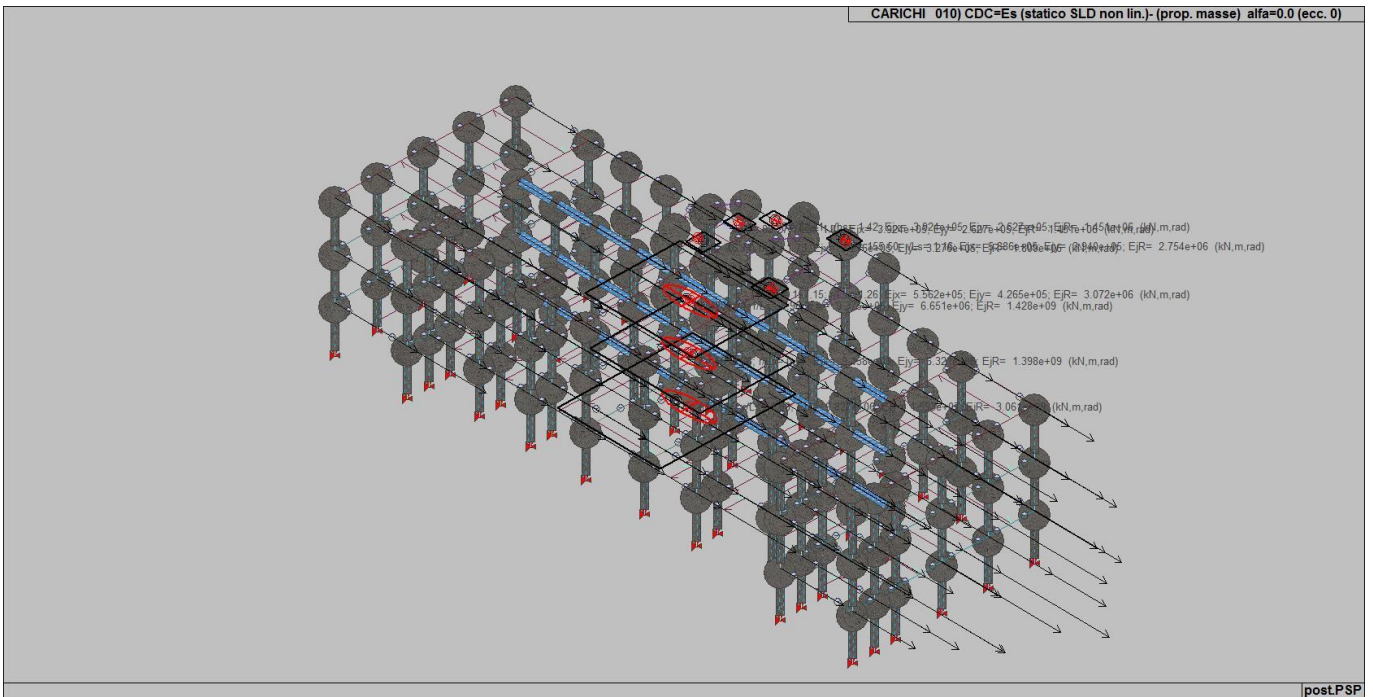
22_CDC_007_CDC=Es (statico SLU non lin.) - [prop. statica] alfa=0.0 (ecc. 0)



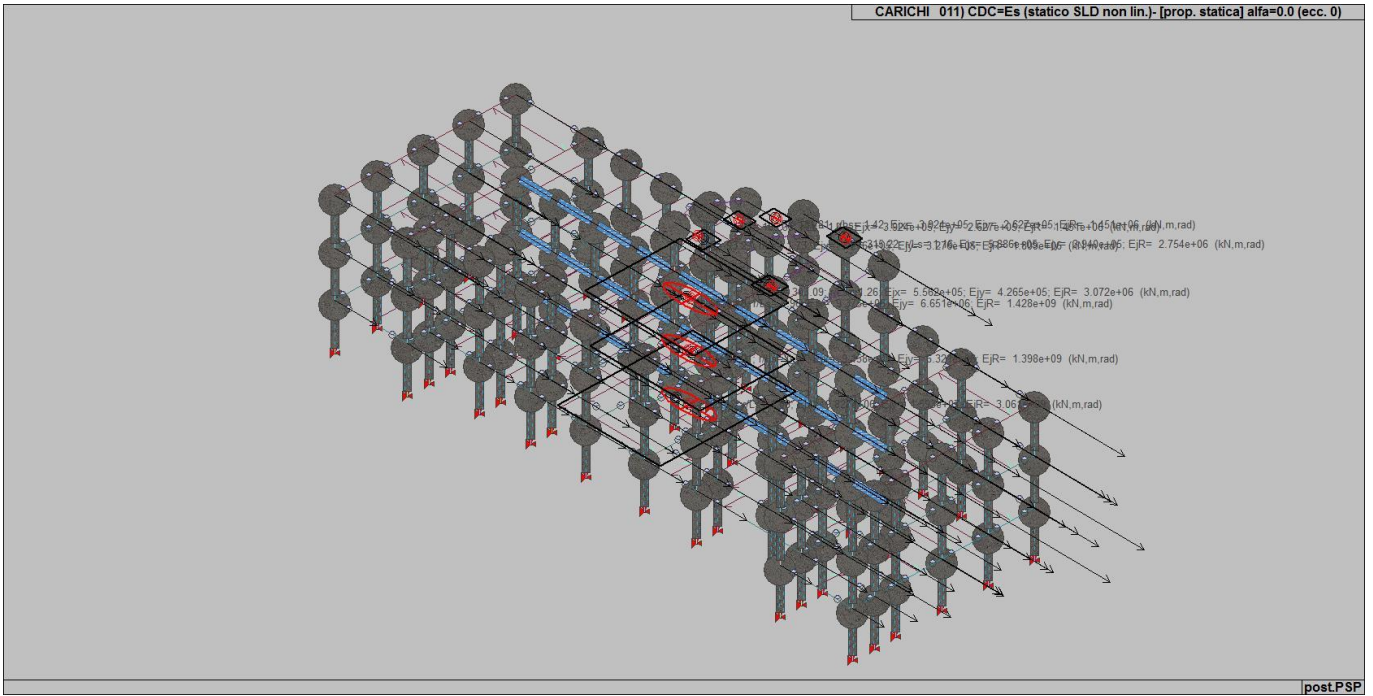
22_CDC_008_CDC=Es (statico SLU non lin.) - (prop. masse) alfa=90.00 (ecc. 0)



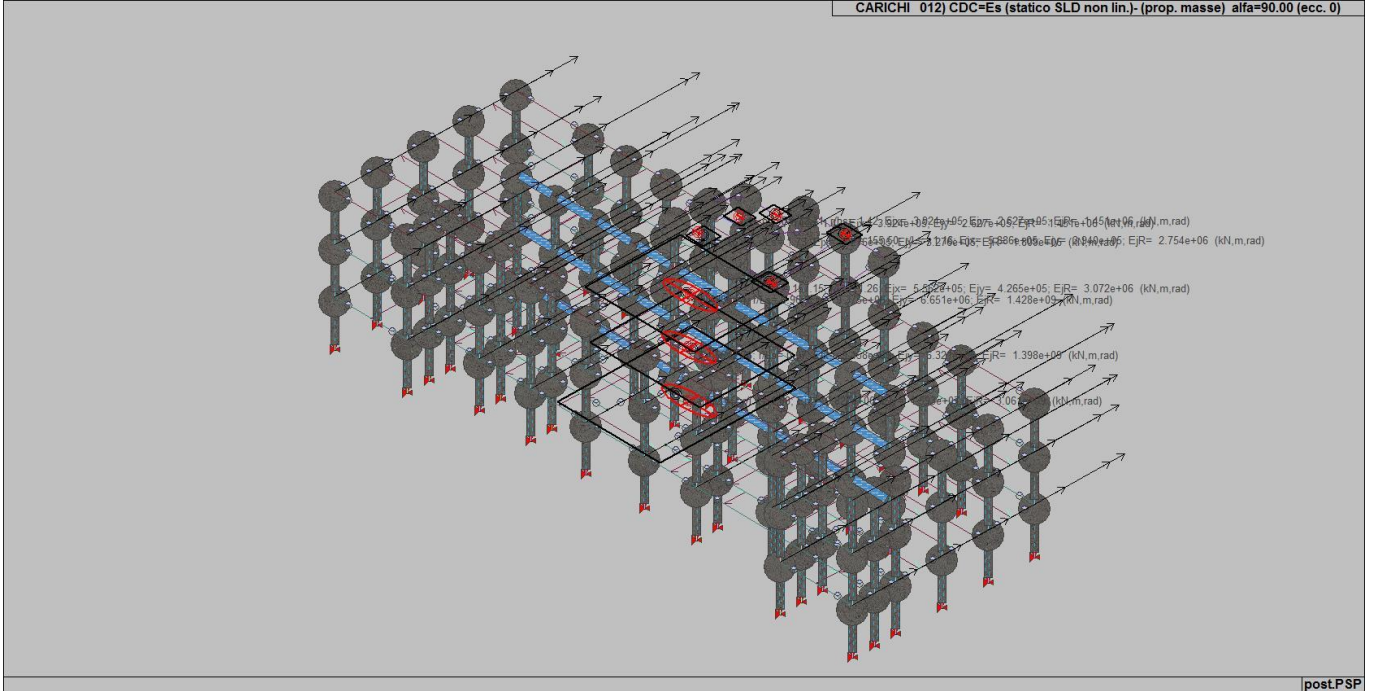
22_CDC_009_CDC=Es (statico SLU non lin.) - [prop. statica] alfa=90.00 (ecc. 0)



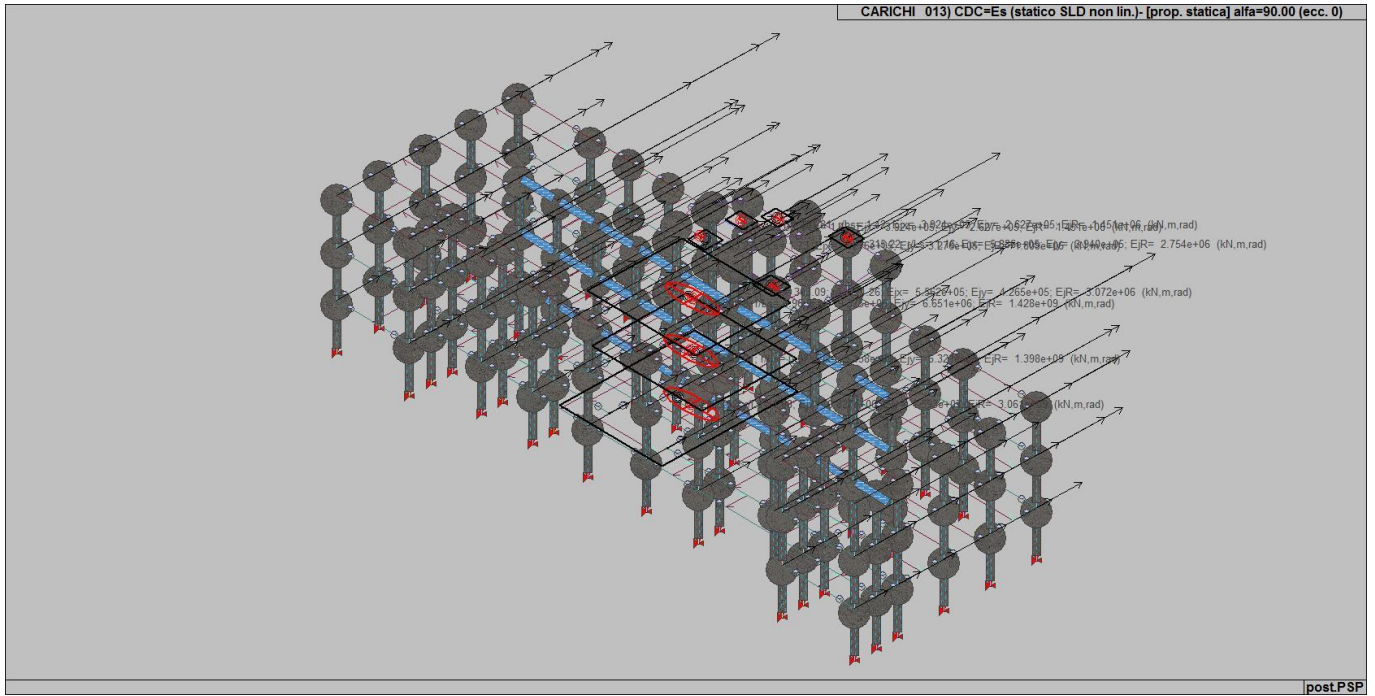
22_CDC_010_CDC=Es (statico SLD non lin.)- (prop. masse) alfa=0.0 (ecc. 0)



22_CDC_011_CDC=Es (statico SLD non lin.)- [prop. statica] alfa=0.0 (ecc. 0)



22_CDC_012_CDC=Es (statico SLD non lin.)- (prop. masse) alfa=90.00 (ecc. 0)



22_CDC_013_CDC=Es (statico SLD non lin.)- [prop. statica] alfa=90.00 (ecc. 0)

DEFINIZIONE DELLE COMBINAZIONI

LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente. Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:

Combinazione fondamentale SLU

$$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \dots$$

Combinazione caratteristica (rara) SLE

$$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \dots$$

Combinazione frequente SLE

$$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \dots$$

Combinazione quasi permanente SLE

$$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \dots$$

Combinazione sismica, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E

$$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \dots$$

Combinazione eccezionale, impiegata per gli stati limite connessi alle azioni eccezionali

$$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \dots$$

Dove:

NTC 2008 Tabella 2.5.1

Destinazione d'uso/azione	$\psi 0$	$\psi 1$	$\psi 2$
Categoria A residenziali	0,70	0,50	0,30
Categoria B uffici	0,70	0,50	0,30
Categoria C ambienti suscettibili di affollamento	0,70	0,70	0,60
Categoria D ambienti ad uso commerciale	0,70	0,70	0,60
Categoria E biblioteche, archivi, magazzini,...	1,00	0,90	0,80
Categoria F Rimesse e parcheggi (autoveicoli $\leq 30kN$)	0,70	0,70	0,60
Categoria G Rimesse e parcheggi (autoveicoli $> 30kN$)	0,70	0,50	0,30
Categoria H Coperture	0,00	0,00	0,00
Vento	0,60	0,20	0,00
Neve a quota $\leq 1000 m$	0,50	0,20	0,00
Neve a quota $> 1000 m$	0,70	0,50	0,20
Variazioni Termiche	0,60	0,50	0,00

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:

- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2008 Tabella 2.6.1

		Coefficiente γf	EQU	A1	A2
Carichi permanenti	Favorevoli	$\gamma G1$	0,9	1,0	1,0
	Sfavorevoli		1,1	1,3	1,0
Carichi permanenti non strutturali (Non computatamente definiti)	Favorevoli	$\gamma G2$	0,0	0,0	0,0
	Sfavorevoli		1,5	1,5	1,3
Carichi variabili	Favorevoli	γQi	0,0	0,0	0,0
	Sfavorevoli		1,5	1,5	1,3

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	Comb. SLU A1 1	
2	SLU	Comb. SLU A1 2	
3	SLU	Comb. SLU A1 3	
4	SLU	Comb. SLU A1 4	
5	SLU	Comb. SLU A1 5	
6	SLU	Comb. SLU A1 6	
7	SLU	Comb. SLU A1 7	
8	SLU	Comb. SLU A1 8	
9	SLU	Comb. SLU A1 9	
10	SLU	Comb. SLU A1 10	

Cmb	Tipo	Sigla Id	effetto P-delta
11	SLU	Comb. SLU A1 11	
12	SLU	Comb. SLU A1 12	
13	SLU	Comb. SLU A1 13	
14	SLU	Comb. SLU A1 14	
15	SLU (Terr. A2)	Comb. SLU A2 15	
16	SLU (Terr. A2)	Comb. SLU A2 16	
17	SLU (Terr. A2)	Comb. SLU A2 17	
18	SLU (Terr. A2)	Comb. SLU A2 18	
19	SLU (Terr. A2)	Comb. SLU A2 19	
20	SLU (Terr. A2)	Comb. SLU A2 20	
21	SLU (Terr. A2)	Comb. SLU A2 21	
22	SLE(r)	Comb. SLE(rara) 22	
23	SLE(r)	Comb. SLE(rara) 23	
24	SLE(r)	Comb. SLE(rara) 24	
25	SLE(r)	Comb. SLE(rara) 25	
26	SLE(r)	Comb. SLE(rara) 26	
27	SLE(r)	Comb. SLE(rara) 27	
28	SLE(r)	Comb. SLE(rara) 28	
29	SL (pushover)	Comb. SLU A1 (SLV sism.) 29	
30	SL (pushover)	Comb. SLU A1 (SLV sism.) 30	
31	SL (pushover)	Comb. SLU A1 (SLV sism.) 31	
32	SL (pushover)	Comb. SLU A1 (SLV sism.) 32	
33	SL (pushover)	Comb. SLU A1 (SLV sism.) 33	
34	SL (pushover)	Comb. SLU A1 (SLV sism.) 34	
35	SL (pushover)	Comb. SLU A1 (SLV sism.) 35	
36	SL (pushover)	Comb. SLU A1 (SLV sism.) 36	
37	SL (pushover)	Comb. SLE (SLD Danno sism.) 37	
38	SL (pushover)	Comb. SLE (SLD Danno sism.) 38	
39	SL (pushover)	Comb. SLE (SLD Danno sism.) 39	
40	SL (pushover)	Comb. SLE (SLD Danno sism.) 40	
41	SL (pushover)	Comb. SLE (SLD Danno sism.) 41	
42	SL (pushover)	Comb. SLE (SLD Danno sism.) 42	
43	SL (pushover)	Comb. SLE (SLD Danno sism.) 43	
44	SL (pushover)	Comb. SLE (SLD Danno sism.) 44	
45	SL (pushover)	Comb. SLU A2 (SLV sism.) 45	
46	SL (pushover)	Comb. SLU A2 (SLV sism.) 46	
47	SL (pushover)	Comb. SLU A2 (SLV sism.) 47	
48	SL (pushover)	Comb. SLU A2 (SLV sism.) 48	
49	SL (pushover)	Comb. SLU A2 (SLV sism.) 49	
50	SL (pushover)	Comb. SLU A2 (SLV sism.) 50	
51	SL (pushover)	Comb. SLU A2 (SLV sism.) 51	
52	SL (pushover)	Comb. SLU A2 (SLV sism.) 52	
53	SLE(f)	Comb. SLE(freq.) 53	
54	SLE(f)	Comb. SLE(freq.) 54	
55	SLE(f)	Comb. SLE(freq.) 55	
56	SLE(f)	Comb. SLE(freq.) 56	
57	SLE(f)	Comb. SLE(freq.) 57	
58	SLU(acc.)	Comb. SLU (Accid.) 58	
59	SLU(acc.)	Comb. SLU (Accid.) 59	
60	SLE(p)	Comb. SLE(perm.) 60	
61	SLE(p)	Comb. SLE(perm.) 61	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
1	1.30	1.30	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	1.30	1.30	1.50	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	1.30	1.30	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	1.30	1.30	1.50	1.50	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	1.00	1.00	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	1.00	1.00	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	1.00	1.00	0.0	1.50	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	1.30	1.30	1.50	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	1.30	1.30	1.50	1.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	1.30	1.30	1.50	1.05	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	1.00	1.00	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	1.00	1.00	0.0	1.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	1.00	1.00	0.0	1.05	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	1.00	1.00	1.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	1.00	1.00	1.30	0.0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	1.00	1.00	1.30	1.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27...	CDC 14/28...
18	1.00	1.00	1.30	1.30	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	1.00	1.00	1.30	0.0	1.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	1.00	1.00	1.30	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	1.00	1.00	1.30	0.91	1.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	1.00	1.00	1.00	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	1.00	1.00	1.00	1.00	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	1.00	1.00	1.00	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	1.00	1.00	1.00	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	1.00	1.00	1.00	0.70	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	1.00	1.00	1.00	0.60	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	1.00	1.00	1.00	0.60	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	1.00	1.00	1.00	0.60	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	1.00	1.00	1.00	0.60	0.0	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0
34	1.00	1.00	1.00	0.60	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0
35	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0
36	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0
37	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0	0.0
38	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0
39	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0
40	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0
41	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0
42	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0
43	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.00	0.0
44	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0
45	1.00	1.00	1.00	0.60	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	1.00	1.00	1.00	0.60	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	1.00	1.00	1.00	0.60	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	1.00	1.00	1.00	0.60	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	1.00	1.00	1.00	0.60	0.0	0.0	0.0	-1.00	0.0	0.0	0.0	0.0	0.0	0.0
50	1.00	1.00	1.00	0.60	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0
51	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	-1.00	0.0	0.0	0.0	0.0
52	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0
53	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	1.00	1.00	1.00	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	1.00	1.00	1.00	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	1.00	1.00	1.00	0.60	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	1.00	1.00	1.00	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

AZIONE SISMICA

VALUTAZIONE DELL' AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.

Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito <http://esse1.mi.ingv.it/>. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell' allegato alle NTC (rispettivamente media pesata e interpolazione).

L' azione sismica viene definita in relazione ad un periodo di riferimento V_r che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento V_r e la probabilità di superamento P_{ver} associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno T_r e i relativi parametri di pericolosità sismica (vedi tabella successiva):

ag: accelerazione orizzontale massima del terreno;

Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;

T*c: periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;

Parametri della struttura					
Classe d'uso	Vita V_n [anni]	Coeff. Uso	Periodo V_r [anni]	Tipo di suolo	Categoria topografica
III	50.0	1.5	75.0	C	T1

Individuati su reticolo di riferimento i parametri di pericolosità sismica si valutano i parametri spettrali riportati in tabella:

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente $S = S_s * S_t$ (3.2.5)

Fo è il fattore che quantifica l'amplificazione spettrale massima, su sito di riferimento rigido orizzontale

Fv è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno ag su sito di riferimento rigido orizzontale

Tb è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.

Tc è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.

Td è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Id nodo	Longitudine	Latitudine	Distanza Km
Loc.	12.752	41.835	
28737	12.685	41.832	5.543
28738	12.752	41.833	0.222
28516	12.752	41.883	5.320
28515	12.684	41.882	7.658

SL	P_{ver}	T_r Anni	ag g	Fo	T*c sec
SLO	81.0	45.0	0.071	2.400	0.270
SLD	63.0	75.0	0.088	2.430	0.270
SLV	10.0	712.0	0.193	2.530	0.290
SLC	5.0	1462.0	0.238	2.510	0.290

SL	ag g	S	Fo	Fv	Tb sec	Tc sec	Td sec
SLO	0.071	1.500	2.400	0.861	0.146	0.437	1.883
SLD	0.089	1.500	2.430	0.976	0.146	0.437	1.954
SLV	0.049	1.407	2.530	1.501	0.153	0.458	2.373
SLC	0.238	1.342	2.510	1.652	0.153	0.458	2.550

RISULTATI ANALISI SISMICHE

LEGENDA TABELLA ANALISI SISMICHE

Il programma consente l'analisi di diverse configurazioni sismiche.

Sono previsti, infatti, i seguenti casi di carico:

- 9. Esk** caso di carico sismico con analisi statica equivalente
10. Edk caso di carico sismico con analisi dinamica

Ciascun caso di carico è caratterizzato da un angolo di ingresso e da una configurazione di masse determinante la forza sismica complessiva (si rimanda al capitolo relativo ai casi di carico per chiarimenti inerenti questo aspetto).

Nella colonna Note, in funzione della norma in uso sono riportati i parametri fondamentali che caratterizzano l'azione sismica: in particolare possono essere presenti i seguenti valori:

Angolo di ingresso	Angolo di ingresso dell'azione sismica orizzontale
Fattore di importanza	Fattore di importanza dell'edificio, in base alla categoria di appartenenza
Zona sismica	Zona sismica
Accelerazione ag	Accelerazione orizzontale massima sul suolo
Categoria suolo	Categoria di profilo stratigrafico del suolo di fondazione
Fattore di struttura q	Fattore dipendente dalla tipologia strutturale
Fattore di sito S	Fattore dipendente dalla stratigrafia e dal profilo topografico
Classe di duttilità CD	Classe di duttilità della struttura – "A" duttilità alta, "B" duttilità bassa
Fattore riduz. SLD	Fattore di riduzione dello spettro elastico per lo stato limite di danno
Periodo proprio T1	Periodo proprio di vibrazione della struttura
Coefficiente Lambda	Coefficiente dipendente dal periodo proprio T1 e dal numero di piani della struttura
Ordinata spettro Sd(T1)	Valore delle ordinate dello spettro di progetto per lo stato limite ultimo, componente orizzontale (verticale Svd)
Ordinata spettro Se(T1)	Valore delle ordinate dello spettro elastico ridotta del fattore SLD per lo stato limite di danno, componente orizzontale (verticale Sve)
Ordinata spettro S (Tb-Tc)	Valore dell' ordinata dello spettro in uso nel tratto costante
numero di modi considerati	Numero di modi di vibrare della struttura considerati nell'analisi dinamica

Per ciascun caso di carico sismico viene riportato l'insieme di dati sotto riportati (le masse sono espresse in unità di forza):

- a) **analisi sismica statica equivalente:**
- quota, posizione del centro di applicazione e azione orizzontale risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo), indici di regolarità e/r secondo EC8 4.2.3.2
 - azione sismica complessiva
- b) **analisi sismica dinamica con spettro di risposta:**
- quota, posizione del centro di massa e massa risultante, posizione del baricentro delle rigidezze, rapporto r/Ls (per strutture a nucleo) , indici di regolarità e/r secondo EC8 4.2.3.2
 - frequenza, periodo, accelerazione spettrale, massa eccitata nelle tre direzioni globali per tutti i modi
 - massa complessiva ed aliquota di massa complessiva eccitata.

Per ciascuna combinazione sismica definita SLD o SLO viene riportato il livello di deformazione ϵ_T (dr) degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso anche in unità $1000 \cdot \epsilon_T/h$ da confrontare direttamente con i valori forniti nella norma (es. 5 per edifici con tamponamenti collegati rigidamente alla struttura, 10.0 per edifici con tamponamenti collegati elasticamente, 3 per edifici in muratura ordinaria, 4 per edifici in muratura armata).

Qualora si applichi il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") l'analisi sismica dinamica può essere comprensiva di sollecitazione verticale contemporanea a quella orizzontale, nel qual caso è effettuata una sovrapposizione degli effetti in ragione della radice dei quadrati degli effetti stessi. Per ciascuna combinazione sismica - analisi effettuate con il D.M. 96 (vedi NOTA sul capitolo "normativa di riferimento") - viene riportato il livello di deformazione ϵ_T , ϵ_P e ϵ_D degli elementi strutturali verticali. Per semplicità di consultazione il livello è espresso in unità $1000 \cdot \epsilon_T/h$ da confrontare direttamente con il valore 2 o 4 per la verifica.

Per gli edifici sismicamente isolati si riportano di seguito le verifiche condotte sui dispositivi di isolamento. Le verifiche sono effettuate secondo l' allegato 10.A dell'Ordinanza 3274 e smi. In particolare la tabella, per ogni combinazione SLU (SLC per il DM 14-01-2008) sismica riporta il codice di verifica e i valori utilizzati per la verifica: spostamento dE , area ridotta e dimensione $A2$, azione verticale, deformazioni di taglio dell' elastomero e tensioni nell' acciaio.

Nodo	Nodo di appoggio dell' isolatore
Cmb	Combinazione oggetto della verifica
Verif.	Codice di verifica ok – verifica positiva , NV – verifica negativa, ND – verifica non completata
dE	Spostamento relativo tra le due facce (amplificato del 20% per Ordinanza 3274 e smi) combinato con la regola del 30%
Ang fi	Angolo utilizzato per il calcolo dell' area ridotta A_r (per dispositivi circolari)
V	Azione verticale agente

Ar	Area ridotta efficace
Dim A2	Dimensione utile per il calcolo della deformazione per rotazione
Sig s	Tensione nell' inserto in acciaio
Gam c(a,s,t)	Deformazioni di taglio dell' elastomero
Vcr	Carico critico per instabilità

Affinché la verifica sia positiva deve essere:

- 1) $V > 0$
- 2) $Sig\ s < f_{yk}$
- 3) $Gam\ t < 5$
- 4) $Gam\ s < Gam\ * (caratteristica\ dell'\ elastomero)$
- 5) $Gam\ s < 2$
- 6) $V < 0.5\ V_{cr}$

Con riferimento al **Documento di Affidabilità** "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Maggio 2011, disponibile per il download sul sito www.2si.it, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
23	DM 2008: SPETTRO
29	SISMICA 1000/H, SOMMA V, EFFETTO P-δ
30	ANALISI DI UN EDIFICIO CON ISOLATORI SISMICI
70	MASSE SISMICHE
75	PROGETTO DI ISOLATORI ELASTOMERICI
76	VERIFICA DI ISOLATORI ELASTOMERICI
77	VERIFICA DI ISOLATORI FRICTION PENDULUM

CDC	Tipo	Sigla Id	Note
6	Esk	CDC=Es (statico SLU non lin.) - (prop. masse) alfa=0.0 (ecc. 0)	
			verifica esistenti: fattore FC 1.200
			categoria suolo: C
			fattore di sito S = 1.407
			ordinata spettro (tratto Tb-Tc) = 0.175 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: nulla
			forze: proporzionali alla massa

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	daN	daN	cm	cm	cm	cm	cm	cm			
1465.00	4286.23	4286.23	4286.23	4420.22	2288.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1440.00	1.555e+04	1.984e+04	1.555e+04	4993.42	2693.93	0.0	0.0	4981.06	2693.93	1.157	0.047	0.0
1417.00	4673.63	2.451e+04	4673.63	4374.65	2134.08	0.0	0.0	4420.22	2134.08	1.732	0.194	0.0
1410.57	8326.69	3.284e+04	8326.69	4420.22	2416.50	0.0	0.0	4420.22	2416.50	1.417	1.5815e-06	0.0
1370.00	1.572e+04	4.855e+04	1.572e+04	4976.40	2134.08	0.0	0.0	4956.27	2134.08	1.257	0.075	0.0
1293.00	7241.38	5.579e+04	7241.38	4434.98	2693.93	0.0	0.0	4420.22	2693.93	1.417	0.063	0.0
1080.00	4.289e+05	4.847e+05	4.289e+05	4439.16	2013.43	0.0	0.0	4413.58	2011.16	0.964	0.017	0.002
720.00	5.613e+05	1.046e+06	5.613e+05	4433.18	2005.65	0.0	0.0	4455.25	2012.00	0.965	0.015	0.005
360.00	5.773e+05	1.623e+06	5.773e+05	4440.51	2003.61	0.0	0.0	4346.66	1991.79	1.083	0.068	0.007
Risulta	1.623e+06		1.623e+06									

CDC	Tipo	Sigla Id	Note
7	Esk	CDC=Es (statico SLU non lin.) - [prop. statica] alfa=0.0 (ecc. 0)	
			verifica esistenti: fattore FC 1.200
			categoria suolo: C
			fattore di sito S = 1.407
			ordinata spettro (tratto Tb-Tc) = 0.175 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: nulla
			forze: come statica lineare

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	daN	daN	cm	cm	cm	cm	cm	cm			
1465.00	8839.74	8839.74	4286.23	4420.22	2288.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1440.00	3.152e+04	4.036e+04	1.555e+04	4993.42	2693.93	0.0	0.0	4981.06	2693.93	1.157	0.047	0.0
1417.00	9322.88	4.968e+04	4673.63	4374.65	2134.08	0.0	0.0	4420.22	2134.08	1.732	0.194	0.0
1410.57	1.653e+04	6.622e+04	8326.69	4420.22	2416.50	0.0	0.0	4420.22	2416.50	1.417	1.5815e-06	0.0
1370.00	3.031e+04	9.653e+04	1.572e+04	4976.40	2134.08	0.0	0.0	4956.27	2134.08	1.257	0.075	0.0
1293.00	1.318e+04	1.097e+05	7241.38	4434.98	2693.93	0.0	0.0	4420.22	2693.93	1.417	0.063	0.0
1080.00	6.520e+05	7.618e+05	4.289e+05	4439.16	2013.43	0.0	0.0	4413.58	2011.16	0.964	0.017	0.002
720.00	5.689e+05	1.331e+06	5.613e+05	4433.18	2005.65	0.0	0.0	4455.25	2012.00	0.965	0.015	0.005
360.00	2.926e+05	1.623e+06	5.773e+05	4440.51	2003.61	0.0	0.0	4346.66	1991.79	1.083	0.068	0.007
Risulta	1.623e+06		1.623e+06									

CDC	Tipo	Sigla Id	Note
8	Esk	CDC=Es (statico SLU non lin.) - (prop. masse) alfa=90.00 (ecc. 0)	
			verifica esistenti: fattore FC 1.200
			categoria suolo: C
			fattore di sito S = 1.407
			ordinata spettro (tratto Tb-Tc) = 0.175 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: nulla
			forze: proporzionali alla massa

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	daN	daN	cm	cm	cm	cm	cm	cm			
1465.00	4286.23	4286.23	4286.23	4420.22	2288.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1440.00	1.555e+04	1.984e+04	1.555e+04	4993.42	2693.93	0.0	0.0	4981.06	2693.93	1.157	0.047	0.0
1417.00	4673.63	2.451e+04	4673.63	4374.65	2134.08	0.0	0.0	4420.22	2134.08	1.732	0.194	0.0
1410.57	8326.69	3.284e+04	8326.69	4420.22	2416.50	0.0	0.0	4420.22	2416.50	1.417	1.5815e-06	0.0
1370.00	1.572e+04	4.855e+04	1.572e+04	4976.40	2134.08	0.0	0.0	4956.27	2134.08	1.257	0.075	0.0
1293.00	7241.38	5.579e+04	7241.38	4434.98	2693.93	0.0	0.0	4420.22	2693.93	1.417	0.063	0.0
1080.00	4.289e+05	4.847e+05	4.289e+05	4439.16	2013.43	0.0	0.0	4413.58	2011.16	0.964	0.017	0.002
720.00	5.613e+05	1.046e+06	5.613e+05	4433.18	2005.65	0.0	0.0	4455.25	2012.00	0.965	0.015	0.005
360.00	5.773e+05	1.623e+06	5.773e+05	4440.51	2003.61	0.0	0.0	4346.66	1991.79	1.083	0.068	0.007
Risulta	1.623e+06		1.623e+06									

CDC	Tipo	Sigla Id	Note
9	Esk	CDC=Es (statico SLU non lin.) - [prop. statica] alfa=90.00 (ecc. 0)	
			verifica esistenti: fattore FC 1.200
			categoria suolo: C
			fattore di sito S = 1.407
			ordinata spettro (tratto Tb-Tc) = 0.175 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: nulla
			forze: come statica lineare

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	daN	daN	cm	cm	cm	cm	cm	cm			
1465.00	8839.74	8839.74	4286.23	4420.22	2288.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1440.00	3.152e+04	4.036e+04	1.555e+04	4993.42	2693.93	0.0	0.0	4981.06	2693.93	1.157	0.047	0.0
1417.00	9322.88	4.968e+04	4673.63	4374.65	2134.08	0.0	0.0	4420.22	2134.08	1.732	0.194	0.0
1410.57	1.653e+04	6.622e+04	8326.69	4420.22	2416.50	0.0	0.0	4420.22	2416.50	1.417	1.5815e-06	0.0
1370.00	3.031e+04	9.653e+04	1.572e+04	4976.40	2134.08	0.0	0.0	4956.27	2134.08	1.257	0.075	0.0
1293.00	1.318e+04	1.097e+05	7241.38	4434.98	2693.93	0.0	0.0	4420.22	2693.93	1.417	0.063	0.0
1080.00	6.520e+05	7.618e+05	4.289e+05	4439.16	2013.43	0.0	0.0	4413.58	2011.16	0.964	0.017	0.002
720.00	5.689e+05	1.331e+06	5.613e+05	4433.18	2005.65	0.0	0.0	4455.25	2012.00	0.965	0.015	0.005
360.00	2.926e+05	1.623e+06	5.773e+05	4440.51	2003.61	0.0	0.0	4346.66	1991.79	1.083	0.068	0.007
Risulta	1.623e+06		1.623e+06									

CDC	Tipo	Sigla Id	Note
10	Esk	CDC=Es (statico SLD non lin.)- (prop. masse) alfa=0.0 (ecc. 0)	
			verifica esistenti: fattore FC 1.200

CDC	Tipo	Sigla Id	Note
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.323 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: nulla
			forze: proporzionali alla massa

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	daN	daN	cm	cm	cm	cm	cm	cm			
1465.00	4286.23	4286.23	4286.23	4420.22	2288.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1440.00	1.555e+04	1.984e+04	1.555e+04	4993.42	2693.93	0.0	0.0	4981.06	2693.93	1.157	0.047	0.0
1417.00	4673.63	2.451e+04	4673.63	4374.65	2134.08	0.0	0.0	4420.22	2134.08	1.732	0.194	0.0
1410.57	8326.69	3.284e+04	8326.69	4420.22	2416.50	0.0	0.0	4420.22	2416.50	1.417	1.5815e-06	0.0
1370.00	1.572e+04	4.855e+04	1.572e+04	4976.40	2134.08	0.0	0.0	4956.27	2134.08	1.257	0.075	0.0
1293.00	7241.38	5.579e+04	7241.38	4434.98	2693.93	0.0	0.0	4420.22	2693.93	1.417	0.063	0.0
1080.00	4.289e+05	4.847e+05	4.289e+05	4439.16	2013.43	0.0	0.0	4413.58	2011.16	0.964	0.017	0.002
720.00	5.613e+05	1.046e+06	5.613e+05	4433.18	2005.65	0.0	0.0	4455.25	2012.00	0.965	0.015	0.005
360.00	5.773e+05	1.623e+06	5.773e+05	4440.51	2003.61	0.0	0.0	4346.66	1991.79	1.083	0.068	0.007
Risulta	1.623e+06		1.623e+06									

CDC	Tipo	Sigla Id	Note
11	Esk	CDC=Es (statico SLD non lin.)- [prop. statica] alfa=0.0 (ecc. 0)	
			verifica esistenti: fattore FC 1.200
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.323 g
			angolo di ingresso:0.0
			eccentricità aggiuntiva: nulla
			forze: come statica lineare

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	daN	daN	cm	cm	cm	cm	cm	cm			
1465.00	8839.74	8839.74	4286.23	4420.22	2288.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1440.00	3.152e+04	4.036e+04	1.555e+04	4993.42	2693.93	0.0	0.0	4981.06	2693.93	1.157	0.047	0.0
1417.00	9322.88	4.968e+04	4673.63	4374.65	2134.08	0.0	0.0	4420.22	2134.08	1.732	0.194	0.0
1410.57	1.653e+04	6.622e+04	8326.69	4420.22	2416.50	0.0	0.0	4420.22	2416.50	1.417	1.5815e-06	0.0
1370.00	3.031e+04	9.653e+04	1.572e+04	4976.40	2134.08	0.0	0.0	4956.27	2134.08	1.257	0.075	0.0
1293.00	1.318e+04	1.097e+05	7241.38	4434.98	2693.93	0.0	0.0	4420.22	2693.93	1.417	0.063	0.0
1080.00	6.520e+05	7.618e+05	4.289e+05	4439.16	2013.43	0.0	0.0	4413.58	2011.16	0.964	0.017	0.002
720.00	5.689e+05	1.331e+06	5.613e+05	4433.18	2005.65	0.0	0.0	4455.25	2012.00	0.965	0.015	0.005
360.00	2.926e+05	1.623e+06	5.773e+05	4440.51	2003.61	0.0	0.0	4346.66	1991.79	1.083	0.068	0.007
Risulta	1.623e+06		1.623e+06									

CDC	Tipo	Sigla Id	Note
12	Esk	CDC=Es (statico SLD non lin.)- (prop. masse) alfa=90.00 (ecc. 0)	
			verifica esistenti: fattore FC 1.200
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.323 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: nulla
			forze: proporzionali alla massa

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	daN	daN	cm	cm	cm	cm	cm	cm			
1465.00	4286.23	4286.23	4286.23	4420.22	2288.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1440.00	1.555e+04	1.984e+04	1.555e+04	4993.42	2693.93	0.0	0.0	4981.06	2693.93	1.157	0.047	0.0
1417.00	4673.63	2.451e+04	4673.63	4374.65	2134.08	0.0	0.0	4420.22	2134.08	1.732	0.194	0.0
1410.57	8326.69	3.284e+04	8326.69	4420.22	2416.50	0.0	0.0	4420.22	2416.50	1.417	1.5815e-06	0.0
1370.00	1.572e+04	4.855e+04	1.572e+04	4976.40	2134.08	0.0	0.0	4956.27	2134.08	1.257	0.075	0.0
1293.00	7241.38	5.579e+04	7241.38	4434.98	2693.93	0.0	0.0	4420.22	2693.93	1.417	0.063	0.0

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
1080.00	4.289e+05	4.847e+05	4.289e+05	4439.16	2013.43	0.0	0.0	4413.58	2011.16	0.964	0.017	0.002
720.00	5.613e+05	1.046e+06	5.613e+05	4433.18	2005.65	0.0	0.0	4455.25	2012.00	0.965	0.015	0.005
360.00	5.773e+05	1.623e+06	5.773e+05	4440.51	2003.61	0.0	0.0	4346.66	1991.79	1.083	0.068	0.007
Risulta	1.623e+06		1.623e+06									

CDC	Tipo	Sigla Id	Note
13	Esk	CDC=Es (statico SLD non lin.)- [prop. statica] alfa=90.00 (ecc. 0)	
			verifica esistenti: fattore FC 1.200
			categoria suolo: C
			fattore di sito S = 1.500
			ordinata spettro (tratto Tb-Tc) = 0.323 g
			angolo di ingresso:90.00
			eccentricità aggiuntiva: nulla
			forze: come statica lineare

Quota	Forza Sismica	Tot. parziale	M Sismica x g	Pos. GX	Pos. GY	E agg. X-X	E agg. Y-Y	Pos. KX	Pos. KY	rapp. r/Ls	rapp. ex/rx	rapp. ey/ry
cm	daN	daN	daN	cm	cm	cm	cm	cm	cm			
1465.00	8839.74	8839.74	4286.23	4420.22	2288.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1440.00	3.152e+04	4.036e+04	1.555e+04	4993.42	2693.93	0.0	0.0	4981.06	2693.93	1.157	0.047	0.0
1417.00	9322.88	4.968e+04	4673.63	4374.65	2134.08	0.0	0.0	4420.22	2134.08	1.732	0.194	0.0
1410.57	1.653e+04	6.622e+04	8326.69	4420.22	2416.50	0.0	0.0	4420.22	2416.50	1.417	1.5815e-06	0.0
1370.00	3.031e+04	9.653e+04	1.572e+04	4976.40	2134.08	0.0	0.0	4956.27	2134.08	1.257	0.075	0.0
1293.00	1.318e+04	1.097e+05	7241.38	4434.98	2693.93	0.0	0.0	4420.22	2693.93	1.417	0.063	0.0
1080.00	6.520e+05	7.618e+05	4.289e+05	4439.16	2013.43	0.0	0.0	4413.58	2011.16	0.964	0.017	0.002
720.00	5.689e+05	1.331e+06	5.613e+05	4433.18	2005.65	0.0	0.0	4455.25	2012.00	0.965	0.015	0.005
360.00	2.926e+05	1.623e+06	5.773e+05	4440.51	2003.61	0.0	0.0	4346.66	1991.79	1.083	0.068	0.007
Risulta	1.623e+06		1.623e+06									

LEGENDA TABELLA ANALISI SISMICHE NON LINEARI

Le analisi sismiche non lineari sono state condotte con riferimento al Capitolo 7.3.4.1 del D.M. 14 Gennaio 2008 e successive modifiche e integrazioni.

In particolare per i singoli casi di carico, oltre a quanto riportato nel capitolo precedente, si individuano:

- stato limite di interesse (SL CO collasso, SL V salvaguardia della vita, SL D danno e SL O operatività)
- modalità di distribuzione delle forze (proporzionale alle masse, funzione della forma modale, approssimata come per statica lineare) e di calcolo dello spostamento del punto di controllo.

Le combinazioni sismiche non lineari sono definite in maniera automatica dal programma in base ai paragrafi 2.5.3 e 7.3.5 del DM 14 Gennaio 2008: l'analisi è svolta considerando l'azione sismica (di segno positivo e negativo) applicata separatamente secondo ciascuna delle due direzioni orizzontali.

I risultati delle analisi di seguito riportati sono pertanto:

- parametri di calcolo dell' azione sismica
- parametri di calcolo del sistema bilineare equivalente e domanda di spostamento effettivo della struttura
- curva forza complessiva applicata / spostamento del punto di controllo

Una prima tabella riassume i parametri di calcolo per l' azione sismica

CDC	Indice del caso di carico sismico
Tipo	Stato limite di interesse (CO collasso, SL V salvaguardia della vita, SL D danno e SL O operatività)
Angolo ing.	Direzione di ingresso del sisma
Distribuzione F	Modalità di applicazione delle forze sismiche (proporzionale, modale, statica approssimata)
Nodo Dc	Nodo assunto come punto di controllo della curva forza spostamento.
Uso Dc	Modalità di calcolo dello spostamento del punto di controllo effettivo/mediato (valore medio del piano di appartenenza)
Modo/CDC	Forma modale adottata per il calcolo del fattore di partecipazione gamma e per l' eventuale distribuzione delle forze sismiche (se distribuzione = modale); ovvero caso di carico statico assunto come prima forma modale approssimata
Periodo	Periodo del modo adottato
M sismica x g	Massa effettiva
m*	Massa del sistema equivalente (circolare 2 febbraio 2009 paragrafo C7.3.4.1)
m* % stat.	Percentuale di massa partecipante statica (m^* / massa)
m* % din.	Percentuale di massa partecipante dinamica (fattore di partecipazione del modo adottato nella direzione del sisma)
Part. Gamma	Fattore di partecipazione (circolare 2 febbraio 2009 paragrafo C7.3.4.1)

La seconda tabella riassume per tutte le combinazioni analizzate le caratteristiche dell' oscillatore equivalente e la domanda in termini di spostamento assunta per la struttura:

Cmb (LC)	Indice della combinazione di interesse con caso di carico considerato e verso (+/-)
Tipo	Stato limite di interesse (CO collasso, SL V salvaguardia della vita, SL D danno e SL O operatività)
D<C	Controllo della condizione domanda inferiore a capacità (se NO d verif. è assunto pari a d Ultimo nella curva di capacità come riportato alla tabella successiva)
sup. Danno	Indica se elementi hanno superato lo spostamento interpiano di danno
sup. Rottura	Indica se elementi hanno superato lo spostamento interpiano ultimo
d verif.	Spostamento orizzontale effettivo del punto di controllo: prodotto di gamma e d* max ; nel caso in cui D>C si assume convenzionalmente d verif. pari alla capacità ultima dU (vedi tabella successiva)
PGA verif.	Accelerazione corrispondente allo spostamento d verif.
F verif.	Taglio alla base corrispondente allo spostamento d verif.
Se(T*)	Accelerazione (ordinata spettro elastico) corrispondente a T*
d* max	Risposta in spostamento del sistema equivalente per l' azione sismica (circolare 2 febbraio 2009 paragrafo C7.3.4.1)
q*	Rapporto tra forza di risposta elastica e forza di snervamento del sistema equivalente. (circolare 2 febbraio 2009 paragrafo C7.3.4.1)
dy*	Spostamento limite elastico del sistema equivalente (circolare 2 febbraio 2009 paragrafo C7.3.4.1)
Fy*	Resistenza del sistema equivalente (circolare 2 febbraio 2009 paragrafo C7.3.4.1)
K*	Rigidità del sistema equivalente (circolare 2 febbraio 2009 paragrafo C7.3.4.1)
T*	Periodo del sistema equivalente (circolare 2 febbraio 2009 paragrafo C7.3.4.1)

Per ogni combinazione analizzata, viene di seguito riportata la curva di capacità della struttura per mezzo dei punti significativi:

Cmb (LC)	Indice della combinazione di interesse con caso di carico considerato e verso (+/-)
d D	Spostamento del punto di controllo in corrispondenza al superamento dello spostamento di interpiano (per la muratura se non attinto si assume d M)
d P1	Spostamento del punto di controllo in corrispondenza alla formazione della prima plasticità concentrata
d M	Spostamento del punto di controllo in corrispondenza al massimo taglio alla base
d U	Spostamento del punto di controllo in corrispondenza alla capacità ultima
d R	Spostamento del punto di controllo in corrispondenza al massimo spostamento dell'oscillatore equivalente
PGA	Accelerazione corrispondente agli spostamenti sopra riportati
F	Taglio alla base corrispondente agli spostamenti sopra riportati

e in forma integrale:

d Dc	Spostamento del punto di controllo
Tag. Fb	Taglio complessivo alla base relativo allo spostamento d Dc

Con riferimento al **Documento di Affidabilità** "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Maggio 2011, disponibile per il download sul sito www.2si.it, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
85	ANALISI PUSHOVER DI UN EDIFICIO IN C.A.
86	ANALISI PUSHOVER DI UNA STRUTTURA IN MURATURA
87	ANALISI ELASTO PLASTICA INCREMENTALE
88	ANALISI ELASTO PLASTICA INCREMENTALE
89	ANALISI ELASTO PLASTICA INCREMENTALE, PARETE IN MURATURA

CDC	Tipo	Angolo ing.	Distribuzione	Nodo Dc	Usò Dc	CDC	Periodo	M Sismica	xm*	m* % stat	m* % din	Part. Gamma
		gradi	F				sec	daN	daN			
6	SLV-DS	0.0	Proporz.	175	Mediato	7		1.624e+06	9.051e+05	55.7		1.53
7	SLV-DS	0.0	Stat. equiv.	175	Mediato	7		1.624e+06	9.051e+05	55.7		1.53
8	SLV-DS	90.0	Proporz.	181	Mediato	9		1.624e+06	7.574e+05	46.7		1.67
9	SLV-DS	90.0	Stat. equiv.	181	Mediato	9		1.624e+06	7.574e+05	46.7		1.67
10	SLD-DL	0.0	Proporz.	175	Mediato	7		1.624e+06	9.051e+05	55.7		1.53
11	SLD-DL	0.0	Stat. equiv.	175	Mediato	11		1.624e+06	9.051e+05	55.7		1.53
12	SLD-DL	90.0	Proporz.	181	Mediato	9		1.624e+06	7.574e+05	46.7		1.67
13	SLD-DL	90.0	Stat. equiv.	181	Mediato	13		1.624e+06	7.574e+05	46.7		1.67

Cmb (LC)	Tip	D<C	sup. Danno	sup. Rottura	d verif.	PGA verif.	F verif.	Se(T*)	d* max	q*	d y*	F y*	K*	T*
					cm	g	daN	g	cm		cm	daN	daN/cm	sec
29 (-6)	SLU-V	SI	NO	NO	-0.56	0.298	-1.900e+05	0.18	0.37	1.31	0.24	1.210e+05	4.951e+05	0.27
30 (6)	SLU-V	SI	NO	NO	0.57	0.298	1.900e+05	0.18	0.37	1.32	0.24	1.203e+05	4.951e+05	0.27
31 (-7)	SLU-V	SI	NO	NO	-0.75	0.298	-1.697e+05	0.18	0.49	1.48	0.29	1.075e+05	3.742e+05	0.31
32 (7)	SLU-V	SI	NO	NO	0.75	0.298	1.697e+05	0.18	0.49	1.48	0.29	1.070e+05	3.752e+05	0.31
33 (-8)	SLU-V	SI	NO	NO	-0.83	0.298	-1.461e+05	0.18	0.50	1.57	0.27	8.431e+04	3.079e+05	0.31
34 (8)	SLU-V	SI	NO	NO	0.83	0.298	1.445e+05	0.18	0.50	1.56	0.28	8.517e+04	3.079e+05	0.31
35 (-9)	SLU-V	SI	NO	NO	-1.16	0.298	-1.136e+05	0.18	0.69	2.15	0.29	6.175e+04	2.155e+05	0.38
36 (9)	SLU-V	SI	NO	NO	1.13	0.298	1.104e+05	0.18	0.69	2.16	0.28	6.131e+04	2.162e+05	0.38
37 (-10)	SLE-D	SI	NO	NO	-0.71	0.302	-1.940e+05	0.32	0.80	2.41	0.24	1.210e+05	4.951e+05	0.27
38 (10)	SLE-D	SI	NO	NO	0.68	0.302	1.932e+05	0.32	0.80	2.43	0.24	1.203e+05	4.951e+05	0.27
39 (-11)	SLE-D	SI	NO	NO	-1.00	0.302	-1.762e+05	0.32	0.98	2.72	0.29	1.075e+05	3.742e+05	0.31
40 (11)	SLE-D	SI	NO	NO	0.97	0.302	1.753e+05	0.32	0.98	2.73	0.29	1.070e+05	3.752e+05	0.31
41 (-12)	SLE-D	SI	NO	NO	-1.14	0.302	-1.559e+05	0.32	1.00	2.90	0.27	8.431e+04	3.079e+05	0.31
42 (12)	SLE-D	SI	NO	NO	1.25	0.302	1.551e+05	0.32	0.99	2.87	0.28	8.517e+04	3.079e+05	0.31
43 (-13)	SLE-D	SI	NO	NO	-1.23	0.298	-1.145e+05	0.32	1.27	3.96	0.29	6.175e+04	2.155e+05	0.38
44 (13)	SLE-D	SI	NO	NO	1.25	0.298	1.120e+05	0.32	1.27	3.99	0.28	6.131e+04	2.162e+05	0.38
45 (-6)	SLU-V	SI	NO	NO	-0.56	0.298	-1.900e+05	0.18	0.37	1.31	0.24	1.210e+05	4.951e+05	0.27
46 (6)	SLU-V	SI	NO	NO	0.57	0.298	1.900e+05	0.18	0.37	1.32	0.24	1.203e+05	4.951e+05	0.27
47 (-7)	SLU-V	SI	NO	NO	-0.75	0.298	-1.697e+05	0.18	0.49	1.48	0.29	1.075e+05	3.742e+05	0.31
48 (7)	SLU-V	SI	NO	NO	0.75	0.298	1.697e+05	0.18	0.49	1.48	0.29	1.070e+05	3.752e+05	0.31
49 (-8)	SLU-V	SI	NO	NO	-0.83	0.298	-1.461e+05	0.18	0.50	1.57	0.27	8.431e+04	3.079e+05	0.31
50 (8)	SLU-V	SI	NO	NO	0.83	0.298	1.445e+05	0.18	0.50	1.56	0.28	8.517e+04	3.079e+05	0.31
51 (-9)	SLU-V	SI	NO	NO	-1.16	0.298	-1.136e+05	0.18	0.69	2.15	0.29	6.175e+04	2.155e+05	0.38
52 (9)	SLU-V	SI	NO	NO	1.13	0.298	1.104e+05	0.18	0.69	2.16	0.28	6.131e+04	2.162e+05	0.38

Cmb (LC)	d D	PGA D	Fb D	d P1	PGA P1	Fb P1	d M	PGA M	Fb M	d U	PGA U	Fb U	d R	PGA R	Fb R
	cm	g	daN	cm	g	daN	cm	g	daN	cm	g	daN	cm	g	daN
29 (-6)				-0.15	0.02	-7.631e+04	-0.71	0.298	-1.940e+05	-0.71	0.298	-1.940e+05	-0.71	0.298	-1.940e+05
30 (6)				0.10	0.01	5.033e+04	0.68	0.298	1.932e+05	0.68	0.298	1.932e+05	0.68	0.298	1.932e+05
31 (-7)				-0.13	9.96e-03	-5.033e+04	-1.00	0.298	-1.762e+05	-1.00	0.298	-1.762e+05	-1.00	0.298	-1.762e+05
32 (7)				0.13	0.01	5.033e+04	0.97	0.298	1.753e+05	0.97	0.298	1.753e+05	0.97	0.298	1.753e+05
33 (-8)				-0.08	5.67e-03	-2.679e+04	-1.14	0.298	-1.559e+05	-1.14	0.298	-1.559e+05	-1.14	0.298	-1.559e+05
34 (8)				0.16	0.01	5.277e+04	1.25	0.298	1.551e+05	1.25	0.298	1.551e+05	1.25	0.298	1.551e+05
35 (-9)				-0.12	5.55e-03	-2.679e+04	-1.23	0.298	-1.145e+05	-1.23	0.298	-1.145e+05	-1.23	0.298	-1.145e+05
36 (9)				0.11	5.52e-03	2.679e+04	1.25	0.298	1.120e+05	1.25	0.298	1.120e+05	1.25	0.298	1.120e+05
37 (-10)				-0.15	0.01	-7.631e+04	-0.71	0.302	-1.940e+05	-0.71	0.302	-1.940e+05	-0.71	0.302	-1.940e+05
38 (10)				0.10	9.88e-03	5.033e+04	0.68	0.302	1.932e+05	0.68	0.302	1.932e+05	0.68	0.302	1.932e+05
39 (-11)				-0.13	9.73e-03	-5.033e+04	-1.00	0.302	-1.762e+05	-1.00	0.302	-1.762e+05	-1.00	0.302	-1.762e+05
40 (11)				0.13	9.77e-03	5.033e+04	0.97	0.302	1.753e+05	0.97	0.302	1.753e+05	0.97	0.302	1.753e+05
41 (-12)				-0.08	5.54e-03	-2.679e+04	-1.14	0.302	-1.559e+05	-1.14	0.302	-1.559e+05	-1.14	0.302	-1.559e+05
42 (12)				0.16	0.01	5.277e+04	1.25	0.302	1.551e+05	1.25	0.302	1.551e+05	1.25	0.302	1.551e+05
43 (-13)				-0.12	5.42e-03	-2.679e+04	-1.23	0.298	-1.145e+05	-1.23	0.298	-1.145e+05	-1.23	0.298	-1.145e+05
44 (13)				0.11	5.39e-03	2.679e+04	1.25	0.298	1.120e+05	1.25	0.298	1.120e+05	1.25	0.298	1.120e+05
45 (-6)				-0.15	0.02	-7.631e+04	-0.71	0.298	-1.940e+05	-0.71	0.298	-1.940e+05	-0.71	0.298	-1.940e+05
46 (6)				0.10	0.01	5.033e+04	0.68	0.298	1.932e+05	0.68	0.298	1.932e+05	0.68	0.298	1.932e+05
47 (-7)				-0.13	9.96e-03	-5.033e+04	-1.00	0.298	-1.762e+05	-1.00	0.298	-1.762e+05	-1.00	0.298	-1.762e+05
48 (7)				0.13	0.01	5.033e+04	0.97	0.298	1.753e+05	0.97	0.298	1.753e+05	0.97	0.298	1.753e+05
49 (-8)				-0.08	5.67e-03	-2.679e+04	-1.14	0.298	-1.559e+05	-1.14	0.298	-1.559e+05	-1.14	0.298	-1.559e+05
50 (8)				0.16	0.01	5.277e+04	1.25	0.298	1.551e+05	1.25	0.298	1.551e+05	1.25	0.298	1.551e+05
51 (-9)				-0.12	5.55e-03	-2.679e+04	-1.23	0.298	-1.145e+05	-1.23	0.298	-1.145e+05	-1.23	0.298	-1.145e+05
52 (9)				0.11	5.52e-03	2.679e+04	1.25	0.298	1.120e+05	1.25	0.298	1.120e+05	1.25	0.298	1.120e+05

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
29	0.0	0.0	-3.25e-03	-1623.6	-9.75e-03	-4870.7	-0.02	-1.136e+04	-0.05	-2.435e+04	-0.10	-5.033e+04
	-0.15	-7.631e+04	-0.21	-1.023e+05	-0.21	-1.031e+05	-0.21	-1.039e+05	-0.21	-1.055e+05	-0.22	-1.088e+05
	-0.23	-1.153e+05	-0.26	-1.283e+05	-0.26	-1.291e+05	-0.26	-1.299e+05	-0.27	-1.315e+05	-0.27	-1.348e+05
	-0.29	-1.413e+05	-0.29	-1.421e+05	-0.29	-1.429e+05	-0.29	-1.437e+05	-0.30	-1.445e+05	-0.30	-1.461e+05
	-0.30	-1.469e+05	-0.31	-1.477e+05	-0.31	-1.486e+05	-0.31	-1.494e+05	-0.31	-1.510e+05	-0.32	-1.542e+05
	-0.34	-1.607e+05	-0.34	-1.615e+05	-0.35	-1.624e+05	-0.35	-1.632e+05	-0.35	-1.640e+05	-0.35	-1.648e+05
	-0.36	-1.664e+05	-0.36	-1.672e+05	-0.37	-1.680e+05	-0.37	-1.689e+05	-0.37	-1.697e+05	-0.38	-1.705e+05
	-0.38	-1.713e+05	-0.39	-1.729e+05	-0.39	-1.737e+05	-0.40	-1.745e+05	-0.40	-1.753e+05	-0.41	-1.762e+05
	-0.41	-1.770e+05	-0.42	-1.778e+05	-0.42	-1.786e+05	-0.43	-1.794e+05	-0.43	-1.802e+05	-0.44	-1.810e+05
	-0.45	-1.818e+05	-0.46	-1.827e+05	-0.46	-1.835e+05	-0.47	-1.843e+05	-0.48	-1.851e+05	-0.49	-1.859e+05
	-0.50	-1.867e+05	-0.52	-1.875e+05	-0.53	-1.883e+05	-0.55	-1.891e+05	-0.56	-1.900e+05	-0.59	-1.908e+05
	-0.61	-1.916e+05	-0.64	-1.924e+05	-0.68	-1.932e+05	-0.71	-1.940e+05				

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
Cmb	Sp. Dc	Tag. Fb										
	-0.71	-1.940e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
30	0.0	0.0	3.25e-03	1623.6	9.75e-03	4870.7	0.02	1.136e+04	0.05	2.435e+04	0.10	5.033e+04
	0.15	7.631e+04	0.21	1.023e+05	0.26	1.283e+05	0.26	1.291e+05	0.26	1.299e+05	0.27	1.315e+05
	0.27	1.348e+05	0.29	1.413e+05	0.29	1.421e+05	0.29	1.429e+05	0.29	1.437e+05	0.30	1.445e+05
	0.30	1.461e+05	0.30	1.469e+05	0.30	1.477e+05	0.31	1.486e+05	0.31	1.502e+05	0.32	1.534e+05
	0.32	1.542e+05	0.32	1.551e+05	0.33	1.559e+05	0.33	1.567e+05	0.33	1.575e+05	0.33	1.583e+05
	0.34	1.599e+05	0.34	1.607e+05	0.34	1.615e+05	0.35	1.624e+05	0.35	1.632e+05	0.35	1.640e+05
	0.35	1.648e+05	0.36	1.656e+05	0.36	1.664e+05	0.36	1.672e+05	0.37	1.680e+05	0.37	1.689e+05
	0.38	1.705e+05	0.38	1.713e+05	0.39	1.721e+05	0.39	1.729e+05	0.39	1.737e+05	0.40	1.745e+05
	0.40	1.753e+05	0.41	1.762e+05	0.41	1.770e+05	0.42	1.778e+05	0.42	1.786e+05	0.43	1.794e+05
	0.43	1.802e+05	0.44	1.810e+05	0.45	1.818e+05	0.46	1.827e+05	0.46	1.835e+05	0.47	1.843e+05
	0.48	1.851e+05	0.49	1.859e+05	0.51	1.867e+05	0.52	1.875e+05	0.54	1.883e+05	0.55	1.891e+05
	0.57	1.900e+05	0.59	1.908e+05	0.62	1.916e+05	0.64	1.924e+05	0.68	1.932e+05		
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	0.68	1.932e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
31	0.0	0.0	-4.23e-03	-1623.6	-0.01	-4870.7	-0.03	-1.136e+04	-0.06	-2.435e+04	-0.13	-5.033e+04
	-0.20	-7.631e+04	-0.20	-7.712e+04	-0.20	-7.793e+04	-0.21	-7.955e+04	-0.22	-8.280e+04	-0.24	-8.930e+04
	-0.27	-1.023e+05	-0.27	-1.031e+05	-0.28	-1.039e+05	-0.28	-1.055e+05	-0.29	-1.088e+05	-0.31	-1.153e+05
	-0.31	-1.161e+05	-0.32	-1.169e+05	-0.32	-1.185e+05	-0.33	-1.218e+05	-0.34	-1.226e+05	-0.34	-1.234e+05
	-0.34	-1.242e+05	-0.35	-1.258e+05	-0.35	-1.266e+05	-0.35	-1.275e+05	-0.36	-1.283e+05	-0.36	-1.291e+05
	-0.36	-1.299e+05	-0.37	-1.307e+05	-0.37	-1.323e+05	-0.38	-1.331e+05	-0.38	-1.339e+05	-0.39	-1.348e+05
	-0.39	-1.356e+05	-0.39	-1.364e+05	-0.40	-1.372e+05	-0.40	-1.380e+05	-0.41	-1.388e+05	-0.41	-1.396e+05
	-0.41	-1.404e+05	-0.42	-1.413e+05	-0.42	-1.421e+05	-0.43	-1.429e+05	-0.43	-1.437e+05	-0.44	-1.445e+05
	-0.45	-1.453e+05	-0.45	-1.461e+05	-0.46	-1.469e+05	-0.46	-1.477e+05	-0.47	-1.486e+05	-0.48	-1.502e+05
	-0.49	-1.510e+05	-0.49	-1.518e+05	-0.50	-1.526e+05	-0.52	-1.542e+05	-0.52	-1.551e+05	-0.53	-1.559e+05
	-0.54	-1.567e+05	-0.55	-1.575e+05	-0.56	-1.583e+05	-0.57	-1.591e+05	-0.58	-1.599e+05	-0.59	-1.607e+05
	-0.60	-1.615e+05	-0.61	-1.624e+05	-0.62	-1.632e+05	-0.63	-1.640e+05	-0.65	-1.648e+05	-0.66	-1.656e+05
	-0.68	-1.664e+05	-0.69	-1.672e+05	-0.71	-1.680e+05	-0.73	-1.689e+05	-0.75	-1.697e+05	-0.77	-1.705e+05
	-0.79	-1.713e+05	-0.82	-1.721e+05	-0.84	-1.729e+05	-0.88	-1.737e+05	-0.91	-1.745e+05	-0.95	-1.753e+05
	-1.00	-1.762e+05										
Cmb	Sp. Dc	Tag. Fb										
	-1.00	-1.762e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
32	0.0	0.0	4.23e-03	1623.6	0.01	4870.7	0.03	1.136e+04	0.06	2.435e+04	0.13	5.033e+04
	0.20	7.631e+04	0.27	1.023e+05	0.27	1.031e+05	0.28	1.039e+05	0.28	1.047e+05	0.28	1.063e+05
	0.29	1.096e+05	0.31	1.161e+05	0.32	1.169e+05	0.32	1.177e+05	0.33	1.193e+05	0.33	1.201e+05
	0.33	1.210e+05	0.34	1.226e+05	0.34	1.234e+05	0.34	1.242e+05	0.35	1.258e+05	0.35	1.266e+05
	0.35	1.275e+05	0.36	1.283e+05	0.36	1.291e+05	0.36	1.299e+05	0.37	1.315e+05	0.38	1.323e+05
	0.38	1.331e+05	0.39	1.348e+05	0.39	1.356e+05	0.39	1.364e+05	0.40	1.372e+05	0.40	1.380e+05
	0.41	1.388e+05	0.41	1.404e+05	0.42	1.413e+05	0.42	1.421e+05	0.43	1.429e+05	0.43	1.437e+05
	0.44	1.445e+05	0.44	1.453e+05	0.45	1.461e+05	0.45	1.469e+05	0.46	1.477e+05	0.46	1.486e+05
	0.47	1.494e+05	0.47	1.502e+05	0.48	1.510e+05	0.49	1.518e+05	0.49	1.526e+05	0.50	1.534e+05
	0.51	1.542e+05	0.51	1.551e+05	0.52	1.559e+05	0.53	1.567e+05	0.54	1.575e+05	0.55	1.583e+05
	0.56	1.591e+05	0.57	1.599e+05	0.58	1.607e+05	0.59	1.615e+05	0.61	1.624e+05	0.62	1.632e+05
	0.63	1.640e+05	0.65	1.648e+05	0.66	1.656e+05	0.68	1.664e+05	0.69	1.672e+05	0.71	1.680e+05
	0.73	1.689e+05	0.75	1.697e+05	0.77	1.705e+05	0.79	1.713e+05	0.82	1.721e+05	0.85	1.729e+05
	0.88	1.737e+05	0.92	1.745e+05	0.97	1.753e+05						
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	0.97	1.753e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
33	0.0	0.0	-5.00e-03	-1623.6	-7.50e-03	-2435.4	-0.01	-4058.9	-0.02	-7306.1	-0.04	-1.380e+04
	-0.08	-2.679e+04	-0.16	-5.277e+04	-0.25	-7.874e+04	-0.25	-7.955e+04	-0.25	-8.037e+04	-0.26	-8.199e+04
	-0.27	-8.524e+04	-0.27	-8.605e+04	-0.28	-8.686e+04	-0.28	-8.767e+04	-0.29	-8.930e+04	-0.30	-9.254e+04
	-0.30	-9.336e+04	-0.31	-9.417e+04	-0.31	-9.498e+04	-0.31	-9.579e+04	-0.32	-9.741e+04	-0.34	-1.007e+05
	-0.34	-1.015e+05	-0.34	-1.023e+05	-0.35	-1.031e+05	-0.35	-1.039e+05	-0.36	-1.047e+05	-0.36	-1.055e+05
	-0.37	-1.063e+05	-0.37	-1.072e+05	-0.38	-1.080e+05	-0.38	-1.088e+05	-0.39	-1.096e+05	-0.39	-1.104e+05
	-0.40	-1.112e+05	-0.40	-1.120e+05	-0.41	-1.128e+05	-0.42	-1.136e+05	-0.42	-1.145e+05	-0.43	-1.153e+05
	-0.44	-1.161e+05	-0.44	-1.169e+05	-0.45	-1.177e+05	-0.46	-1.185e+05	-0.48	-1.201e+05	-0.48	-1.210e+05
	-0.49	-1.218e+05	-0.50	-1.226e+05	-0.52	-1.242e+05	-0.53	-1.250e+05	-0.54	-1.258e+05	-0.55	-1.266e+05
	-0.56	-1.275e+05	-0.58	-1.291e+05	-0.59	-1.299e+05	-0.60	-1.307e+05	-0.62	-1.323e+05	-0.63	-1.331e+05
	-0.64	-1.339e+05	-0.65	-1.348e+05	-0.68	-1.364e+05	-0.69	-1.372e+05	-0.70	-1.380e+05	-0.73	-1.396e+05
	-0.78	-1.429e+05	-0.79	-1.437e+05	-0.80	-1.445e+05	-0.83	-1.461e+05	-0.85	-1.469e+05	-0.86	-1.477e+05
	-0.88	-1.486e+05	-0.90	-1.494e+05	-0.95	-1.510e+05	-0.97	-1.518e+05	-0.99	-1.526e+05	-1.02	-1.534e+05
	-1.06	-1.542e+05	-1.10	-1.551e+05	-1.14	-1.559e+05						
Cmb	Sp. Dc	Tag. Fb										
	-1.14	-1.559e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
34	0.0	0.0	5.01e-03	1623.6	7.51e-03	2435.4	0.01	4058.9	0.02	7306.1	0.04	1.380e+04
	0.08	2.679e+04	0.16	5.277e+04	0.25	7.874e+04	0.25	7.955e+04	0.25	8.037e+04	0.26	8.118e+04
	0.26	8.280e+04	0.27	8.361e+04	0.27	8.443e+04	0.27	8.524e+04	0.28	8.686e+04	0.28	8.767e+04
	0.29	8.930e+04	0.30	9.254e+04	0.30	9.336e+04	0.31	9.417e+04	0.31	9.579e+04	0.32	9.660e+04
	0.32	9.741e+04	0.33	9.904e+04	0.33	9.985e+04	0.34	1.007e+05	0.34	1.015e+05	0.34	1.023e+05
	0.35	1.031e+05	0.36	1.047e+05	0.36	1.055e+05	0.37	1.063e+05	0.37	1.072e+05	0.38	1.080e+05
	0.39	1.096e+05	0.39	1.104e+05	0.40	1.112e+05	0.40	1.120e+05	0.41	1.136e+05	0.42	1.145e+05
	0.42	1.153e+05	0.43	1.161e+05	0.44	1.169e+05	0.44	1.177e+05	0.45	1.193e+05	0.46	1.201e+05
	0.47	1.210e+05	0.47	1.218e+05	0.49	1.234e+05	0.50	1.242e+05	0.50	1.250e+05	0.51	1.258e+05
	0.52	1.266e+05	0.53	1.275e+05	0.54	1.283e+05	0.55	1.291e+05	0.56	1.299e+05	0.58	1.307e+05
	0.59	1.315e+05	0.60	1.323e+05	0.62	1.331e+05	0.64	1.348e+05	0.66	1.356e+05	0.67	1.364e+05
	0.70	1.380e+05	0.71	1.388e+05	0.73	1.396e+05	0.75	1.404e+05	0.76	1.413e+05	0.78	1.421e+05
	0.80	1.429e+05	0.83	1.445e+05	0.91	1.477e+05	0.94	1.486e+05	0.96	1.494e+05	1.00	1.502e+05
	1.03	1.510e+05	1.07	1.518e+05	1.11	1.526e+05	1.15	1.534e+05	1.19	1.542e+05	1.25	1.551e+05
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	1.25	1.551e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
35	0.0	0.0	-6.97e-03	-1623.6	-0.01	-2435.4	-0.02	-4058.9	-0.03	-7306.1	-0.06	-1.380e+04
	-0.12	-2.679e+04	-0.23	-5.277e+04	-0.24	-5.358e+04	-0.24	-5.439e+04	-0.25	-5.601e+04	-0.25	-5.682e+04
	-0.26	-5.845e+04	-0.26	-5.926e+04	-0.27	-6.007e+04	-0.28	-6.170e+04	-0.28	-6.251e+04	-0.29	-6.332e+04
	-0.29	-6.413e+04	-0.30	-6.494e+04	-0.30	-6.575e+04	-0.31	-6.738e+04	-0.32	-6.819e+04	-0.32	-6.900e+04
	-0.33	-6.981e+04	-0.33	-7.063e+04	-0.34	-7.144e+04	-0.34	-7.225e+04	-0.35	-7.306e+04	-0.36	-7.468e+04
	-0.37	-7.550e+04	-0.37	-7.631e+04	-0.39	-7.793e+04	-0.39	-7.874e+04	-0.40	-7.955e+04	-0.41	-8.037e+04
	-0.42	-8.118e+04	-0.43	-8.199e+04	-0.43	-8.280e+04	-0.44	-8.361e+04	-0.45	-8.443e+04	-0.46	-8.524e+04
	-0.48	-8.605e+04	-0.49	-8.686e+04	-0.50	-8.767e+04	-0.51	-8.848e+04	-0.53	-8.930e+04	-0.54	-9.011e+04
	-0.55	-9.092e+04	-0.58	-9.254e+04	-0.64	-9.579e+04	-0.66	-9.660e+04	-0.67	-9.741e+04	-0.71	-9.904e+04
	-0.73	-9.985e+04	-0.74	-1.007e+05	-0.76	-1.015e+05	-0.78	-1.023e+05	-0.80	-1.031e+05	-0.82	-1.039e+05
	-0.87	-1.055e+05	-0.96	-1.088e+05	-0.99	-1.096e+05	-1.01	-1.104e+05	-1.04	-1.112e+05	-1.08	-1.120e+05
	-1.11	-1.128e+05	-1.16	-1.136e+05	-1.23	-1.145e+05						
Cmb	Sp. Dc	Tag. Fb										
	-1.23	-1.145e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
36	0.0	0.0	6.99e-03	1623.6	0.01	2435.4	0.02	4058.9	0.03	7306.1	0.06	1.380e+04
	0.11	2.679e+04	0.23	5.277e+04	0.23	5.358e+04	0.24	5.439e+04	0.24	5.520e+04	0.25	5.682e+04
	0.26	5.764e+04	0.26	5.926e+04	0.28	6.251e+04	0.29	6.332e+04	0.30	6.494e+04	0.30	6.575e+04
	0.31	6.657e+04	0.31	6.738e+04	0.32	6.819e+04	0.33	6.981e+04	0.33	7.063e+04	0.34	7.144e+04

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	0.34	7.225e+04	0.36	7.387e+04	0.38	7.712e+04	0.39	7.793e+04	0.39	7.874e+04	0.40	7.955e+04
	0.41	8.118e+04	0.42	8.199e+04	0.43	8.280e+04	0.44	8.361e+04	0.45	8.443e+04	0.46	8.524e+04
	0.46	8.605e+04	0.47	8.686e+04	0.48	8.767e+04	0.49	8.848e+04	0.51	8.930e+04	0.52	9.011e+04
	0.53	9.092e+04	0.54	9.173e+04	0.56	9.254e+04	0.58	9.336e+04	0.59	9.417e+04	0.62	9.579e+04
	0.64	9.660e+04	0.66	9.741e+04	0.69	9.823e+04	0.71	9.904e+04	0.73	9.985e+04	0.76	1.007e+05
	0.78	1.015e+05	0.80	1.023e+05	0.83	1.031e+05	0.89	1.047e+05	0.92	1.055e+05	0.94	1.063e+05
	1.01	1.080e+05	1.04	1.088e+05	1.08	1.096e+05	1.13	1.104e+05	1.18	1.112e+05	1.25	1.120e+05
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	1.25	1.120e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
37	0.0	0.0	-3.25e-03	-1623.6	-9.75e-03	-4870.7	-0.02	-1.136e+04	-0.05	-2.435e+04	-0.10	-5.033e+04
	-0.15	-7.631e+04	-0.21	-1.023e+05	-0.21	-1.031e+05	-0.21	-1.039e+05	-0.21	-1.055e+05	-0.22	-1.088e+05
	-0.23	-1.153e+05	-0.26	-1.283e+05	-0.26	-1.291e+05	-0.26	-1.299e+05	-0.27	-1.315e+05	-0.27	-1.348e+05
	-0.29	-1.413e+05	-0.29	-1.421e+05	-0.29	-1.429e+05	-0.29	-1.437e+05	-0.30	-1.445e+05	-0.30	-1.461e+05
	-0.30	-1.469e+05	-0.31	-1.477e+05	-0.31	-1.486e+05	-0.31	-1.494e+05	-0.31	-1.510e+05	-0.32	-1.542e+05
	-0.34	-1.607e+05	-0.34	-1.615e+05	-0.35	-1.624e+05	-0.35	-1.632e+05	-0.35	-1.640e+05	-0.35	-1.648e+05
	-0.36	-1.664e+05	-0.36	-1.672e+05	-0.37	-1.680e+05	-0.37	-1.689e+05	-0.37	-1.697e+05	-0.38	-1.705e+05
	-0.38	-1.713e+05	-0.39	-1.729e+05	-0.39	-1.737e+05	-0.40	-1.745e+05	-0.40	-1.753e+05	-0.41	-1.762e+05
	-0.41	-1.770e+05	-0.42	-1.778e+05	-0.42	-1.786e+05	-0.43	-1.794e+05	-0.43	-1.802e+05	-0.44	-1.810e+05
	-0.45	-1.818e+05	-0.46	-1.827e+05	-0.46	-1.835e+05	-0.47	-1.843e+05	-0.48	-1.851e+05	-0.49	-1.859e+05
	-0.50	-1.867e+05	-0.52	-1.875e+05	-0.53	-1.883e+05	-0.55	-1.891e+05	-0.56	-1.900e+05	-0.59	-1.908e+05
	-0.61	-1.916e+05	-0.64	-1.924e+05	-0.68	-1.932e+05	-0.71	-1.940e+05				
Cmb	Sp. Dc	Tag. Fb										
	-0.71	-1.940e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
38	0.0	0.0	3.25e-03	1623.6	9.75e-03	4870.7	0.02	1.136e+04	0.05	2.435e+04	0.10	5.033e+04
	0.15	7.631e+04	0.21	1.023e+05	0.26	1.283e+05	0.26	1.291e+05	0.26	1.299e+05	0.27	1.315e+05
	0.27	1.348e+05	0.29	1.413e+05	0.29	1.421e+05	0.29	1.429e+05	0.29	1.437e+05	0.30	1.445e+05
	0.30	1.461e+05	0.30	1.469e+05	0.30	1.477e+05	0.31	1.486e+05	0.31	1.502e+05	0.32	1.534e+05
	0.32	1.542e+05	0.32	1.551e+05	0.33	1.559e+05	0.33	1.567e+05	0.33	1.575e+05	0.33	1.583e+05
	0.34	1.599e+05	0.34	1.607e+05	0.34	1.615e+05	0.35	1.624e+05	0.35	1.632e+05	0.35	1.640e+05
	0.35	1.648e+05	0.36	1.656e+05	0.36	1.664e+05	0.36	1.672e+05	0.37	1.680e+05	0.37	1.689e+05
	0.38	1.705e+05	0.38	1.713e+05	0.39	1.721e+05	0.39	1.729e+05	0.39	1.737e+05	0.40	1.745e+05
	0.40	1.753e+05	0.41	1.762e+05	0.41	1.770e+05	0.42	1.778e+05	0.42	1.786e+05	0.43	1.794e+05
	0.43	1.802e+05	0.44	1.810e+05	0.45	1.818e+05	0.46	1.827e+05	0.46	1.835e+05	0.47	1.843e+05
	0.48	1.851e+05	0.49	1.859e+05	0.51	1.867e+05	0.52	1.875e+05	0.54	1.883e+05	0.55	1.891e+05
	0.57	1.900e+05	0.59	1.908e+05	0.62	1.916e+05	0.64	1.924e+05	0.68	1.932e+05		
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	0.68	1.932e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
39	0.0	0.0	-4.23e-03	-1623.6	-0.01	-4870.7	-0.03	-1.136e+04	-0.06	-2.435e+04	-0.13	-5.033e+04
	-0.20	-7.631e+04	-0.20	-7.712e+04	-0.20	-7.793e+04	-0.21	-7.955e+04	-0.22	-8.280e+04	-0.24	-8.930e+04
	-0.27	-1.023e+05	-0.27	-1.031e+05	-0.28	-1.039e+05	-0.28	-1.055e+05	-0.29	-1.088e+05	-0.31	-1.153e+05
	-0.31	-1.161e+05	-0.32	-1.169e+05	-0.32	-1.185e+05	-0.33	-1.218e+05	-0.34	-1.226e+05	-0.34	-1.234e+05
	-0.34	-1.242e+05	-0.35	-1.258e+05	-0.35	-1.266e+05	-0.35	-1.275e+05	-0.36	-1.283e+05	-0.36	-1.291e+05
	-0.36	-1.299e+05	-0.37	-1.307e+05	-0.37	-1.323e+05	-0.38	-1.331e+05	-0.38	-1.339e+05	-0.39	-1.348e+05
	-0.39	-1.356e+05	-0.39	-1.364e+05	-0.40	-1.372e+05	-0.40	-1.380e+05	-0.41	-1.388e+05	-0.41	-1.396e+05
	-0.41	-1.404e+05	-0.42	-1.413e+05	-0.42	-1.421e+05	-0.43	-1.429e+05	-0.43	-1.437e+05	-0.44	-1.445e+05
	-0.45	-1.453e+05	-0.45	-1.461e+05	-0.46	-1.469e+05	-0.46	-1.477e+05	-0.47	-1.486e+05	-0.48	-1.502e+05
	-0.49	-1.510e+05	-0.49	-1.518e+05	-0.50	-1.526e+05	-0.52	-1.542e+05	-0.52	-1.551e+05	-0.53	-1.559e+05
	-0.54	-1.567e+05	-0.55	-1.575e+05	-0.56	-1.583e+05	-0.57	-1.591e+05	-0.58	-1.599e+05	-0.59	-1.607e+05
	-0.60	-1.615e+05	-0.61	-1.624e+05	-0.62	-1.632e+05	-0.63	-1.640e+05	-0.65	-1.648e+05	-0.66	-1.656e+05
	-0.68	-1.664e+05	-0.69	-1.672e+05	-0.71	-1.680e+05	-0.73	-1.689e+05	-0.75	-1.697e+05	-0.77	-1.705e+05
	-0.79	-1.713e+05	-0.82	-1.721e+05	-0.84	-1.729e+05	-0.88	-1.737e+05	-0.91	-1.745e+05	-0.95	-1.753e+05
	-1.00	-1.762e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
Cmb	Sp. Dc	Tag. Fb										
	-1.00	-1.762e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
40	0.0	0.0	4.23e-03	1623.6	0.01	4870.7	0.03	1.136e+04	0.06	2.435e+04	0.13	5.033e+04
	0.20	7.631e+04	0.27	1.023e+05	0.27	1.031e+05	0.28	1.039e+05	0.28	1.047e+05	0.28	1.063e+05
	0.29	1.096e+05	0.31	1.161e+05	0.32	1.169e+05	0.32	1.177e+05	0.33	1.193e+05	0.33	1.201e+05
	0.33	1.210e+05	0.34	1.226e+05	0.34	1.234e+05	0.34	1.242e+05	0.35	1.258e+05	0.35	1.266e+05
	0.35	1.275e+05	0.36	1.283e+05	0.36	1.291e+05	0.36	1.299e+05	0.37	1.315e+05	0.38	1.323e+05
	0.38	1.331e+05	0.39	1.348e+05	0.39	1.356e+05	0.39	1.364e+05	0.40	1.372e+05	0.40	1.380e+05
	0.41	1.388e+05	0.41	1.404e+05	0.42	1.413e+05	0.42	1.421e+05	0.43	1.429e+05	0.43	1.437e+05
	0.44	1.445e+05	0.44	1.453e+05	0.45	1.461e+05	0.45	1.469e+05	0.46	1.477e+05	0.46	1.486e+05
	0.47	1.494e+05	0.47	1.502e+05	0.48	1.510e+05	0.49	1.518e+05	0.49	1.526e+05	0.50	1.534e+05
	0.51	1.542e+05	0.51	1.551e+05	0.52	1.559e+05	0.53	1.567e+05	0.54	1.575e+05	0.55	1.583e+05
	0.56	1.591e+05	0.57	1.599e+05	0.58	1.607e+05	0.59	1.615e+05	0.61	1.624e+05	0.62	1.632e+05
	0.63	1.640e+05	0.65	1.648e+05	0.66	1.656e+05	0.68	1.664e+05	0.69	1.672e+05	0.71	1.680e+05
	0.73	1.689e+05	0.75	1.697e+05	0.77	1.705e+05	0.79	1.713e+05	0.82	1.721e+05	0.85	1.729e+05
	0.88	1.737e+05	0.92	1.745e+05	0.97	1.753e+05						
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	0.97	1.753e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
41	0.0	0.0	-5.00e-03	-1623.6	-7.50e-03	-2435.4	-0.01	-4058.9	-0.02	-7306.1	-0.04	-1.380e+04
	-0.08	-2.679e+04	-0.16	-5.277e+04	-0.25	-7.874e+04	-0.25	-7.955e+04	-0.25	-8.037e+04	-0.26	-8.199e+04
	-0.27	-8.524e+04	-0.27	-8.605e+04	-0.28	-8.686e+04	-0.28	-8.767e+04	-0.29	-8.930e+04	-0.30	-9.254e+04
	-0.30	-9.336e+04	-0.31	-9.417e+04	-0.31	-9.498e+04	-0.31	-9.579e+04	-0.32	-9.741e+04	-0.34	-1.007e+05
	-0.34	-1.015e+05	-0.34	-1.023e+05	-0.35	-1.031e+05	-0.35	-1.039e+05	-0.36	-1.047e+05	-0.36	-1.055e+05
	-0.37	-1.063e+05	-0.37	-1.072e+05	-0.38	-1.080e+05	-0.38	-1.088e+05	-0.39	-1.096e+05	-0.39	-1.104e+05
	-0.40	-1.112e+05	-0.40	-1.120e+05	-0.41	-1.128e+05	-0.42	-1.136e+05	-0.42	-1.145e+05	-0.43	-1.153e+05
	-0.44	-1.161e+05	-0.44	-1.169e+05	-0.45	-1.177e+05	-0.46	-1.185e+05	-0.48	-1.201e+05	-0.48	-1.210e+05
	-0.49	-1.218e+05	-0.50	-1.226e+05	-0.52	-1.242e+05	-0.53	-1.250e+05	-0.54	-1.258e+05	-0.55	-1.266e+05
	-0.56	-1.275e+05	-0.58	-1.291e+05	-0.59	-1.299e+05	-0.60	-1.307e+05	-0.62	-1.323e+05	-0.63	-1.331e+05
	-0.64	-1.339e+05	-0.65	-1.348e+05	-0.68	-1.364e+05	-0.69	-1.372e+05	-0.70	-1.380e+05	-0.73	-1.396e+05
	-0.78	-1.429e+05	-0.79	-1.437e+05	-0.80	-1.445e+05	-0.83	-1.461e+05	-0.85	-1.469e+05	-0.86	-1.477e+05
	-0.88	-1.486e+05	-0.90	-1.494e+05	-0.95	-1.510e+05	-0.97	-1.518e+05	-0.99	-1.526e+05	-1.02	-1.534e+05
	-1.06	-1.542e+05	-1.10	-1.551e+05	-1.14	-1.559e+05						
Cmb	Sp. Dc	Tag. Fb										
	-1.14	-1.559e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
42	0.0	0.0	5.01e-03	1623.6	7.51e-03	2435.4	0.01	4058.9	0.02	7306.1	0.04	1.380e+04
	0.08	2.679e+04	0.16	5.277e+04	0.25	7.874e+04	0.25	7.955e+04	0.25	8.037e+04	0.26	8.118e+04
	0.26	8.280e+04	0.27	8.361e+04	0.27	8.443e+04	0.27	8.524e+04	0.28	8.686e+04	0.28	8.767e+04
	0.29	8.930e+04	0.30	9.254e+04	0.30	9.336e+04	0.31	9.417e+04	0.31	9.579e+04	0.32	9.660e+04
	0.32	9.741e+04	0.33	9.904e+04	0.33	9.985e+04	0.34	1.007e+05	0.34	1.015e+05	0.34	1.023e+05
	0.35	1.031e+05	0.36	1.047e+05	0.36	1.055e+05	0.37	1.063e+05	0.37	1.072e+05	0.38	1.080e+05
	0.39	1.096e+05	0.39	1.104e+05	0.40	1.112e+05	0.40	1.120e+05	0.41	1.136e+05	0.42	1.145e+05
	0.42	1.153e+05	0.43	1.161e+05	0.44	1.169e+05	0.44	1.177e+05	0.45	1.193e+05	0.46	1.201e+05
	0.47	1.210e+05	0.47	1.218e+05	0.49	1.234e+05	0.50	1.242e+05	0.50	1.250e+05	0.51	1.258e+05
	0.52	1.266e+05	0.53	1.275e+05	0.54	1.283e+05	0.55	1.291e+05	0.56	1.299e+05	0.58	1.307e+05
	0.59	1.315e+05	0.60	1.323e+05	0.62	1.331e+05	0.64	1.348e+05	0.66	1.356e+05	0.67	1.364e+05
	0.70	1.380e+05	0.71	1.388e+05	0.73	1.396e+05	0.75	1.404e+05	0.76	1.413e+05	0.78	1.421e+05
	0.80	1.429e+05	0.83	1.445e+05	0.91	1.477e+05	0.94	1.486e+05	0.96	1.494e+05	1.00	1.502e+05
	1.03	1.510e+05	1.07	1.518e+05	1.11	1.526e+05	1.15	1.534e+05	1.19	1.542e+05	1.25	1.551e+05
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	1.25	1.551e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
43	0.0	0.0	-6.97e-03	-1623.6	-0.01	-2435.4	-0.02	-4058.9	-0.03	-7306.1	-0.06	-1.380e+04
	-0.12	-2.679e+04	-0.23	-5.277e+04	-0.24	-5.358e+04	-0.24	-5.439e+04	-0.25	-5.601e+04	-0.25	-5.682e+04
	-0.26	-5.845e+04	-0.26	-5.926e+04	-0.27	-6.007e+04	-0.28	-6.170e+04	-0.28	-6.251e+04	-0.29	-6.332e+04
	-0.29	-6.413e+04	-0.30	-6.494e+04	-0.30	-6.575e+04	-0.31	-6.738e+04	-0.32	-6.819e+04	-0.32	-6.900e+04
	-0.33	-6.981e+04	-0.33	-7.063e+04	-0.34	-7.144e+04	-0.34	-7.225e+04	-0.35	-7.306e+04	-0.36	-7.468e+04
	-0.37	-7.550e+04	-0.37	-7.631e+04	-0.39	-7.793e+04	-0.39	-7.874e+04	-0.40	-7.955e+04	-0.41	-8.037e+04
	-0.42	-8.118e+04	-0.43	-8.199e+04	-0.43	-8.280e+04	-0.44	-8.361e+04	-0.45	-8.443e+04	-0.46	-8.524e+04
	-0.48	-8.605e+04	-0.49	-8.686e+04	-0.50	-8.767e+04	-0.51	-8.848e+04	-0.53	-8.930e+04	-0.54	-9.011e+04
	-0.55	-9.092e+04	-0.58	-9.254e+04	-0.64	-9.579e+04	-0.66	-9.660e+04	-0.67	-9.741e+04	-0.71	-9.904e+04
	-0.73	-9.985e+04	-0.74	-1.007e+05	-0.76	-1.015e+05	-0.78	-1.023e+05	-0.80	-1.031e+05	-0.82	-1.039e+05
	-0.87	-1.055e+05	-0.96	-1.088e+05	-0.99	-1.096e+05	-1.01	-1.104e+05	-1.04	-1.112e+05	-1.08	-1.120e+05
	-1.11	-1.128e+05	-1.16	-1.136e+05	-1.23	-1.145e+05						
Cmb	Sp. Dc	Tag. Fb										
	-1.23	-1.145e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
44	0.0	0.0	6.99e-03	1623.6	0.01	2435.4	0.02	4058.9	0.03	7306.1	0.06	1.380e+04
	0.11	2.679e+04	0.23	5.277e+04	0.23	5.358e+04	0.24	5.439e+04	0.24	5.520e+04	0.25	5.682e+04
	0.26	5.764e+04	0.26	5.926e+04	0.28	6.251e+04	0.29	6.332e+04	0.30	6.494e+04	0.30	6.575e+04
	0.31	6.657e+04	0.31	6.738e+04	0.32	6.819e+04	0.33	6.981e+04	0.33	7.063e+04	0.34	7.144e+04
	0.34	7.225e+04	0.36	7.387e+04	0.38	7.712e+04	0.39	7.793e+04	0.39	7.874e+04	0.40	7.955e+04
	0.41	8.118e+04	0.42	8.199e+04	0.43	8.280e+04	0.44	8.361e+04	0.45	8.443e+04	0.46	8.524e+04
	0.46	8.605e+04	0.47	8.686e+04	0.48	8.767e+04	0.49	8.848e+04	0.51	8.930e+04	0.52	9.011e+04
	0.53	9.092e+04	0.54	9.173e+04	0.56	9.254e+04	0.58	9.336e+04	0.59	9.417e+04	0.62	9.579e+04
	0.64	9.660e+04	0.66	9.741e+04	0.69	9.823e+04	0.71	9.904e+04	0.73	9.985e+04	0.76	1.007e+05
	0.78	1.015e+05	0.80	1.023e+05	0.83	1.031e+05	0.89	1.047e+05	0.92	1.055e+05	0.94	1.063e+05
	1.01	1.080e+05	1.04	1.088e+05	1.08	1.096e+05	1.13	1.104e+05	1.18	1.112e+05	1.25	1.120e+05
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	1.25	1.120e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
45	0.0	0.0	-3.25e-03	-1623.6	-9.75e-03	-4870.7	-0.02	-1.136e+04	-0.05	-2.435e+04	-0.10	-5.033e+04
	-0.15	-7.631e+04	-0.21	-1.023e+05	-0.21	-1.031e+05	-0.21	-1.039e+05	-0.21	-1.055e+05	-0.22	-1.088e+05
	-0.23	-1.153e+05	-0.26	-1.283e+05	-0.26	-1.291e+05	-0.26	-1.299e+05	-0.27	-1.315e+05	-0.27	-1.348e+05
	-0.29	-1.413e+05	-0.29	-1.421e+05	-0.29	-1.429e+05	-0.29	-1.437e+05	-0.30	-1.445e+05	-0.30	-1.461e+05
	-0.30	-1.469e+05	-0.31	-1.477e+05	-0.31	-1.486e+05	-0.31	-1.494e+05	-0.31	-1.510e+05	-0.32	-1.542e+05
	-0.34	-1.607e+05	-0.34	-1.615e+05	-0.35	-1.624e+05	-0.35	-1.632e+05	-0.35	-1.640e+05	-0.35	-1.648e+05
	-0.36	-1.664e+05	-0.36	-1.672e+05	-0.37	-1.680e+05	-0.37	-1.689e+05	-0.37	-1.697e+05	-0.38	-1.705e+05
	-0.38	-1.713e+05	-0.39	-1.729e+05	-0.39	-1.737e+05	-0.40	-1.745e+05	-0.40	-1.753e+05	-0.41	-1.762e+05
	-0.41	-1.770e+05	-0.42	-1.778e+05	-0.42	-1.786e+05	-0.43	-1.794e+05	-0.43	-1.802e+05	-0.44	-1.810e+05
	-0.45	-1.818e+05	-0.46	-1.827e+05	-0.46	-1.835e+05	-0.47	-1.843e+05	-0.48	-1.851e+05	-0.49	-1.859e+05
	-0.50	-1.867e+05	-0.52	-1.875e+05	-0.53	-1.883e+05	-0.55	-1.891e+05	-0.56	-1.900e+05	-0.59	-1.908e+05
	-0.61	-1.916e+05	-0.64	-1.924e+05	-0.68	-1.932e+05	-0.71	-1.940e+05				
Cmb	Sp. Dc	Tag. Fb										
	-0.71	-1.940e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
46	0.0	0.0	3.25e-03	1623.6	9.75e-03	4870.7	0.02	1.136e+04	0.05	2.435e+04	0.10	5.033e+04
	0.15	7.631e+04	0.21	1.023e+05	0.26	1.283e+05	0.26	1.291e+05	0.26	1.299e+05	0.27	1.315e+05
	0.27	1.348e+05	0.29	1.413e+05	0.29	1.421e+05	0.29	1.429e+05	0.29	1.437e+05	0.30	1.445e+05
	0.30	1.461e+05	0.30	1.469e+05	0.30	1.477e+05	0.31	1.486e+05	0.31	1.502e+05	0.32	1.534e+05
	0.32	1.542e+05	0.32	1.551e+05	0.33	1.559e+05	0.33	1.567e+05	0.33	1.575e+05	0.33	1.583e+05
	0.34	1.599e+05	0.34	1.607e+05	0.34	1.615e+05	0.35	1.624e+05	0.35	1.632e+05	0.35	1.640e+05
	0.35	1.648e+05	0.36	1.656e+05	0.36	1.664e+05	0.36	1.672e+05	0.37	1.680e+05	0.37	1.689e+05
	0.38	1.705e+05	0.38	1.713e+05	0.39	1.721e+05	0.39	1.729e+05	0.39	1.737e+05	0.40	1.745e+05
	0.40	1.753e+05	0.41	1.762e+05	0.41	1.770e+05	0.42	1.778e+05	0.42	1.786e+05	0.43	1.794e+05

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	0.43	1.802e+05	0.44	1.810e+05	0.45	1.818e+05	0.46	1.827e+05	0.46	1.835e+05	0.47	1.843e+05
	0.48	1.851e+05	0.49	1.859e+05	0.51	1.867e+05	0.52	1.875e+05	0.54	1.883e+05	0.55	1.891e+05
	0.57	1.900e+05	0.59	1.908e+05	0.62	1.916e+05	0.64	1.924e+05	0.68	1.932e+05		
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	0.68	1.932e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
47	0.0	0.0	-4.23e-03	-1623.6	-0.01	-4870.7	-0.03	-1.136e+04	-0.06	-2.435e+04	-0.13	-5.033e+04
	-0.20	-7.631e+04	-0.20	-7.712e+04	-0.20	-7.793e+04	-0.21	-7.955e+04	-0.22	-8.280e+04	-0.24	-8.930e+04
	-0.27	-1.023e+05	-0.27	-1.031e+05	-0.28	-1.039e+05	-0.28	-1.055e+05	-0.29	-1.088e+05	-0.31	-1.153e+05
	-0.31	-1.161e+05	-0.32	-1.169e+05	-0.32	-1.185e+05	-0.33	-1.218e+05	-0.34	-1.226e+05	-0.34	-1.234e+05
	-0.34	-1.242e+05	-0.35	-1.258e+05	-0.35	-1.266e+05	-0.35	-1.275e+05	-0.36	-1.283e+05	-0.36	-1.291e+05
	-0.36	-1.299e+05	-0.37	-1.307e+05	-0.37	-1.323e+05	-0.38	-1.331e+05	-0.38	-1.339e+05	-0.39	-1.348e+05
	-0.39	-1.356e+05	-0.39	-1.364e+05	-0.40	-1.372e+05	-0.40	-1.380e+05	-0.41	-1.388e+05	-0.41	-1.396e+05
	-0.41	-1.404e+05	-0.42	-1.413e+05	-0.42	-1.421e+05	-0.43	-1.429e+05	-0.43	-1.437e+05	-0.44	-1.445e+05
	-0.45	-1.453e+05	-0.45	-1.461e+05	-0.46	-1.469e+05	-0.46	-1.477e+05	-0.47	-1.486e+05	-0.48	-1.502e+05
	-0.49	-1.510e+05	-0.49	-1.518e+05	-0.50	-1.526e+05	-0.52	-1.542e+05	-0.52	-1.551e+05	-0.53	-1.559e+05
	-0.54	-1.567e+05	-0.55	-1.575e+05	-0.56	-1.583e+05	-0.57	-1.591e+05	-0.58	-1.599e+05	-0.59	-1.607e+05
	-0.60	-1.615e+05	-0.61	-1.624e+05	-0.62	-1.632e+05	-0.63	-1.640e+05	-0.65	-1.648e+05	-0.66	-1.656e+05
	-0.68	-1.664e+05	-0.69	-1.672e+05	-0.71	-1.680e+05	-0.73	-1.689e+05	-0.75	-1.697e+05	-0.77	-1.705e+05
	-0.79	-1.713e+05	-0.82	-1.721e+05	-0.84	-1.729e+05	-0.88	-1.737e+05	-0.91	-1.745e+05	-0.95	-1.753e+05
	-1.00	-1.762e+05										
Cmb	Sp. Dc	Tag. Fb										
	-1.00	-1.762e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
48	0.0	0.0	4.23e-03	1623.6	0.01	4870.7	0.03	1.136e+04	0.06	2.435e+04	0.13	5.033e+04
	0.20	7.631e+04	0.27	1.023e+05	0.27	1.031e+05	0.28	1.039e+05	0.28	1.047e+05	0.28	1.063e+05
	0.29	1.096e+05	0.31	1.161e+05	0.32	1.169e+05	0.32	1.177e+05	0.33	1.193e+05	0.33	1.201e+05
	0.33	1.210e+05	0.34	1.226e+05	0.34	1.234e+05	0.34	1.242e+05	0.35	1.258e+05	0.35	1.266e+05
	0.35	1.275e+05	0.36	1.283e+05	0.36	1.291e+05	0.36	1.299e+05	0.37	1.315e+05	0.38	1.323e+05
	0.38	1.331e+05	0.39	1.348e+05	0.39	1.356e+05	0.39	1.364e+05	0.40	1.372e+05	0.40	1.380e+05
	0.41	1.388e+05	0.41	1.404e+05	0.42	1.413e+05	0.42	1.421e+05	0.43	1.429e+05	0.43	1.437e+05
	0.44	1.445e+05	0.44	1.453e+05	0.45	1.461e+05	0.45	1.469e+05	0.46	1.477e+05	0.46	1.486e+05
	0.47	1.494e+05	0.47	1.502e+05	0.48	1.510e+05	0.49	1.518e+05	0.49	1.526e+05	0.50	1.534e+05
	0.51	1.542e+05	0.51	1.551e+05	0.52	1.559e+05	0.53	1.567e+05	0.54	1.575e+05	0.55	1.583e+05
	0.56	1.591e+05	0.57	1.599e+05	0.58	1.607e+05	0.59	1.615e+05	0.61	1.624e+05	0.62	1.632e+05
	0.63	1.640e+05	0.65	1.648e+05	0.66	1.656e+05	0.68	1.664e+05	0.69	1.672e+05	0.71	1.680e+05
	0.73	1.689e+05	0.75	1.697e+05	0.77	1.705e+05	0.79	1.713e+05	0.82	1.721e+05	0.85	1.729e+05
	0.88	1.737e+05	0.92	1.745e+05	0.97	1.753e+05						
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	0.97	1.753e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
49	0.0	0.0	-5.00e-03	-1623.6	-7.50e-03	-2435.4	-0.01	-4058.9	-0.02	-7306.1	-0.04	-1.380e+04
	-0.08	-2.679e+04	-0.16	-5.277e+04	-0.25	-7.874e+04	-0.25	-7.955e+04	-0.25	-8.037e+04	-0.26	-8.199e+04
	-0.27	-8.524e+04	-0.27	-8.605e+04	-0.28	-8.686e+04	-0.28	-8.767e+04	-0.29	-8.930e+04	-0.30	-9.254e+04
	-0.30	-9.336e+04	-0.31	-9.417e+04	-0.31	-9.498e+04	-0.31	-9.579e+04	-0.32	-9.741e+04	-0.34	-1.007e+05
	-0.34	-1.015e+05	-0.34	-1.023e+05	-0.35	-1.031e+05	-0.35	-1.039e+05	-0.36	-1.047e+05	-0.36	-1.055e+05
	-0.37	-1.063e+05	-0.37	-1.072e+05	-0.38	-1.080e+05	-0.38	-1.088e+05	-0.39	-1.096e+05	-0.39	-1.104e+05
	-0.40	-1.112e+05	-0.40	-1.120e+05	-0.41	-1.128e+05	-0.42	-1.136e+05	-0.42	-1.145e+05	-0.43	-1.153e+05
	-0.44	-1.161e+05	-0.44	-1.169e+05	-0.45	-1.177e+05	-0.46	-1.185e+05	-0.48	-1.201e+05	-0.48	-1.210e+05
	-0.49	-1.218e+05	-0.50	-1.226e+05	-0.52	-1.242e+05	-0.53	-1.250e+05	-0.54	-1.258e+05	-0.55	-1.266e+05
	-0.56	-1.275e+05	-0.58	-1.291e+05	-0.59	-1.299e+05	-0.60	-1.307e+05	-0.62	-1.323e+05	-0.63	-1.331e+05
	-0.64	-1.339e+05	-0.65	-1.348e+05	-0.68	-1.364e+05	-0.69	-1.372e+05	-0.70	-1.380e+05	-0.73	-1.396e+05
	-0.78	-1.429e+05	-0.79	-1.437e+05	-0.80	-1.445e+05	-0.83	-1.461e+05	-0.85	-1.469e+05	-0.86	-1.477e+05
	-0.88	-1.486e+05	-0.90	-1.494e+05	-0.95	-1.510e+05	-0.97	-1.518e+05	-0.99	-1.526e+05	-1.02	-1.534e+05
	-1.06	-1.542e+05	-1.10	-1.551e+05	-1.14	-1.559e+05						

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
Cmb	Sp. Dc	Tag. Fb										
	-1.14	-1.559e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
50	0.0	0.0	5.01e-03	1623.6	7.51e-03	2435.4	0.01	4058.9	0.02	7306.1	0.04	1.380e+04
	0.08	2.679e+04	0.16	5.277e+04	0.25	7.874e+04	0.25	7.955e+04	0.25	8.037e+04	0.26	8.118e+04
	0.26	8.280e+04	0.27	8.361e+04	0.27	8.443e+04	0.27	8.524e+04	0.28	8.686e+04	0.28	8.767e+04
	0.29	8.930e+04	0.30	9.254e+04	0.30	9.336e+04	0.31	9.417e+04	0.31	9.579e+04	0.32	9.660e+04
	0.32	9.741e+04	0.33	9.904e+04	0.33	9.985e+04	0.34	1.007e+05	0.34	1.015e+05	0.34	1.023e+05
	0.35	1.031e+05	0.36	1.047e+05	0.36	1.055e+05	0.37	1.063e+05	0.37	1.072e+05	0.38	1.080e+05
	0.39	1.096e+05	0.39	1.104e+05	0.40	1.112e+05	0.40	1.120e+05	0.41	1.136e+05	0.42	1.145e+05
	0.42	1.153e+05	0.43	1.161e+05	0.44	1.169e+05	0.44	1.177e+05	0.45	1.193e+05	0.46	1.201e+05
	0.47	1.210e+05	0.47	1.218e+05	0.49	1.234e+05	0.50	1.242e+05	0.50	1.250e+05	0.51	1.258e+05
	0.52	1.266e+05	0.53	1.275e+05	0.54	1.283e+05	0.55	1.291e+05	0.56	1.299e+05	0.58	1.307e+05
	0.59	1.315e+05	0.60	1.323e+05	0.62	1.331e+05	0.64	1.348e+05	0.66	1.356e+05	0.67	1.364e+05
	0.70	1.380e+05	0.71	1.388e+05	0.73	1.396e+05	0.75	1.404e+05	0.76	1.413e+05	0.78	1.421e+05
	0.80	1.429e+05	0.83	1.445e+05	0.91	1.477e+05	0.94	1.486e+05	0.96	1.494e+05	1.00	1.502e+05
	1.03	1.510e+05	1.07	1.518e+05	1.11	1.526e+05	1.15	1.534e+05	1.19	1.542e+05	1.25	1.551e+05
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	1.25	1.551e+05										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
51	0.0	0.0	-6.97e-03	-1623.6	-0.01	-2435.4	-0.02	-4058.9	-0.03	-7306.1	-0.06	-1.380e+04
	-0.12	-2.679e+04	-0.23	-5.277e+04	-0.24	-5.358e+04	-0.24	-5.439e+04	-0.25	-5.601e+04	-0.25	-5.682e+04
	-0.26	-5.845e+04	-0.26	-5.926e+04	-0.27	-6.007e+04	-0.28	-6.170e+04	-0.28	-6.251e+04	-0.29	-6.332e+04
	-0.29	-6.413e+04	-0.30	-6.494e+04	-0.30	-6.575e+04	-0.31	-6.738e+04	-0.32	-6.819e+04	-0.32	-6.900e+04
	-0.33	-6.981e+04	-0.33	-7.063e+04	-0.34	-7.144e+04	-0.34	-7.225e+04	-0.35	-7.306e+04	-0.36	-7.468e+04
	-0.37	-7.550e+04	-0.37	-7.631e+04	-0.39	-7.793e+04	-0.39	-7.874e+04	-0.40	-7.955e+04	-0.41	-8.037e+04
	-0.42	-8.118e+04	-0.43	-8.199e+04	-0.43	-8.280e+04	-0.44	-8.361e+04	-0.45	-8.443e+04	-0.46	-8.524e+04
	-0.48	-8.605e+04	-0.49	-8.686e+04	-0.50	-8.767e+04	-0.51	-8.848e+04	-0.53	-8.930e+04	-0.54	-9.011e+04
	-0.55	-9.092e+04	-0.58	-9.254e+04	-0.64	-9.579e+04	-0.66	-9.660e+04	-0.67	-9.741e+04	-0.71	-9.904e+04
	-0.73	-9.985e+04	-0.74	-1.007e+05	-0.76	-1.015e+05	-0.78	-1.023e+05	-0.80	-1.031e+05	-0.82	-1.039e+05
	-0.87	-1.055e+05	-0.96	-1.088e+05	-0.99	-1.096e+05	-1.01	-1.104e+05	-1.04	-1.112e+05	-1.08	-1.120e+05
	-1.11	-1.128e+05	-1.16	-1.136e+05	-1.23	-1.145e+05						
Cmb	Sp. Dc	Tag. Fb										
	-1.23	-1.145e+05										
	0.0	0.0										

Cmb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb	Sp. Dc	Tag. Fb
	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN	cm	daN
52	0.0	0.0	6.99e-03	1623.6	0.01	2435.4	0.02	4058.9	0.03	7306.1	0.06	1.380e+04
	0.11	2.679e+04	0.23	5.277e+04	0.23	5.358e+04	0.24	5.439e+04	0.24	5.520e+04	0.25	5.682e+04
	0.26	5.764e+04	0.26	5.926e+04	0.28	6.251e+04	0.29	6.332e+04	0.30	6.494e+04	0.30	6.575e+04
	0.31	6.657e+04	0.31	6.738e+04	0.32	6.819e+04	0.33	6.981e+04	0.33	7.063e+04	0.34	7.144e+04
	0.34	7.225e+04	0.36	7.387e+04	0.38	7.712e+04	0.39	7.793e+04	0.39	7.874e+04	0.40	7.955e+04
	0.41	8.118e+04	0.42	8.199e+04	0.43	8.280e+04	0.44	8.361e+04	0.45	8.443e+04	0.46	8.524e+04
	0.46	8.605e+04	0.47	8.686e+04	0.48	8.767e+04	0.49	8.848e+04	0.51	8.930e+04	0.52	9.011e+04
	0.53	9.092e+04	0.54	9.173e+04	0.56	9.254e+04	0.58	9.336e+04	0.59	9.417e+04	0.62	9.579e+04
	0.64	9.660e+04	0.66	9.741e+04	0.69	9.823e+04	0.71	9.904e+04	0.73	9.985e+04	0.76	1.007e+05
	0.78	1.015e+05	0.80	1.023e+05	0.83	1.031e+05	0.89	1.047e+05	0.92	1.055e+05	0.94	1.063e+05
	1.01	1.080e+05	1.04	1.088e+05	1.08	1.096e+05	1.13	1.104e+05	1.18	1.112e+05	1.25	1.120e+05
Cmb	Sp. Dc	Tag. Fb										
	0.0	0.0										
	1.25	1.120e+05										

RISULTATI NODALI

LEGENDA RISULTATI NODALI

Il controllo dei risultati delle analisi condotte, per quanto concerne i nodi strutturali, è possibile in relazione alle tabelle sottoriportate.

Una prima tabella riporta infatti per ogni nodo e per ogni combinazione (o caso di carico) gli spostamenti nodali.

Una seconda tabella riporta per ogni nodo a cui sia associato un vincolo rigido e/o elastico o una fondazione speciale e per ogni combinazione (o caso di carico) i valori delle azioni esercitate dalla struttura sui vincoli (reazioni vincolari cambiate di segno).

Una terza tabella, infine riassume per ogni nodo le sei combinazioni in cui si attingono i valori minimi e massimi della reazione Fz, della reazione Mx e della reazione My.

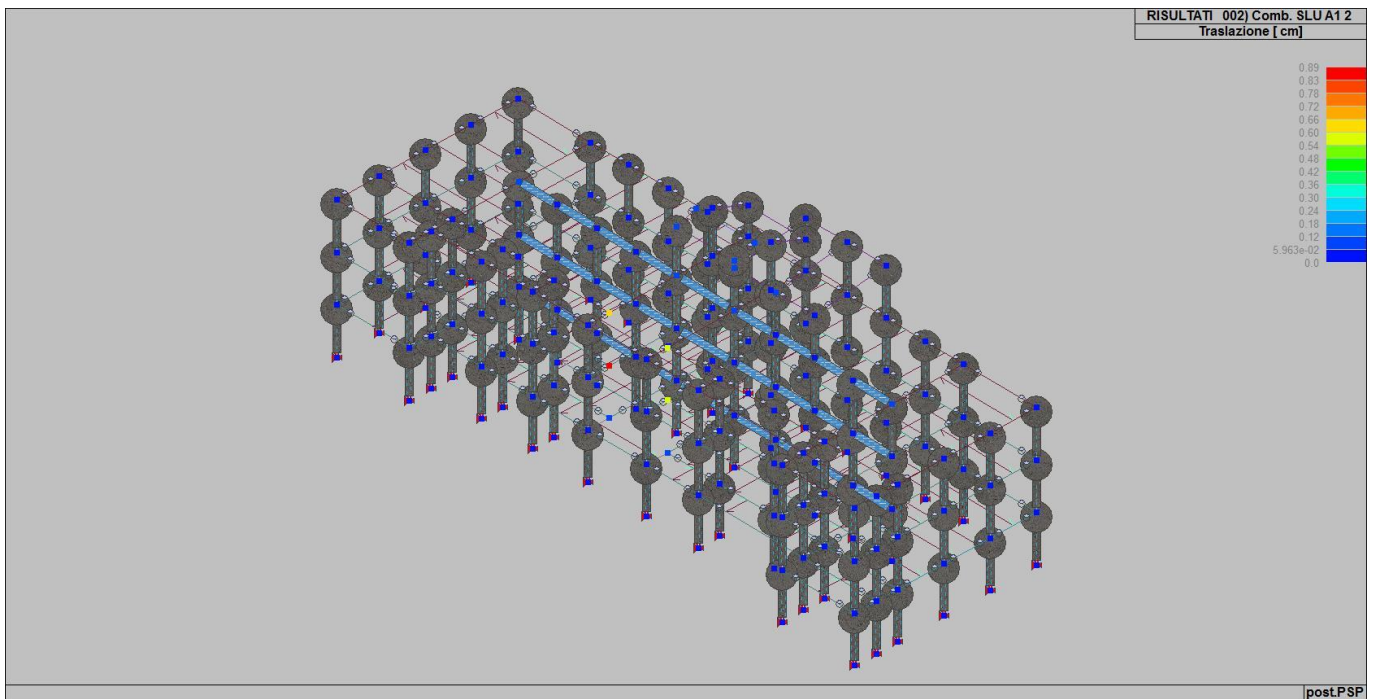
Nodo	Cmb	Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		cm	cm	cm			
1	1	0.0	0.0	0.0	0.0	0.0	0.0
1	15	0.0	0.0	0.0	0.0	0.0	0.0
1	22	0.0	0.0	0.0	0.0	0.0	0.0
1	29	0.0	0.0	0.0	0.0	0.0	0.0
1	53	0.0	0.0	0.0	0.0	0.0	0.0
1	58	0.0	0.0	0.0	0.0	0.0	0.0
1	60	0.0	0.0	0.0	0.0	0.0	0.0
2	1	2.13e-04	2.52e-03	-0.01	-1.34e-05	-3.06e-06	0.0
2	4	8.80e-05	3.54e-03	-0.02	-1.97e-05	-3.57e-06	0.0
2	17	8.52e-05	2.87e-03	-0.01	-1.58e-05	-2.54e-06	0.0
2	18	7.60e-05	2.90e-03	-0.01	-1.61e-05	-2.75e-06	0.0
2	24	6.61e-05	2.50e-03	-0.01	-1.39e-05	-2.58e-06	0.0
2	25	5.90e-05	2.53e-03	-0.01	-1.41e-05	-2.74e-06	0.0
2	32	0.16	1.63e-03	-0.01	-9.18e-06	1.74e-04	0.0
2	37	-0.37	2.29e-03	-0.01	-1.34e-05	-1.87e-04	0.0
2	42	5.13e-03	0.12	-0.01	-6.20e-04	0.0	-7.39e-06
2	54	5.46e-05	2.29e-03	-0.01	-1.28e-05	-2.61e-06	0.0
2	59	5.08e-05	2.21e-03	-0.01	-1.24e-05	-2.62e-06	0.0
2	61	5.08e-05	2.21e-03	-0.01	-1.24e-05	-2.62e-06	0.0
3	1	0.0	0.0	0.0	0.0	0.0	0.0
3	15	0.0	0.0	0.0	0.0	0.0	0.0
3	22	0.0	0.0	0.0	0.0	0.0	0.0
3	29	0.0	0.0	0.0	0.0	0.0	0.0
3	53	0.0	0.0	0.0	0.0	0.0	0.0
3	58	0.0	0.0	0.0	0.0	0.0	0.0
3	60	0.0	0.0	0.0	0.0	0.0	0.0
4	1	2.62e-04	2.50e-03	-0.01	-9.01e-06	2.10e-06	0.0
4	4	1.32e-04	3.59e-03	-0.02	-1.32e-05	3.92e-06	0.0
4	17	1.28e-04	2.91e-03	-0.01	-1.06e-05	3.38e-06	0.0
4	18	1.15e-04	2.94e-03	-0.01	-1.08e-05	3.36e-06	0.0
4	24	9.73e-05	2.54e-03	-0.01	-9.29e-06	2.67e-06	0.0
4	25	8.77e-05	2.57e-03	-0.01	-9.42e-06	2.66e-06	0.0
4	34	4.96e-03	0.10	-0.01	-5.19e-04	7.32e-06	-1.45e-05
4	37	-0.37	2.22e-03	-0.01	-9.49e-06	-1.56e-04	0.0
4	42	6.80e-03	0.11	-0.01	-5.75e-04	8.38e-06	-1.96e-05
4	54	7.91e-05	2.31e-03	-0.01	-8.49e-06	2.25e-06	0.0
4	59	7.31e-05	2.24e-03	-0.01	-8.22e-06	2.11e-06	0.0
4	61	7.31e-05	2.24e-03	-0.01	-8.22e-06	2.11e-06	0.0
5	1	0.0	0.0	0.0	0.0	0.0	0.0
5	15	0.0	0.0	0.0	0.0	0.0	0.0
5	22	0.0	0.0	0.0	0.0	0.0	0.0
5	29	0.0	0.0	0.0	0.0	0.0	0.0
5	53	0.0	0.0	0.0	0.0	0.0	0.0
5	58	0.0	0.0	0.0	0.0	0.0	0.0
5	60	0.0	0.0	0.0	0.0	0.0	0.0
6	1	3.20e-04	2.57e-03	-0.02	8.91e-05	5.82e-06	0.0
6	4	1.98e-04	3.74e-03	-0.02	1.39e-04	-5.30e-06	0.0
6	17	1.87e-04	3.02e-03	-0.02	1.14e-04	-5.75e-06	0.0
6	18	1.72e-04	3.07e-03	-0.02	1.14e-04	-5.82e-06	0.0
6	24	1.44e-04	2.64e-03	-0.02	9.85e-05	-2.20e-06	0.0
6	25	1.32e-04	2.67e-03	-0.02	9.86e-05	-2.25e-06	0.0
6	30	0.26	2.20e-03	-0.02	8.67e-05	2.22e-04	0.0
6	37	-0.37	2.35e-03	-0.01	8.21e-05	-2.05e-04	0.0
6	42	7.92e-03	0.10	-0.02	-2.02e-04	7.81e-06	-8.45e-06
6	54	1.18e-04	2.41e-03	-0.01	8.90e-05	0.0	0.0
6	59	1.09e-04	2.33e-03	-0.01	8.59e-05	0.0	0.0

6	61	1.09e-04	2.33e-03	-0.01	8.59e-05	0.0	0.0
7	1	0.0	0.0	0.0	0.0	0.0	0.0
7	15	0.0	0.0	0.0	0.0	0.0	0.0
7	22	0.0	0.0	0.0	0.0	0.0	0.0
7	29	0.0	0.0	0.0	0.0	0.0	0.0
7	53	0.0	0.0	0.0	0.0	0.0	0.0
7	58	0.0	0.0	0.0	0.0	0.0	0.0
7	60	0.0	0.0	0.0	0.0	0.0	0.0
8	3	4.72e-04	3.60e-03	-0.03	-2.45e-05	-6.03e-05	0.0
8	4	4.68e-04	3.65e-03	-0.03	-2.47e-05	-6.02e-05	0.0
8	17	3.92e-04	2.95e-03	-0.03	-2.01e-05	-5.02e-05	0.0
8	18	3.88e-04	2.99e-03	-0.03	-2.03e-05	-5.02e-05	0.0
8	24	3.33e-04	2.58e-03	-0.02	-1.75e-05	-4.23e-05	0.0
8	25	3.30e-04	2.62e-03	-0.03	-1.77e-05	-4.23e-05	0.0
8	37	-0.37	2.60e-03	-0.02	-1.53e-05	-4.60e-04	1.02e-06
8	40	0.20	3.15e-04	-0.03	-1.04e-05	3.74e-04	-2.04e-06
8	42	1.22e-03	0.10	-0.02	-2.45e-04	-3.48e-05	-9.69e-05
8	54	2.98e-04	2.36e-03	-0.02	-1.60e-05	-3.76e-05	0.0
8	59	2.86e-04	2.29e-03	-0.02	-1.55e-05	-3.60e-05	0.0
8	61	2.86e-04	2.29e-03	-0.02	-1.55e-05	-3.60e-05	0.0
9	1	0.0	0.0	0.0	0.0	0.0	0.0
9	15	0.0	0.0	0.0	0.0	0.0	0.0
9	22	0.0	0.0	0.0	0.0	0.0	0.0
9	29	0.0	0.0	0.0	0.0	0.0	0.0
9	53	0.0	0.0	0.0	0.0	0.0	0.0
9	58	0.0	0.0	0.0	0.0	0.0	0.0
9	60	0.0	0.0	0.0	0.0	0.0	0.0
10	1	1.25e-04	2.63e-03	-9.31e-03	-5.74e-06	2.56e-06	0.0
10	4	6.89e-05	3.44e-03	-9.81e-03	-9.32e-06	3.37e-06	0.0
10	11	5.94e-05	3.16e-03	-0.01	-7.91e-06	2.81e-06	0.0
10	17	5.87e-05	2.79e-03	-7.38e-03	-7.99e-06	2.90e-06	0.0
10	18	5.65e-05	2.82e-03	-7.60e-03	-7.77e-06	2.89e-06	0.0
10	21	4.83e-05	2.58e-03	-7.77e-03	-6.55e-06	2.41e-06	0.0
10	24	5.10e-05	2.43e-03	-7.32e-03	-6.70e-06	2.28e-06	0.0
10	25	4.93e-05	2.46e-03	-7.49e-03	-6.53e-06	2.28e-06	0.0
10	28	4.30e-05	2.27e-03	-7.62e-03	-5.59e-06	1.91e-06	0.0
10	37	-0.36	2.27e-03	-7.42e-03	-5.98e-06	-8.26e-04	0.0
10	42	1.69e-03	0.12	-4.85e-03	-1.27e-04	6.19e-06	-4.81e-06
10	43	-7.76e-04	-0.08	-8.31e-03	1.05e-04	0.0	3.13e-06
10	54	4.64e-05	2.22e-03	-7.28e-03	-5.92e-06	1.91e-06	0.0
10	57	4.42e-05	2.16e-03	-7.34e-03	-5.60e-06	1.79e-06	0.0
10	59	4.48e-05	2.15e-03	-7.27e-03	-5.66e-06	1.79e-06	0.0
10	61	4.48e-05	2.15e-03	-7.27e-03	-5.66e-06	1.79e-06	0.0
11	1	0.0	0.0	0.0	0.0	0.0	0.0
11	15	0.0	0.0	0.0	0.0	0.0	0.0
11	22	0.0	0.0	0.0	0.0	0.0	0.0
11	29	0.0	0.0	0.0	0.0	0.0	0.0
11	53	0.0	0.0	0.0	0.0	0.0	0.0
11	58	0.0	0.0	0.0	0.0	0.0	0.0
11	60	0.0	0.0	0.0	0.0	0.0	0.0
12	1	4.84e-04	2.50e-03	-0.01	3.61e-05	-3.18e-05	0.0
12	4	3.47e-04	4.00e-03	-0.01	5.25e-05	-3.27e-05	0.0
12	17	3.03e-04	3.19e-03	-9.65e-03	4.32e-05	-2.50e-05	0.0
12	18	2.87e-04	3.27e-03	-9.78e-03	4.32e-05	-2.51e-05	0.0
12	24	2.58e-04	2.82e-03	-9.03e-03	3.74e-05	-2.51e-05	0.0
12	25	2.46e-04	2.88e-03	-9.14e-03	3.74e-05	-2.51e-05	0.0
12	37	-0.37	3.79e-03	-6.56e-03	3.30e-05	-5.67e-04	6.37e-06
12	42	8.77e-03	0.09	-0.01	-1.64e-04	-1.51e-05	-1.41e-05
12	54	2.31e-04	2.60e-03	-8.67e-03	3.39e-05	-2.51e-05	0.0
12	59	2.22e-04	2.52e-03	-8.54e-03	3.27e-05	-2.51e-05	0.0
12	61	2.22e-04	2.52e-03	-8.54e-03	3.27e-05	-2.51e-05	0.0
13	1	0.0	0.0	0.0	0.0	0.0	0.0
13	15	0.0	0.0	0.0	0.0	0.0	0.0
13	22	0.0	0.0	0.0	0.0	0.0	0.0
13	29	0.0	0.0	0.0	0.0	0.0	0.0
13	53	0.0	0.0	0.0	0.0	0.0	0.0
13	58	0.0	0.0	0.0	0.0	0.0	0.0
13	60	0.0	0.0	0.0	0.0	0.0	0.0
14	1	-5.64e-04	2.14e-03	-0.01	3.61e-05	3.25e-05	0.0
14	4	-4.89e-04	3.58e-03	-0.01	5.37e-05	3.28e-05	0.0
14	17	-4.07e-04	2.86e-03	-9.59e-03	4.44e-05	2.51e-05	0.0
14	18	-3.98e-04	2.92e-03	-9.73e-03	4.44e-05	2.52e-05	0.0
14	24	-3.59e-04	2.53e-03	-8.97e-03	3.80e-05	2.52e-05	0.0
14	25	-3.53e-04	2.58e-03	-9.07e-03	3.80e-05	2.53e-05	0.0
14	37	-0.37	9.89e-04	-0.01	3.50e-05	-4.63e-04	4.72e-06
14	42	-6.25e-03	0.09	-0.01	-1.98e-04	2.34e-05	7.63e-06

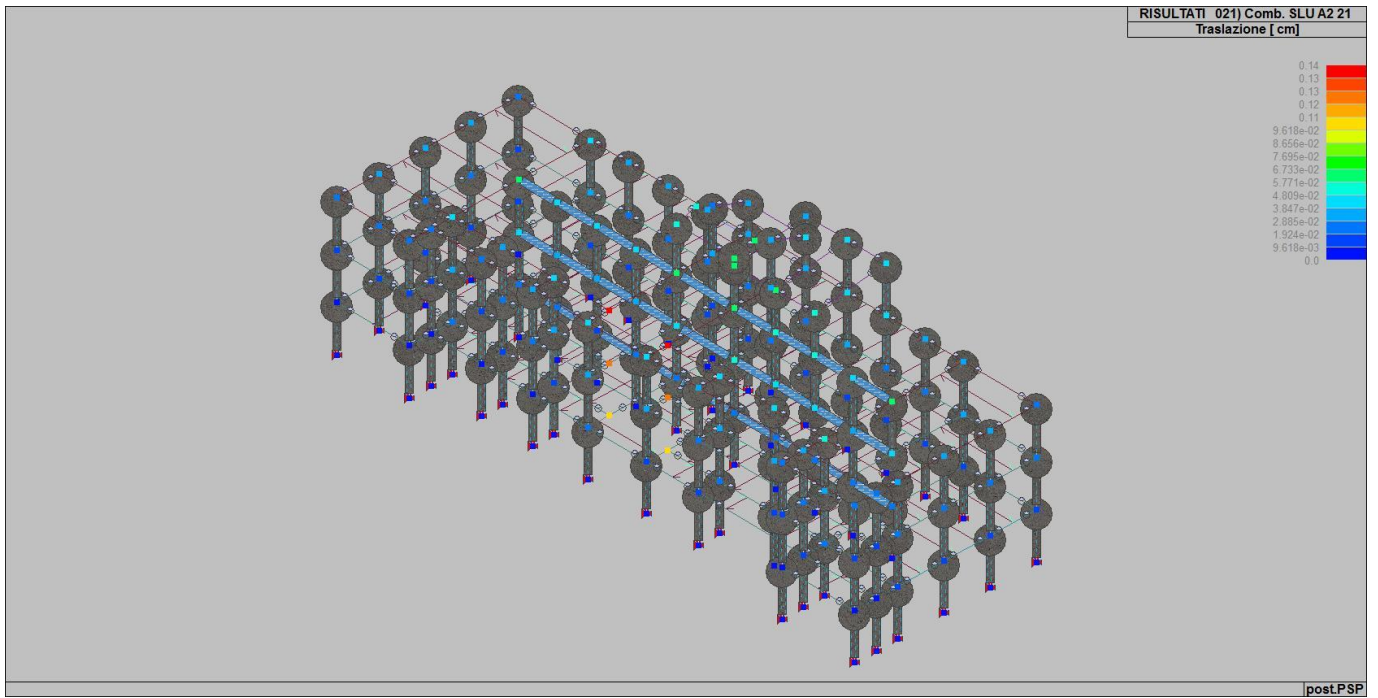
14	54	-3.31e-04	2.34e-03	-8.60e-03	3.42e-05	2.53e-05	0.0
14	59	-3.22e-04	2.28e-03	-8.48e-03	3.29e-05	2.53e-05	0.0
14	61	-3.22e-04	2.28e-03	-8.48e-03	3.29e-05	2.53e-05	0.0
15	1	0.0	0.0	0.0	0.0	0.0	0.0
15	15	0.0	0.0	0.0	0.0	0.0	0.0
15	22	0.0	0.0	0.0	0.0	0.0	0.0
15	29	0.0	0.0	0.0	0.0	0.0	0.0
15	53	0.0	0.0	0.0	0.0	0.0	0.0
15	58	0.0	0.0	0.0	0.0	0.0	0.0
15	60	0.0	0.0	0.0	0.0	0.0	0.0
16	1	-4.04e-04	2.28e-03	-0.02	9.00e-05	-6.72e-06	0.0
16	4	-3.42e-04	3.42e-03	-0.02	1.40e-04	3.76e-06	0.0
16	17	-2.92e-04	2.76e-03	-0.02	1.15e-04	4.52e-06	0.0
16	18	-2.84e-04	2.80e-03	-0.02	1.15e-04	4.56e-06	0.0
16	24	-2.47e-04	2.42e-03	-0.02	9.90e-05	1.10e-06	0.0
16	25	-2.40e-04	2.45e-03	-0.02	9.92e-05	1.13e-06	0.0
16	29	-0.25	2.11e-03	-0.02	8.69e-05	-2.25e-04	0.0
16	37	-0.37	2.20e-03	-0.02	8.81e-05	-2.17e-04	0.0
16	42	-5.73e-03	0.10	-0.02	-2.01e-04	-3.63e-06	1.28e-05
16	54	-2.19e-04	2.21e-03	-0.01	8.96e-05	0.0	0.0
16	59	-2.10e-04	2.14e-03	-0.01	8.64e-05	-1.65e-06	0.0
16	61	-2.10e-04	2.14e-03	-0.01	8.64e-05	-1.65e-06	0.0
17	1	0.0	0.0	0.0	0.0	0.0	0.0
17	15	0.0	0.0	0.0	0.0	0.0	0.0
17	22	0.0	0.0	0.0	0.0	0.0	0.0
17	29	0.0	0.0	0.0	0.0	0.0	0.0
17	53	0.0	0.0	0.0	0.0	0.0	0.0
17	58	0.0	0.0	0.0	0.0	0.0	0.0
17	60	0.0	0.0	0.0	0.0	0.0	0.0
18	4	-4.63e-04	3.35e-03	-0.03	-2.21e-05	5.26e-05	0.0
18	18	-3.77e-04	2.74e-03	-0.03	-1.81e-05	4.39e-05	0.0
18	25	-3.34e-04	2.40e-03	-0.02	-1.58e-05	3.68e-05	0.0
18	37	-0.37	1.73e-03	-0.03	-1.24e-05	-3.60e-04	0.0
18	39	-0.21	0.0	-0.03	-8.27e-06	-3.98e-04	1.67e-06
18	42	-7.84e-04	0.10	-0.02	-2.36e-04	3.04e-05	8.81e-06
18	54	-3.06e-04	2.17e-03	-0.02	-1.43e-05	3.26e-05	0.0
18	59	-2.98e-04	2.11e-03	-0.02	-1.39e-05	3.12e-05	0.0
18	61	-2.98e-04	2.11e-03	-0.02	-1.39e-05	3.12e-05	0.0
19	1	0.0	0.0	0.0	0.0	0.0	0.0
19	15	0.0	0.0	0.0	0.0	0.0	0.0
19	22	0.0	0.0	0.0	0.0	0.0	0.0
19	29	0.0	0.0	0.0	0.0	0.0	0.0
19	53	0.0	0.0	0.0	0.0	0.0	0.0
19	58	0.0	0.0	0.0	0.0	0.0	0.0
19	60	0.0	0.0	0.0	0.0	0.0	0.0
20	4	-4.29e-04	3.57e-03	-0.02	-1.19e-05	0.0	0.0
20	18	-3.49e-04	2.91e-03	-0.01	-9.64e-06	0.0	0.0
20	25	-3.10e-04	2.58e-03	-0.01	-8.59e-06	0.0	0.0
20	37	-0.36	1.00e-03	-0.01	-6.78e-06	-8.73e-04	4.47e-06
20	41	9.13e-04	-0.09	-0.01	1.35e-04	1.36e-06	-4.85e-06
20	42	-2.53e-03	0.09	-0.01	-1.49e-04	-1.91e-06	5.87e-06
20	54	-2.87e-04	2.33e-03	-0.01	-7.89e-06	0.0	0.0
20	59	-2.79e-04	2.27e-03	-0.01	-7.68e-06	0.0	0.0
20	61	-2.79e-04	2.27e-03	-0.01	-7.68e-06	0.0	0.0
21	1	0.0	0.0	0.0	0.0	0.0	0.0
21	15	0.0	0.0	0.0	0.0	0.0	0.0
21	22	0.0	0.0	0.0	0.0	0.0	0.0
21	29	0.0	0.0	0.0	0.0	0.0	0.0
21	53	0.0	0.0	0.0	0.0	0.0	0.0
21	58	0.0	0.0	0.0	0.0	0.0	0.0
21	60	0.0	0.0	0.0	0.0	0.0	0.0
22	1	-3.58e-04	2.23e-03	-0.01	-7.18e-06	-3.99e-06	0.0
22	4	-2.86e-04	3.28e-03	-0.02	-1.14e-05	-5.83e-06	0.0
22	17	-2.42e-04	2.66e-03	-0.01	-9.22e-06	-4.71e-06	0.0
22	18	-2.36e-04	2.70e-03	-0.01	-9.34e-06	-4.79e-06	0.0
22	24	-2.07e-04	2.32e-03	-0.01	-8.05e-06	-4.10e-06	0.0
22	25	-2.03e-04	2.35e-03	-0.01	-8.14e-06	-4.17e-06	0.0
22	30	0.26	1.82e-03	-0.01	-6.24e-06	1.52e-04	0.0
22	37	-0.37	2.09e-03	-9.76e-03	-5.82e-06	-1.66e-04	0.0
22	42	-4.85e-03	0.11	-0.01	-5.62e-04	-5.07e-06	1.36e-05
22	54	-1.87e-04	2.12e-03	-0.01	-7.34e-06	-3.74e-06	0.0
22	59	-1.80e-04	2.05e-03	-0.01	-7.11e-06	-3.62e-06	0.0
22	61	-1.80e-04	2.05e-03	-0.01	-7.11e-06	-3.62e-06	0.0
23	1	0.0	0.0	0.0	0.0	0.0	0.0
23	15	0.0	0.0	0.0	0.0	0.0	0.0
23	22	0.0	0.0	0.0	0.0	0.0	0.0

23	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	53	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	58	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	1	-3.26e-04	2.31e-03	-0.01	-1.16e-05	-1.15e-06	0.0	0.0
24	4	-2.58e-04	3.24e-03	-0.01	-1.67e-05	-1.32e-06	0.0	0.0
24	17	-2.12e-04	2.64e-03	-0.01	-1.36e-05	-1.09e-06	0.0	0.0
24	18	-2.10e-04	2.66e-03	-0.01	-1.38e-05	-1.09e-06	0.0	0.0
24	24	-1.88e-04	2.29e-03	-0.01	-1.19e-05	0.0	0.0	0.0
24	25	-1.87e-04	2.31e-03	-0.01	-1.20e-05	0.0	0.0	0.0
24	37	-0.37	2.07e-03	-9.84e-03	-1.04e-05	-1.66e-04	0.0	0.0
24	41	2.04e-03	-0.11	-0.01	5.74e-04	0.0	-3.45e-06	0.0
24	42	-3.48e-03	0.11	-9.92e-03	-5.95e-04	0.0	5.91e-06	0.0
24	54	-1.74e-04	2.09e-03	-0.01	-1.08e-05	0.0	0.0	0.0
24	59	-1.70e-04	2.02e-03	-9.98e-03	-1.04e-05	0.0	0.0	0.0
24	61	-1.70e-04	2.02e-03	-9.98e-03	-1.04e-05	0.0	0.0	0.0
25	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	53	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	58	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	4	-3.00e-04	3.21e-03	-0.02	-1.65e-05	-1.45e-06	0.0	0.0
26	18	-2.40e-04	2.64e-03	-0.02	-1.35e-05	-1.19e-06	0.0	0.0
26	25	-2.21e-04	2.29e-03	-0.02	-1.18e-05	-1.04e-06	0.0	0.0
26	37	-0.37	2.07e-03	-0.02	-1.04e-05	-1.98e-04	0.0	0.0
26	42	-1.03e-03	0.11	-0.02	-6.10e-04	-1.37e-06	5.90e-06	0.0
26	44	-7.59e-04	0.08	-0.02	-5.00e-04	-1.52e-06	4.08e-06	0.0
26	54	-2.07e-04	2.07e-03	-0.02	-1.06e-05	0.0	0.0	0.0
26	59	-2.04e-04	2.00e-03	-0.02	-1.02e-05	0.0	0.0	0.0
26	61	-2.04e-04	2.00e-03	-0.02	-1.02e-05	0.0	0.0	0.0
27	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	53	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	58	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	3	3.80e-04	3.91e-03	-0.02	-9.97e-06	-2.69e-06	0.0	0.0
28	4	3.74e-04	3.99e-03	-0.02	-1.00e-05	-2.68e-06	0.0	0.0
28	17	3.15e-04	3.19e-03	-0.01	-8.07e-06	-2.10e-06	0.0	0.0
28	18	3.10e-04	3.26e-03	-0.01	-8.13e-06	-2.09e-06	0.0	0.0
28	24	2.68e-04	2.82e-03	-0.01	-7.25e-06	-2.05e-06	0.0	0.0
28	25	2.64e-04	2.87e-03	-0.01	-7.29e-06	-2.04e-06	0.0	0.0
28	37	-0.36	3.84e-03	-0.01	-5.71e-06	-8.63e-04	4.77e-06	0.0
28	41	-1.93e-03	-0.09	-0.01	1.04e-04	-6.03e-06	9.25e-06	0.0
28	42	3.67e-03	0.09	-0.01	-1.16e-04	4.28e-06	-1.09e-05	0.0
28	54	2.40e-04	2.59e-03	-0.01	-6.75e-06	-2.02e-06	0.0	0.0
28	59	2.31e-04	2.52e-03	-0.01	-6.59e-06	-2.01e-06	0.0	0.0
28	61	2.31e-04	2.52e-03	-0.01	-6.59e-06	-2.01e-06	0.0	0.0
29	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	53	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	58	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	4	6.40e-04	3.98e-03	-0.02	-1.23e-06	-5.41e-06	0.0	0.0
30	18	5.24e-04	3.25e-03	-0.01	-1.02e-06	-4.41e-06	0.0	0.0
30	25	4.59e-04	2.87e-03	-0.01	0.0	-3.89e-06	0.0	0.0
30	34	-2.18e-05	0.08	-0.01	-1.11e-04	-4.41e-06	-6.01e-06	0.0
30	37	-0.36	3.80e-03	-0.01	-4.17e-06	-8.64e-04	-2.36e-06	0.0
30	42	-1.67e-04	0.09	-0.01	-1.18e-04	-4.74e-06	-8.19e-06	0.0
30	54	4.18e-04	2.59e-03	-0.01	0.0	-3.63e-06	0.0	0.0
30	59	4.05e-04	2.52e-03	-0.01	0.0	-3.52e-06	0.0	0.0
30	61	4.05e-04	2.52e-03	-0.01	0.0	-3.52e-06	0.0	0.0
31	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	53	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	58	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	2	-2.43e-04	2.45e-03	-0.02	-8.16e-06	1.27e-05	0.0	0.0
32	4	-2.41e-04	3.23e-03	-0.03	-1.06e-05	1.66e-05	0.0	0.0

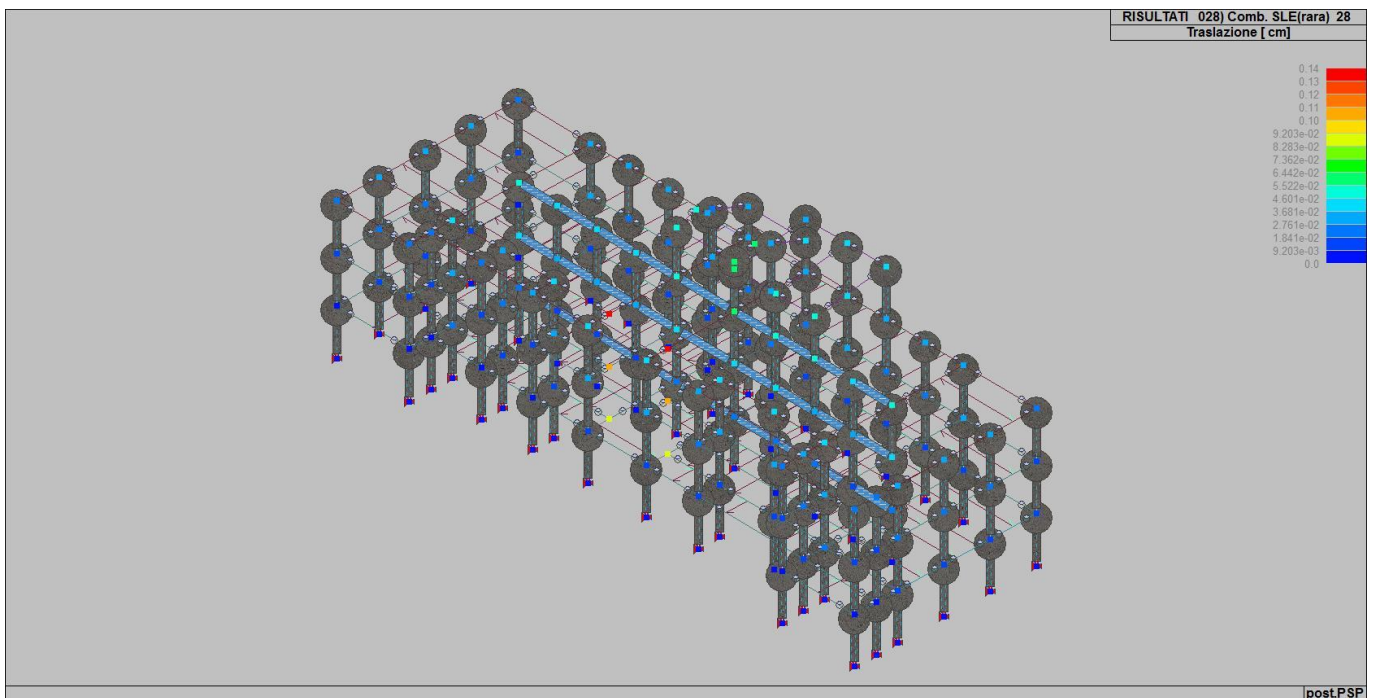
32	18	-1.90e-04	2.66e-03	-0.02	-8.78e-06	1.36e-05	0.0
32	25	-1.81e-04	2.31e-03	-0.02	-7.49e-06	1.20e-05	0.0
32	37	-0.37	2.40e-03	-0.02	-8.04e-06	-1.64e-04	1.00e-06
32	42	-1.43e-03	0.11	-0.02	-5.93e-04	8.60e-06	0.0
32	43	4.67e-04	-0.08	-0.02	4.87e-04	1.55e-05	1.41e-06
32	54	-1.72e-04	2.08e-03	-0.02	-6.72e-06	1.09e-05	0.0
32	57	-1.73e-04	2.02e-03	-0.02	-6.46e-06	1.06e-05	0.0
32	59	-1.71e-04	2.01e-03	-0.02	-6.46e-06	1.06e-05	0.0
32	61	-1.71e-04	2.01e-03	-0.02	-6.46e-06	1.06e-05	0.0
33	1	0.0	0.0	0.0	0.0	0.0	0.0
33	15	0.0	0.0	0.0	0.0	0.0	0.0
33	22	0.0	0.0	0.0	0.0	0.0	0.0
33	29	0.0	0.0	0.0	0.0	0.0	0.0
33	53	0.0	0.0	0.0	0.0	0.0	0.0
...							
212	61	-3.03e-04	8.82e-03	-0.03	-2.28e-05	1.21e-05	-1.22e-06
Nodo		Traslazione X	Traslazione Y	Traslazione Z	Rotazione X	Rotazione Y	Rotazione Z
		-1.01	-1.13	-0.89	-3.64e-03	-9.50e-04	-1.93e-04
		0.97	1.31	1.53e-03	2.01e-03	1.28e-03	2.28e-04



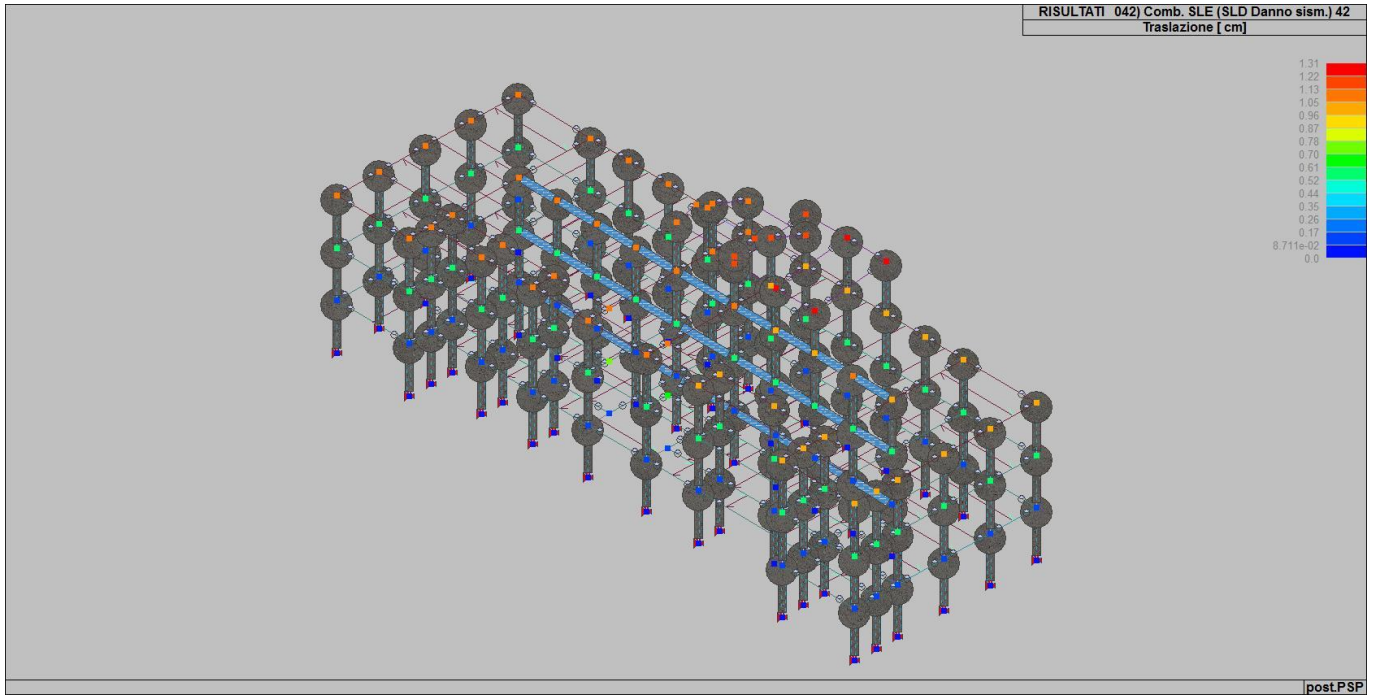
41_RIS_SPOSTAMENTI_002_Comb. SLU A1 2



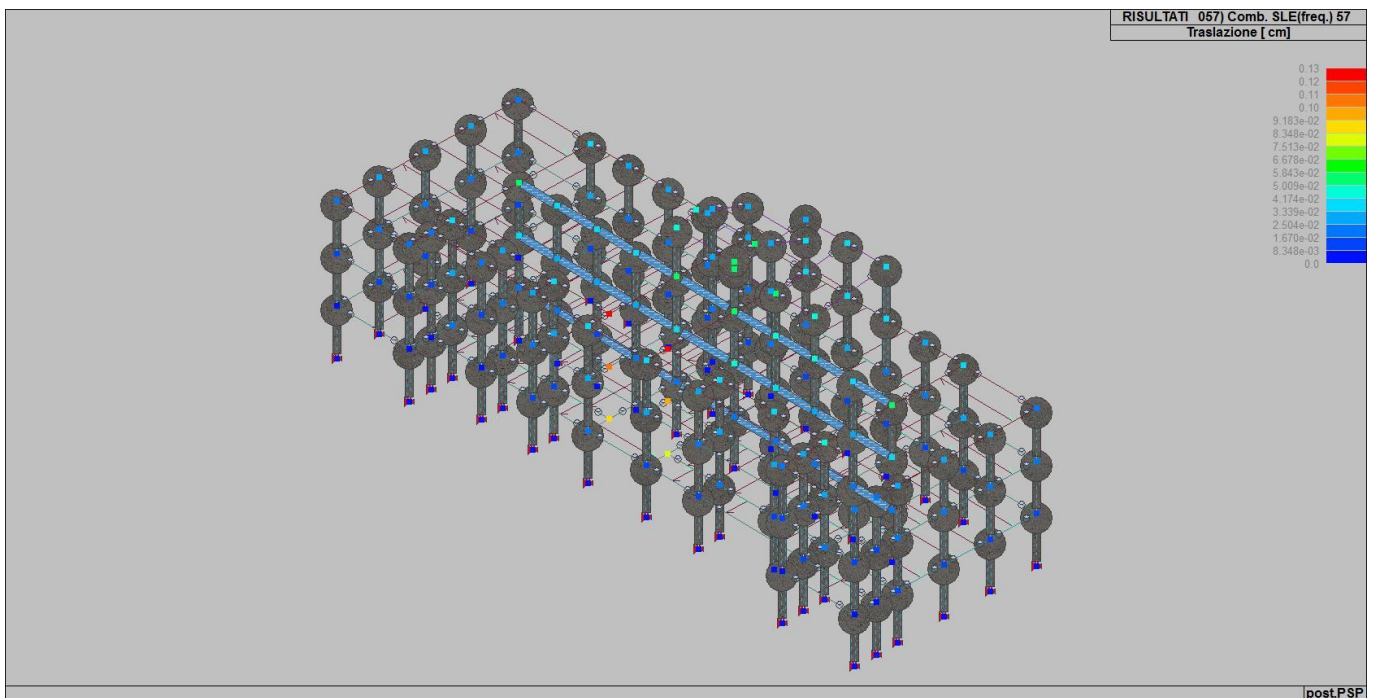
41_RIS_SPOSTAMENTI_021_Comb. SLU A2 21



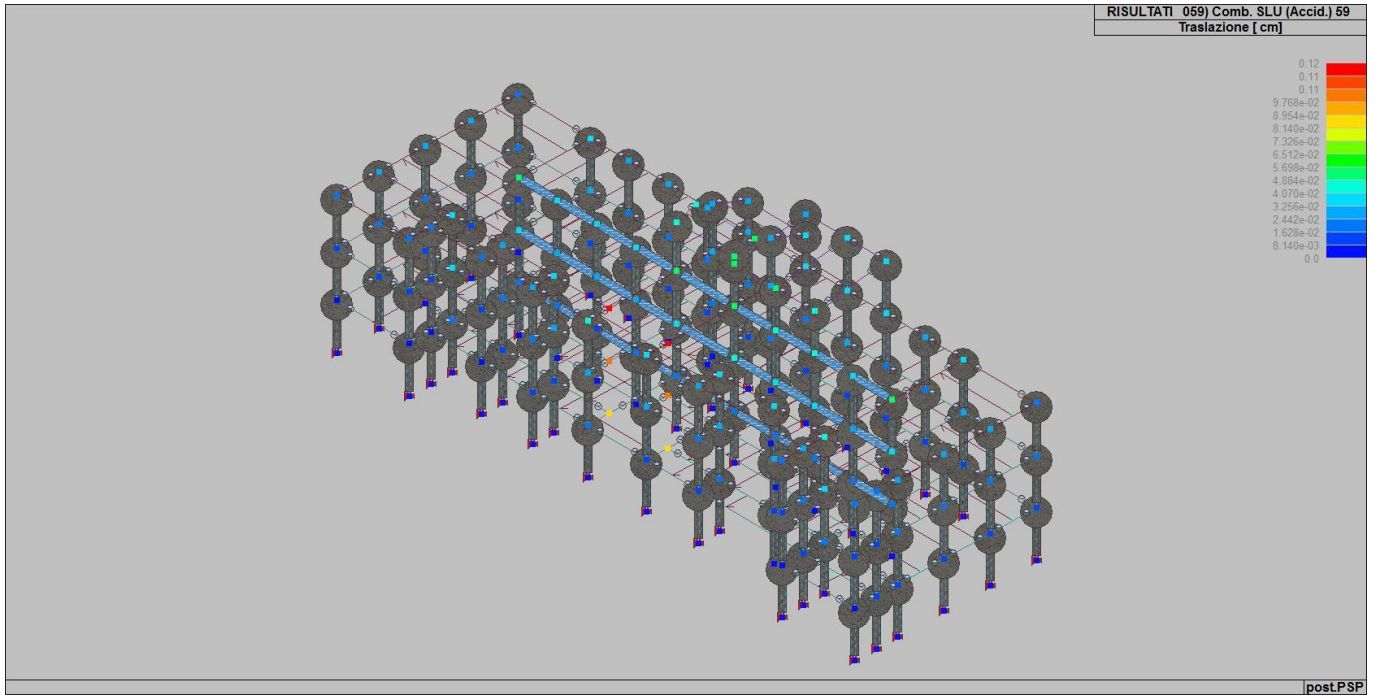
41_RIS_SPOSTAMENTI_028_Comb. SLE(rara) 28



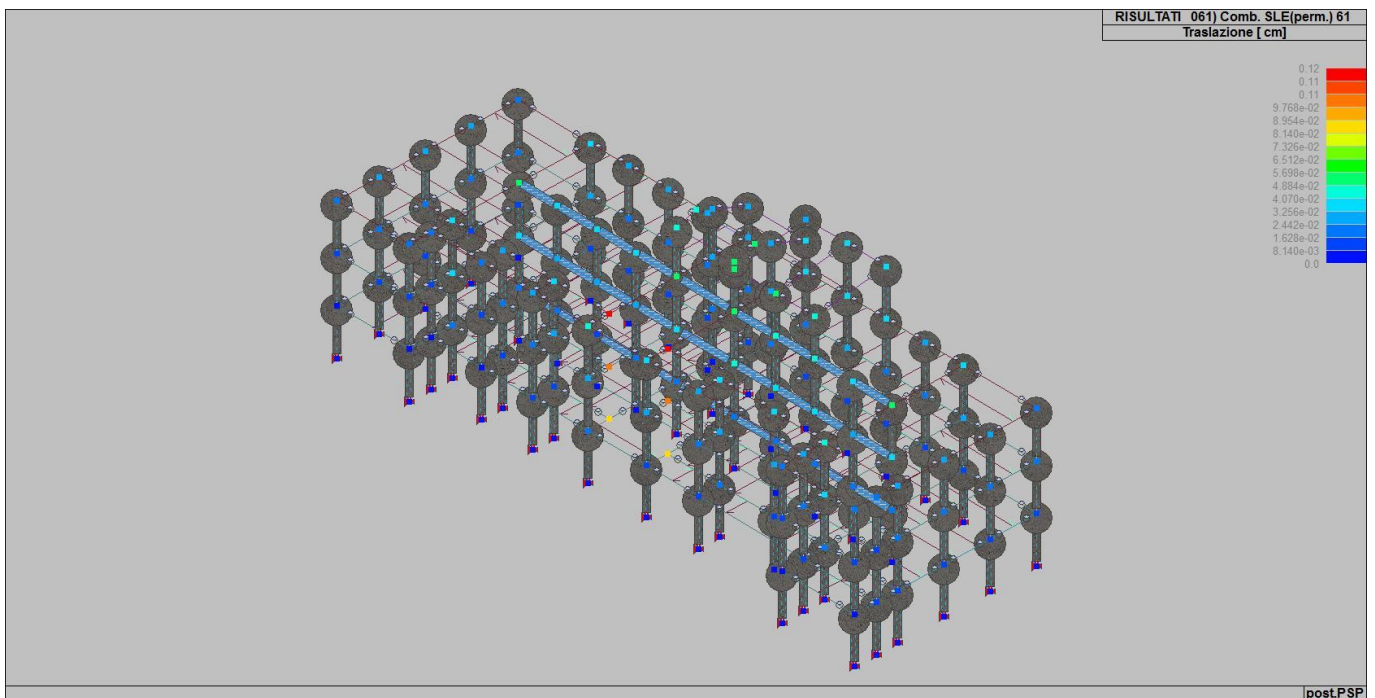
41_RIS_SPOSTAMENTI_042_Comb. SLE (SLD Danno sism.) 42



41_RIS_SPOSTAMENTI_057_Comb. SLE(freq.) 57



41_RIS_SPOSTAMENTI_059_Comb. SLU (Accid.) 59



41_RIS_SPOSTAMENTI_061_Comb. SLE(perm.) 61

Nodo	Cmb	Azione X daN	Azione Y daN	Azione Z daN	Azione RX daN cm	Azione RY daN cm	Azione RZ daN cm
1	2	37.73	8.25	-3.993e+04	-1.224e+04	4987.21	-65.54
1	4	34.97	-0.15	-4.781e+04	-1.544e+04	4346.75	20.70
1	5	23.60	-5.46	-2.578e+04	-5004.16	2759.97	50.93
1	15	24.56	-2.68	-3.040e+04	-8081.70	2972.68	31.16
1	18	27.32	0.56	-3.817e+04	-1.275e+04	3417.59	11.49
1	21	28.21	-1.60	-3.694e+04	-1.142e+04	3447.72	30.38
1	22	24.34	-3.32	-2.933e+04	-7371.50	2923.59	35.72
1	25	26.46	-0.83	-3.531e+04	-1.096e+04	3265.83	20.59
1	28	27.14	-2.49	-3.437e+04	-9937.33	3289.01	35.12
1	32	4006.40	-1.78	-3.383e+04	-6900.47	7.261e+05	-394.18
1	37	-4007.93	-7.87	-3.154e+04	-9088.32	-7.263e+05	-203.44

1	39	-4006.79	16.16	-3.116e+04	-1.780e+04	-7.261e+05	577.30
1	42	237.93	327.09	-3.200e+04	-5.463e+05	4.332e+04	-3353.40
1	53	24.34	-3.32	-2.933e+04	-7371.50	2923.59	35.72
1	54	25.11	-1.09	-3.306e+04	-9857.20	3095.39	19.75
1	57	25.41	-1.69	-3.279e+04	-9518.12	3109.57	25.10
1	58	24.34	-3.32	-2.933e+04	-7371.50	2923.59	35.72
1	59	25.00	-1.41	-3.253e+04	-9502.10	3070.85	22.03
1	60	24.34	-3.32	-2.933e+04	-7371.50	2923.59	35.72
1	61	25.00	-1.41	-3.253e+04	-9502.10	3070.85	22.03
3	4	-27.45	82.17	-4.313e+04	-2.514e+04	-2801.55	-35.52
3	5	-2.99	29.38	-2.186e+04	-9078.21	-358.79	23.34
3	15	-11.00	44.38	-2.670e+04	-1.361e+04	-1134.67	-3.29
3	18	-23.41	67.49	-3.461e+04	-2.064e+04	-2382.56	-33.74
3	22	-9.15	40.92	-2.559e+04	-1.256e+04	-955.62	2.86
3	25	-18.70	58.70	-3.167e+04	-1.797e+04	-1915.54	-20.57
3	34	174.48	409.89	-2.897e+04	-4.817e+05	3.540e+04	-6577.64
3	37	-3947.58	34.76	-2.866e+04	-1.372e+04	-7.156e+05	-19.94
3	39	-3946.45	74.53	-2.787e+04	-2.597e+04	-7.154e+05	468.13
3	42	253.32	516.31	-2.895e+04	-5.452e+05	5.017e+04	-8886.30
3	53	-9.15	40.92	-2.559e+04	-1.256e+04	-955.62	2.86
3	54	-15.62	53.03	-2.950e+04	-1.622e+04	-1582.29	-18.65
3	58	-9.15	40.92	-2.559e+04	-1.256e+04	-955.62	2.86
3	59	-14.70	51.30	-2.894e+04	-1.570e+04	-1492.77	-15.58
3	60	-9.15	40.92	-2.559e+04	-1.256e+04	-955.62	2.86
3	61	-14.70	51.30	-2.894e+04	-1.570e+04	-1492.77	-15.58
5	4	55.20	1934.73	-5.696e+04	-2.392e+05	7041.60	84.38
5	5	-83.00	651.85	-2.939e+04	-8.105e+04	-9682.28	106.16
5	12	-83.47	664.36	-3.113e+04	-8.292e+04	-9843.52	145.07
5	15	-26.37	1026.62	-3.559e+04	-1.271e+05	-2849.76	80.83
5	17	58.56	1588.78	-4.489e+04	-1.962e+05	7399.01	42.82
5	18	58.36	1594.20	-4.564e+04	-1.970e+05	7329.14	59.68
5	22	-39.44	940.13	-3.416e+04	-1.165e+05	-4426.50	86.67
5	25	25.74	1376.73	-4.189e+04	-1.703e+05	3403.43	70.41
5	26	-39.75	948.47	-3.532e+04	-1.177e+05	-4533.99	112.61
5	30	4272.95	1199.90	-4.281e+04	-1.479e+05	7.736e+05	-275.52
5	37	-4273.82	1154.14	-3.482e+04	-1.432e+05	-7.737e+05	185.86
5	41	-229.63	-988.04	-3.240e+04	5.510e+05	-4.470e+04	2509.96
5	42	312.11	4480.66	-4.264e+04	-9.655e+05	6.044e+04	-3832.10
5	53	-39.44	940.13	-3.416e+04	-1.165e+05	-4426.50	86.67
5	54	6.29	1242.84	-3.917e+04	-1.537e+05	1092.07	66.21
5	55	-39.50	941.80	-3.439e+04	-1.167e+05	-4448.00	91.86
5	58	-39.44	940.13	-3.416e+04	-1.165e+05	-4426.50	86.67
5	59	-0.24	1199.59	-3.846e+04	-1.484e+05	303.71	69.13
5	60	-39.44	940.13	-3.416e+04	-1.165e+05	-4426.50	86.67
5	61	-0.24	1199.59	-3.846e+04	-1.484e+05	303.71	69.13
7	3	542.31	-54.69	-9.042e+04	-9418.82	6.470e+04	112.97
7	4	541.74	-53.56	-9.222e+04	-9788.70	6.462e+04	113.99
7	5	143.75	-15.87	-4.163e+04	-4141.87	1.719e+04	29.38
7	15	266.97	-27.67	-5.422e+04	-5540.46	3.187e+04	55.30
7	17	451.79	-45.38	-7.309e+04	-7638.34	5.390e+04	94.18
7	18	451.30	-44.41	-7.465e+04	-7958.90	5.383e+04	95.07
7	22	238.53	-24.95	-5.131e+04	-5217.71	2.848e+04	49.32
7	24	380.70	-38.57	-6.583e+04	-6831.46	4.543e+04	79.23
7	25	380.33	-37.82	-6.703e+04	-7078.05	4.537e+04	79.91
7	37	-4406.63	-10.61	-4.943e+04	-1.015e+04	-7.907e+05	464.20
7	39	-3590.73	59.52	-4.799e+04	-2.578e+04	-7.905e+05	991.54
7	40	4118.36	-104.79	-7.361e+04	1.069e+04	7.905e+05	-923.24
7	41	298.57	-4133.82	-6.161e+04	9.069e+05	3.419e+04	3.869e+04
7	53	238.53	-24.95	-5.131e+04	-5217.71	2.848e+04	49.32
7	54	338.05	-34.49	-6.147e+04	-6347.34	4.034e+04	70.26
7	58	238.53	-24.95	-5.131e+04	-5217.71	2.848e+04	49.32
7	59	323.84	-33.12	-6.002e+04	-6185.96	3.865e+04	67.26
7	60	238.53	-24.95	-5.131e+04	-5217.71	2.848e+04	49.32
7	61	323.84	-33.12	-6.002e+04	-6185.96	3.865e+04	67.26
9	4	-25.76	118.69	-2.746e+04	-2.869e+04	-2796.30	127.56
9	5	-0.80	55.74	-1.999e+04	-1.192e+04	-16.15	70.19
9	11	-21.41	117.00	-2.798e+04	-2.728e+04	-2317.41	130.11
9	15	-9.34	69.82	-2.027e+04	-1.621e+04	-972.18	80.11
9	18	-22.22	95.80	-2.127e+04	-2.335e+04	-2421.41	101.66
9	21	-18.45	94.34	-2.172e+04	-2.213e+04	-2006.38	103.87
9	22	-7.37	66.57	-2.021e+04	-1.522e+04	-751.56	77.82
9	25	-17.28	86.56	-2.097e+04	-2.071e+04	-1866.35	94.40
9	28	-14.38	85.43	-2.132e+04	-1.977e+04	-1547.09	96.10
9	34	15.64	4577.42	-1.453e+04	-8.693e+05	5433.52	-1720.20
9	37	-3379.07	80.49	-2.079e+04	-1.919e+04	-6.191e+05	226.76
9	42	27.76	4784.39	-1.407e+04	-8.692e+05	8378.25	-2181.75

9	43	-32.72	-4252.07	-2.313e+04	8.477e+05	-6172.03	1420.53
9	53	-7.37	66.57	-2.021e+04	-1.522e+04	-751.56	77.82
9	54	-14.27	77.94	-2.043e+04	-1.868e+04	-1523.74	85.84
9	57	-13.30	77.81	-2.058e+04	-1.841e+04	-1418.10	86.74
9	58	-7.37	66.57	-2.021e+04	-1.522e+04	-751.56	77.82
9	59	-13.28	76.31	-2.040e+04	-1.819e+04	-1413.43	84.69
9	60	-7.37	66.57	-2.021e+04	-1.522e+04	-751.56	77.82
9	61	-13.28	76.31	-2.040e+04	-1.819e+04	-1413.43	84.69
11	1	297.30	606.05	-2.870e+04	-8.072e+04	3.615e+04	-162.82
11	4	298.11	906.12	-3.401e+04	-1.218e+05	3.583e+04	-56.77
11	5	223.12	324.82	-1.966e+04	-4.429e+04	2.636e+04	-9.39
11	15	225.94	490.64	-2.245e+04	-6.623e+04	2.692e+04	-29.55
11	17	230.16	739.36	-2.664e+04	-9.913e+04	2.777e+04	-59.80
11	18	230.10	744.16	-2.699e+04	-9.999e+04	2.772e+04	-48.01
11	22	225.29	452.37	-2.181e+04	-6.116e+04	2.679e+04	-24.90
11	24	228.54	643.70	-2.503e+04	-8.647e+04	2.744e+04	-48.17
11	25	228.49	647.39	-2.530e+04	-8.714e+04	2.740e+04	-39.10
11	37	-3509.61	656.20	-1.853e+04	-9.213e+04	-6.374e+05	2887.18
11	41	-25.67	-2588.21	-1.455e+04	6.822e+05	-2.257e+04	5792.27
11	42	550.04	4067.01	-2.997e+04	-8.611e+05	9.076e+04	-6387.53
11	53	225.29	452.37	-2.181e+04	-6.116e+04	2.679e+04	-24.90
11	54	227.56	586.30	-2.406e+04	-7.888e+04	2.725e+04	-41.19
11	58	225.29	452.37	-2.181e+04	-6.116e+04	2.679e+04	-24.90
11	59	227.24	567.17	-2.374e+04	-7.635e+04	2.718e+04	-38.86
11	60	225.29	452.37	-2.181e+04	-6.116e+04	2.679e+04	-24.90
11	61	227.24	567.17	-2.374e+04	-7.635e+04	2.718e+04	-38.86
13	1	-306.92	582.12	-2.844e+04	-7.642e+04	-3.752e+04	169.56
13	4	-305.98	892.98	-3.381e+04	-1.185e+05	-3.718e+04	126.48
13	5	-230.12	301.14	-1.945e+04	-4.105e+04	-2.746e+04	13.17
13	15	-232.45	473.41	-2.226e+04	-6.334e+04	-2.798e+04	55.03
13	17	-235.95	731.82	-2.648e+04	-9.679e+04	-2.876e+04	117.81
13	18	-236.03	735.77	-2.684e+04	-9.753e+04	-2.874e+04	107.95
13	22	-231.91	433.66	-2.161e+04	-5.820e+04	-2.786e+04	45.37
13	24	-234.61	632.43	-2.486e+04	-8.393e+04	-2.846e+04	93.67
13	25	-234.67	635.47	-2.513e+04	-8.449e+04	-2.845e+04	86.08
13	37	-3509.20	491.82	-2.834e+04	-6.098e+04	-6.373e+05	2141.71
13	41	-44.27	-2311.02	-1.484e+04	6.642e+05	7083.56	-3184.84
13	42	-500.74	3802.34	-2.930e+04	-8.402e+05	-7.737e+04	3458.53
13	53	-231.91	433.66	-2.161e+04	-5.820e+04	-2.786e+04	45.37
13	54	-233.80	572.80	-2.389e+04	-7.621e+04	-2.828e+04	79.18
13	58	-231.91	433.66	-2.161e+04	-5.820e+04	-2.786e+04	45.37
13	59	-233.53	552.92	-2.356e+04	-7.363e+04	-2.822e+04	74.35
13	60	-231.91	433.66	-2.161e+04	-5.820e+04	-2.786e+04	45.37
13	61	-233.53	552.92	-2.356e+04	-7.363e+04	-2.822e+04	74.35
15	4	-48.74	1922.97	-5.691e+04	-2.364e+05	-6722.21	-26.26
15	5	84.49	648.12	-2.941e+04	-8.020e+04	9569.35	-83.30
15	12	84.61	660.29	-3.115e+04	-8.197e+04	9639.80	-115.18
15	15	29.50	1020.55	-3.559e+04	-1.257e+05	2914.19	-49.34
15	17	-52.99	1579.21	-4.485e+04	-1.940e+05	-7068.56	1.61
15	18	-52.94	1584.48	-4.560e+04	-1.948e+05	-7038.03	-12.21
15	22	42.19	934.61	-3.416e+04	-1.152e+05	4450.00	-57.17
15	25	-21.23	1368.40	-4.186e+04	-1.683e+05	-3205.56	-28.61
15	26	42.26	942.72	-3.532e+04	-1.164e+05	4496.96	-78.43
15	29	-4261.22	1196.10	-4.287e+04	-4.470e+05	-7.715e+05	386.02
15	37	-4262.13	1216.55	-4.267e+04	-1.498e+05	-7.716e+05	233.51
15	41	165.46	-975.31	-3.245e+04	5.483e+05	3.079e+04	-4458.18
15	42	-242.88	4417.62	-4.233e+04	-9.529e+05	-4.570e+04	5826.15
15	53	42.19	934.61	-3.416e+04	-1.152e+05	4450.00	-57.17
15	54	-2.23	1235.42	-3.915e+04	-1.520e+05	-925.33	-29.74
15	55	42.20	936.23	-3.439e+04	-1.154e+05	4459.39	-61.42
15	58	42.19	934.61	-3.416e+04	-1.152e+05	4450.00	-57.17
15	59	4.12	1192.45	-3.844e+04	-1.467e+05	-157.43	-33.66
15	60	42.19	934.61	-3.416e+04	-1.152e+05	4450.00	-57.17
15	61	4.12	1192.45	-3.844e+04	-1.467e+05	-157.43	-33.66
17	3	-476.04	-43.49	-8.970e+04	-9402.32	-5.694e+04	13.90
17	4	-475.24	-42.26	-9.148e+04	-9762.79	-5.685e+04	1.51
17	5	-123.08	-11.41	-4.138e+04	-4271.93	-1.493e+04	-59.24
17	15	-232.64	-21.35	-5.383e+04	-5606.19	-2.794e+04	-27.72
17	17	-396.98	-36.25	-7.250e+04	-7607.57	-4.745e+04	19.55
17	18	-396.29	-35.18	-7.405e+04	-7919.97	-4.738e+04	8.82
17	22	-207.36	-19.05	-5.095e+04	-5298.28	-2.494e+04	-35.00
17	24	-333.77	-30.52	-6.532e+04	-6837.81	-3.995e+04	1.37
17	25	-333.24	-29.69	-6.651e+04	-7078.12	-3.989e+04	-6.89
17	37	-4823.26	-33.56	-7.203e+04	-3672.98	-8.660e+05	291.49
17	39	-4399.06	-100.30	-7.304e+04	1.155e+04	-8.657e+05	759.35
17	40	3846.01	59.05	-4.742e+04	-2.386e+04	8.656e+05	-429.22

17	42	-299.39	3966.08	-5.998e+04	-8.997e+05	-3.731e+04	3997.07
17	53	-207.36	-19.05	-5.095e+04	-5298.28	-2.494e+04	-35.00
17	54	-295.85	-27.08	-6.101e+04	-6375.95	-3.544e+04	-9.54
17	58	-207.36	-19.05	-5.095e+04	-5298.28	-2.494e+04	-35.00
17	59	-283.21	-25.93	-5.957e+04	-6222.00	-3.394e+04	-13.18
17	60	-207.36	-19.05	-5.095e+04	-5298.28	-2.494e+04	-35.00
17	61	-283.21	-25.93	-5.957e+04	-6222.00	-3.394e+04	-13.18
19	3	-21.99	93.26	-4.677e+04	-2.601e+04	-3864.05	117.75
19	4	-21.62	96.84	-4.758e+04	-2.676e+04	-3823.46	107.54
19	5	-10.36	36.86	-2.357e+04	-1.064e+04	-1760.60	10.96
19	15	-13.31	52.58	-2.916e+04	-1.486e+04	-2306.70	46.84
19	17	-17.74	76.15	-3.755e+04	-2.120e+04	-3125.83	100.66
19	18	-17.42	79.26	-3.825e+04	-2.184e+04	-3090.66	91.81
19	22	-12.63	48.95	-2.787e+04	-1.389e+04	-2180.68	38.56
19	24	-16.04	67.09	-3.432e+04	-1.876e+04	-2810.78	79.96
19	25	-15.79	69.48	-3.486e+04	-1.926e+04	-2783.72	73.15
19	37	-3611.86	-14.82	-3.195e+04	-2665.95	-7.303e+05	2025.43
19	41	31.98	-4479.72	-3.495e+04	9.123e+05	6500.88	-2199.10
19	42	-104.65	4410.25	-3.105e+04	-9.110e+05	-1.988e+04	2663.57
19	53	-12.63	48.95	-2.787e+04	-1.389e+04	-2180.68	38.56
19	54	-15.02	61.65	-3.239e+04	-1.730e+04	-2621.75	67.54
19	58	-12.63	48.95	-2.787e+04	-1.389e+04	-2180.68	38.56
19	59	-14.68	59.83	-3.174e+04	-1.681e+04	-2558.74	63.40
19	60	-12.63	48.95	-2.787e+04	-1.389e+04	-2180.68	38.56
19	61	-14.68	59.83	-3.174e+04	-1.681e+04	-2558.74	63.40
21	4	36.59	83.24	-4.246e+04	-2.393e+04	3401.41	22.08
21	5	13.35	29.97	-2.136e+04	-8647.89	1273.72	-64.98
21	15	19.64	45.07	-2.621e+04	-1.296e+04	1827.30	-22.73
21	18	30.02	68.35	-3.409e+04	-1.965e+04	2786.55	27.37
21	22	18.19	41.58	-2.509e+04	-1.197e+04	1699.55	-32.48
21	25	26.18	59.49	-3.115e+04	-1.711e+04	2437.44	6.05
21	30	3864.71	47.16	-2.951e+04	-1.340e+04	7.008e+05	35.78
21	37	-3865.48	70.58	-2.692e+04	-1.728e+04	-7.009e+05	153.02
21	39	-3864.36	47.06	-2.686e+04	-7788.41	-7.007e+05	788.48
21	42	-188.63	518.14	-2.874e+04	-5.351e+05	-3.672e+04	6165.14
21	53	18.19	41.58	-2.509e+04	-1.197e+04	1699.55	-32.48
21	54	23.26	53.78	-2.900e+04	-1.545e+04	2146.67	1.65
21	58	18.19	41.58	-2.509e+04	-1.197e+04	1699.55	-32.48
21	59	22.54	52.04	-2.844e+04	-1.496e+04	2082.80	-3.22
21	60	18.19	41.58	-2.509e+04	-1.197e+04	1699.55	-32.48
21	61	22.54	52.04	-2.844e+04	-1.496e+04	2082.80	-3.22
23	1	-5.65	14.98	-3.229e+04	-1.181e+04	-1646.40	210.88
23	4	-0.95	15.28	-4.097e+04	-1.592e+04	-893.97	103.51
23	5	-1.23	6.26	-2.071e+04	-5767.21	-478.78	-2.80
23	15	-1.03	8.60	-2.535e+04	-8623.02	-578.37	36.91
23	17	-0.74	12.13	-3.231e+04	-1.291e+04	-727.76	96.47
23	18	-0.67	12.45	-3.289e+04	-1.306e+04	-714.13	90.07
23	22	-1.08	8.06	-2.428e+04	-7963.98	-555.39	27.74
23	24	-0.85	10.77	-2.963e+04	-1.126e+04	-670.31	73.56
23	25	-0.80	11.02	-3.008e+04	-1.138e+04	-659.82	68.64
23	37	-3775.97	13.77	-2.715e+04	-1.062e+04	-6.849e+05	-104.01
23	41	102.72	-295.23	-2.768e+04	5.041e+05	1.817e+04	-1563.58
23	42	-163.32	407.93	-2.736e+04	-5.414e+05	-2.962e+04	2681.28
23	53	-1.08	8.06	-2.428e+04	-7963.98	-555.39	27.74
23	54	-0.92	9.96	-2.803e+04	-1.027e+04	-635.83	59.81
23	58	-1.08	8.06	-2.428e+04	-7963.98	-555.39	27.74
23	59	-0.94	9.69	-2.749e+04	-9941.08	-624.34	55.23
23	60	-1.08	8.06	-2.428e+04	-7963.98	-555.39	27.74
23	61	-0.94	9.69	-2.749e+04	-9941.08	-624.34	55.23
25	4	-1.88	16.47	-6.473e+04	-1.591e+04	-1129.87	106.36
25	5	-2.78	6.43	-2.894e+04	-5701.86	-804.40	-7.00
25	11	-2.26	15.52	-6.137e+04	-1.460e+04	-1141.04	75.75
25	15	-2.16	9.09	-3.789e+04	-8584.71	-825.84	35.91
25	18	-1.27	13.45	-5.243e+04	-1.307e+04	-877.33	93.07
25	21	-1.61	12.63	-4.952e+04	-1.193e+04	-887.01	66.54
25	22	-2.30	8.48	-3.582e+04	-7919.44	-820.90	26.01
25	25	-1.62	11.83	-4.701e+04	-1.137e+04	-860.50	69.97
25	28	-1.88	11.20	-4.477e+04	-1.049e+04	-867.95	49.57
25	37	-4426.36	13.66	-4.172e+04	-1.061e+04	-8.002e+05	347.74
25	40	4425.03	24.96	-4.098e+04	-1.749e+04	7.999e+05	-297.22
25	42	-37.63	106.86	-4.203e+04	-4.985e+05	-7520.46	2674.56
25	44	-23.30	-382.43	-4.204e+04	-3.240e+05	-5022.09	1849.46
25	53	-2.30	8.48	-3.582e+04	-7919.44	-820.90	26.01
25	54	-1.80	10.63	-4.305e+04	-1.025e+04	-838.21	60.67
25	57	-1.89	10.43	-4.236e+04	-9964.48	-841.69	53.50
25	58	-2.30	8.48	-3.582e+04	-7919.44	-820.90	26.01

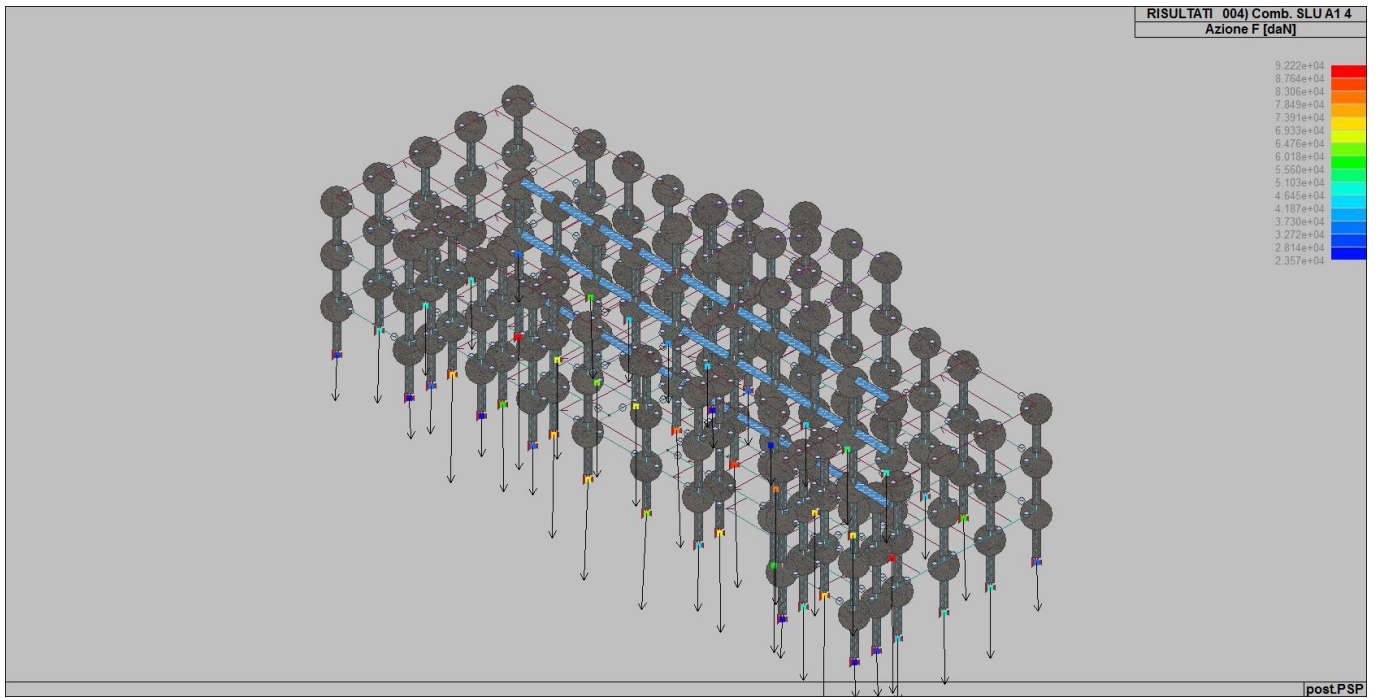
25	59	-1.87	10.32	-4.202e+04	-9915.26	-835.74	55.72
25	60	-2.30	8.48	-3.582e+04	-7919.44	-820.90	26.01
25	61	-1.87	10.32	-4.202e+04	-9915.26	-835.74	55.72
27	3	41.41	142.36	-4.756e+04	-3.346e+04	5983.65	72.34
27	4	41.04	147.11	-4.836e+04	-3.437e+04	5922.03	85.64
27	5	21.65	52.15	-2.418e+04	-1.293e+04	2870.24	52.18
27	15	26.25	78.00	-2.977e+04	-1.870e+04	3651.05	53.74
27	17	33.15	116.78	-3.815e+04	-2.736e+04	4822.27	56.08
27	18	32.83	120.89	-3.885e+04	-2.815e+04	4768.86	67.61
27	22	25.19	72.03	-2.848e+04	-1.737e+04	3470.87	53.38
27	24	30.50	101.86	-3.493e+04	-2.403e+04	4371.80	55.18
27	25	30.25	105.03	-3.547e+04	-2.464e+04	4330.72	64.05
27	37	-3661.01	189.44	-3.214e+04	-3.859e+04	-7.366e+05	2163.35
27	41	-40.68	-4647.70	-3.580e+04	9.180e+05	-1.061e+04	4196.01
27	42	139.05	4657.35	-3.145e+04	-9.296e+05	2.737e+04	-4956.99
27	53	25.19	72.03	-2.848e+04	-1.737e+04	3470.87	53.38
27	54	28.90	92.91	-3.299e+04	-2.203e+04	4101.52	54.64
27	58	25.19	72.03	-2.848e+04	-1.737e+04	3470.87	53.38
27	59	28.37	89.93	-3.235e+04	-2.137e+04	4011.43	54.46
27	60	25.19	72.03	-2.848e+04	-1.737e+04	3470.87	53.38
27	61	28.37	89.93	-3.235e+04	-2.137e+04	4011.43	54.46
29	3	77.81	250.81	-4.799e+04	-4.592e+04	1.101e+04	355.03
29	4	77.27	253.49	-4.880e+04	-4.660e+04	1.096e+04	367.48
29	5	30.27	103.00	-2.436e+04	-1.883e+04	4264.60	197.81
29	15	43.60	143.53	-3.002e+04	-2.627e+04	6159.72	231.74
29	17	63.60	204.32	-3.850e+04	-3.742e+04	9002.40	282.64
29	18	63.13	206.64	-3.921e+04	-3.800e+04	8955.78	293.43
29	22	40.53	134.17	-2.871e+04	-2.455e+04	5722.39	293.91
29	24	55.91	180.94	-3.524e+04	-3.313e+04	7909.06	263.06
29	25	55.55	182.72	-3.578e+04	-3.358e+04	7873.20	271.36
29	34	36.97	4253.61	-3.298e+04	-8.532e+05	4247.02	-2726.31
29	37	-3673.70	205.62	-3.239e+04	-4.029e+04	-7.410e+05	-1068.88
29	39	-1927.13	272.34	-3.232e+04	-5.508e+04	-7.407e+05	44.89
29	42	32.84	4628.82	-3.294e+04	-9.260e+05	3325.52	-3715.56
29	53	40.53	134.17	-2.871e+04	-2.455e+04	5722.39	223.91
29	54	51.29	166.91	-3.328e+04	-3.055e+04	7253.06	251.32
29	58	40.53	134.17	-2.871e+04	-2.455e+04	5722.39	223.91
29	59	49.76	162.23	-3.263e+04	-2.970e+04	7034.39	247.40
29	60	40.53	134.17	-2.871e+04	-2.455e+04	5722.39	223.91
29	61	49.76	162.23	-3.263e+04	-2.970e+04	7034.39	247.40
31	4	-154.81	89.43	-6.881e+04	-2.443e+04	-1.879e+04	153.74
31	5	-64.14	38.76	-3.100e+04	-9480.05	-7945.56	50.55
31	15	-88.53	51.53	-4.041e+04	-1.354e+04	-1.083e+04	80.87
31	18	-126.04	72.60	-5.571e+04	-1.997e+04	-1.528e+04	126.84
31	22	-82.90	48.59	-3.823e+04	-1.260e+04	-1.016e+04	73.87
31	25	-111.76	64.79	-5.001e+04	-1.755e+04	-1.359e+04	109.23
31	37	-4570.15	64.09	-4.465e+04	-1.786e+04	-8.254e+05	454.33
31	40	4568.67	65.69	-4.410e+04	-2.079e+04	8.252e+05	-577.69
31	42	-142.84	435.49	-4.415e+04	-5.446e+05	-2.101e+04	91.39
31	43	-111.01	437.08	-4.582e+04	3.044e+05	-1.154e+04	638.19
31	53	-82.90	48.59	-3.823e+04	-1.260e+04	-1.016e+04	73.87
31	54	-102.60	58.90	-4.583e+04	-1.588e+04	-1.249e+04	98.36
31	58	-82.90	48.59	-3.823e+04	-1.260e+04	-1.016e+04	73.87
31	59	-99.78	57.43	-4.475e+04	-1.541e+04	-1.216e+04	94.86
31	60	-82.90	48.59	-3.823e+04	-1.260e+04	-1.016e+04	73.87
31	61	-99.78	57.43	-4.475e+04	-1.541e+04	-1.216e+04	94.86
33	4	106.90	17.11	-6.858e+04	-1.619e+04	1.138e+04	42.53
33	5	46.72	3.46	-3.079e+04	-5603.96	4948.84	-64.44
33	15	61.99	7.95	-4.021e+04	-8647.24	6582.13	-15.26
...							
208	61	-92.15	12.04	-4.507e+04	-1.120e+04	-1.015e+04	-10.82
Nodo		Azione X	Azione Y	Azione Z	Azione RX	Azione RY	Azione RZ
		-5171.17	-8882.63	-9.222e+04	-2.381e+06	-9.395e+05	-8886.30
		4583.42	8490.38	2650.66	2.379e+06	8.656e+05	3.899e+04
Nodo	Cmb	Azione X daN	Azione Y daN	Azione Z daN	Azione RX daN cm	Azione RY daN cm	Azione RZ daN cm
1	4	34.97	-0.15	-4.781e+04	-1.544e+04	4346.75	20.70
	5	23.60	-5.46	-2.578e+04	-5004.16	2759.97	50.93
	42	237.93	327.09	-3.200e+04	-5.463e+05	4.332e+04	-3353.40
	41	-130.69	-199.51	-3.322e+04	5.037e+05	-2.638e+04	2280.71
	37	-4007.93	-7.87	-3.154e+04	-9088.32	-7.263e+05	-203.44
	38	4007.77	1.06	-3.326e+04	-9497.38	7.263e+05	85.94
3	4	-27.45	82.17	-4.313e+04	-2.514e+04	-2801.55	-35.52
	5	-2.99	29.38	-2.186e+04	-9078.21	-358.79	23.34
	42	253.32	516.31	-2.895e+04	-5.452e+05	5.017e+04	-8886.30

	41	-205.59	-224.68	-2.876e+04	4.898e+05	-3.911e+04	6575.42
	37	-3947.58	34.76	-2.866e+04	-1.372e+04	-7.156e+05	-19.94
	38	3947.38	60.98	-2.817e+04	-1.666e+04	7.155e+05	-147.32
5	4	55.20	1934.73	-5.696e+04	-2.392e+05	7041.60	84.38
	5	-83.00	651.85	-2.939e+04	-8.105e+04	-9682.28	106.16
	42	312.11	4480.66	-4.264e+04	-9.655e+05	6.044e+04	-3832.10
	41	-229.63	-988.04	-3.240e+04	5.510e+05	-4.470e+04	2509.96
	37	-4273.82	1154.14	-3.482e+04	-1.432e+05	-7.737e+05	185.86
	38	4273.62	1214.60	-4.260e+04	-1.499e+05	7.737e+05	-140.06
7	4	541.74	-53.56	-9.222e+04	-9788.70	6.462e+04	113.99
	5	143.75	-15.87	-4.163e+04	-4141.87	1.719e+04	29.38
	42	358.39	3969.09	-6.057e+04	-9.069e+05	4.550e+04	-4.394e+04
	41	298.57	-4133.82	-6.161e+04	9.069e+05	3.419e+04	3.869e+04
	37	-4406.63	-10.61	-4.943e+04	-1.015e+04	-7.907e+05	464.20
	38	4406.63	-43.52	-7.197e+04	-3290.50	7.907e+05	-230.57
9	11	-21.41	117.00	-2.798e+04	-2.728e+04	-2317.41	130.11
	42	27.76	4784.39	-1.407e+04	-8.692e+05	8378.25	-2181.75
	34	15.64	4577.42	-1.453e+04	-8.693e+05	5433.52	-1720.20
	33	-43.42	-4555.84	-2.195e+04	8.693e+05	-7872.97	1581.67
	37	-3379.07	80.49	-2.079e+04	-1.919e+04	-6.191e+05	226.76
	38	3199.34	97.97	-1.980e+04	-2.130e+04	6.190e+05	-263.43
11	4	298.11	906.12	-3.401e+04	-1.218e+05	3.583e+04	-56.77
	41	-25.67	-2588.21	-1.455e+04	6.822e+05	-2.257e+04	5792.27
	42	550.04	4067.01	-2.997e+04	-8.611e+05	9.076e+04	-6387.53
	41	-25.67	-2588.21	-1.455e+04	6.822e+05	-2.257e+04	5792.27
	37	-3509.61	656.20	-1.853e+04	-9.213e+04	-6.374e+05	2887.18
	38	3509.57	477.65	-2.851e+04	-5.941e+04	6.374e+05	-3026.69
13	4	-305.98	892.98	-3.381e+04	-1.185e+05	-3.718e+04	126.48
	41	-44.27	-2311.02	-1.484e+04	6.642e+05	7083.56	-3184.84
	42	-500.74	3802.34	-2.930e+04	-8.402e+05	-7.737e+04	3458.53
	41	-44.27	-2311.02	-1.484e+04	6.642e+05	7083.56	-3184.84
	37	-3509.20	491.82	-2.834e+04	-6.098e+04	-6.373e+05	2141.71
	38	3508.92	632.48	-1.835e+04	-8.719e+04	6.373e+05	-1657.69
15	4	-48.74	1922.97	-5.691e+04	-2.364e+05	-6722.21	-26.26
	5	84.49	648.12	-2.941e+04	-8.020e+04	9569.35	-83.30
	42	-242.88	4417.62	-4.233e+04	-9.529e+05	-4.570e+04	5826.15
	41	165.46	-975.31	-3.245e+04	5.483e+05	3.079e+04	-4458.18
	37	-4262.13	1216.55	-4.267e+04	-1.498e+05	-7.716e+05	233.51
	38	4261.92	1146.89	-3.455e+04	-1.407e+05	7.716e+05	-263.66
17	4	-475.24	-42.26	-9.148e+04	-9762.79	-5.685e+04	1.51
	5	-123.08	-11.41	-4.138e+04	-4271.93	-1.493e+04	-59.24
	42	-299.39	3966.08	-5.998e+04	-8.997e+05	-3.731e+04	3997.07
	41	-273.03	-4090.39	-6.144e+04	8.992e+05	-3.229e+04	-3317.85
	37	-4823.26	-33.56	-7.203e+04	-3672.98	-8.660e+05	291.49
	38	4822.84	-3.92	-4.866e+04	-9285.06	8.659e+05	-334.05
19	4	-21.62	96.84	-4.758e+04	-2.676e+04	-3823.46	107.54
	5	-10.36	36.86	-2.357e+04	-1.064e+04	-1760.60	10.96
	42	-104.65	4410.25	-3.105e+04	-9.110e+05	-1.988e+04	2663.57
	41	31.98	-4479.72	-3.495e+04	9.123e+05	6500.88	-2199.10
	37	-3611.86	-14.82	-3.195e+04	-2665.95	-7.303e+05	2025.43
	38	3426.43	145.91	-3.156e+04	-3.134e+04	7.302e+05	-1628.96
21	4	36.59	83.24	-4.246e+04	-2.393e+04	3401.41	22.08
	5	13.35	29.97	-2.136e+04	-8647.89	1273.72	-64.98
	42	-188.63	518.14	-2.874e+04	-5.351e+05	-3.672e+04	6165.14
	41	155.07	-244.95	-2.796e+04	4.862e+05	2.750e+04	-4148.65
	37	-3865.48	70.58	-2.692e+04	-1.728e+04	-7.009e+05	153.02
	38	3865.30	38.50	-2.944e+04	-1.248e+04	7.009e+05	25.71
23	4	-0.95	15.28	-4.097e+04	-1.592e+04	-893.97	103.51
	5	-1.23	6.26	-2.071e+04	-5767.21	-478.78	-2.80
	42	-163.32	407.93	-2.736e+04	-5.414e+05	-2.962e+04	2681.28
	41	102.72	-295.23	-2.768e+04	5.041e+05	1.817e+04	-1563.58
	37	-3775.97	13.77	-2.715e+04	-1.062e+04	-6.849e+05	-104.01
	38	3775.78	-2.25	-2.734e+04	-8032.23	6.849e+05	434.01
25	4	-1.88	16.47	-6.473e+04	-1.591e+04	-1129.87	106.36
	5	-2.78	6.43	-2.894e+04	-5701.86	-804.40	-7.00
	42	-37.63	106.86	-4.203e+04	-4.985e+05	-7520.46	2674.56
	41	21.43	-11.30	-4.191e+04	4.594e+05	3478.65	-1493.50
	37	-4426.36	13.66	-4.172e+04	-1.061e+04	-8.002e+05	347.74
	38	4426.14	4.57	-4.106e+04	-9069.55	8.001e+05	8.80
27	4	41.04	147.11	-4.836e+04	-3.437e+04	5922.03	85.64
	5	21.65	52.15	-2.418e+04	-1.293e+04	2870.24	52.18
	42	139.05	4657.35	-3.145e+04	-9.296e+05	2.737e+04	-4956.99
	41	-40.68	-4647.70	-3.580e+04	9.180e+05	-1.061e+04	4196.01
	37	-3661.01	189.44	-3.214e+04	-3.859e+04	-7.366e+05	2163.35
	38	3588.44	-13.73	-3.258e+04	-2654.90	7.366e+05	-2066.44
29	4	77.27	253.49	-4.880e+04	-4.660e+04	1.096e+04	367.48

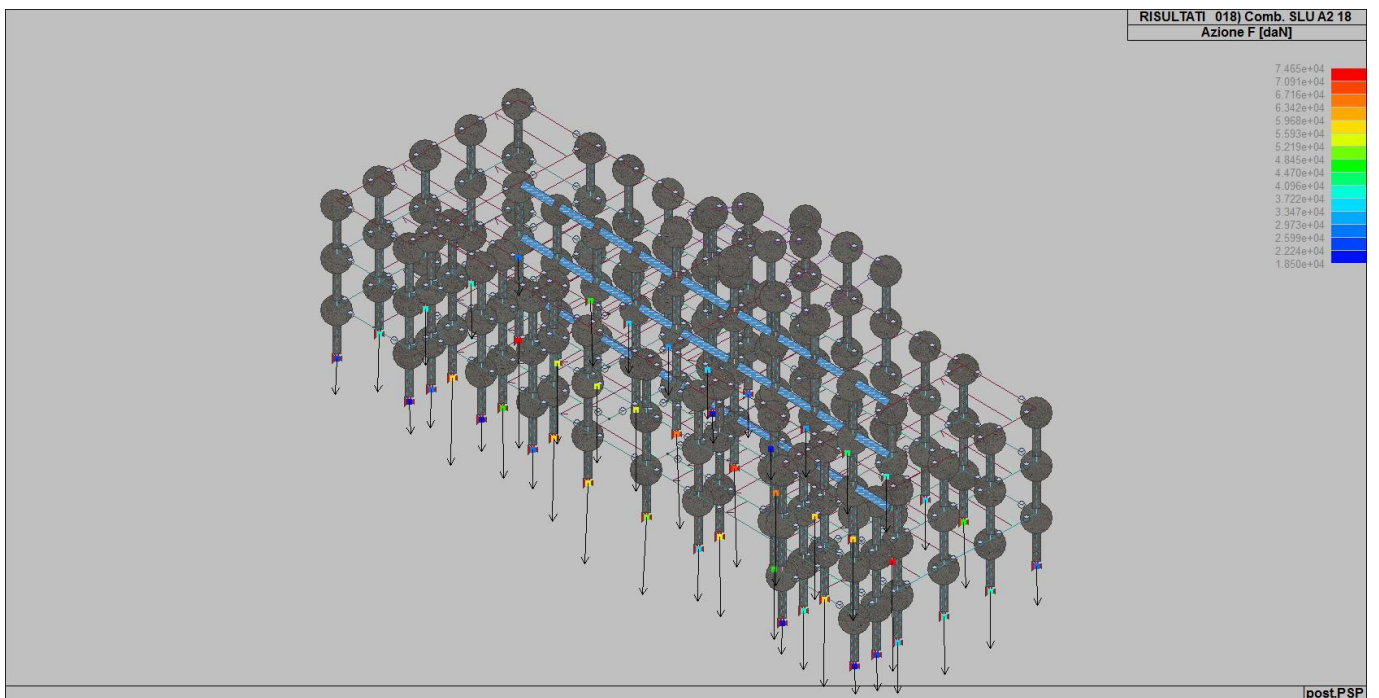
	5	30.27	103.00	-2.436e+04	-1.883e+04	4264.60	197.81
	42	32.84	4628.82	-3.294e+04	-9.260e+05	3325.52	-3715.56
	41	78.51	-4328.25	-3.297e+04	8.790e+05	1.319e+04	3174.46
	37	-3673.70	205.62	-3.239e+04	-4.029e+04	-7.410e+05	-1068.88
	38	3644.22	110.02	-3.283e+04	-1.712e+04	7.410e+05	1820.72
31	4	-154.81	89.43	-6.881e+04	-2.443e+04	-1.879e+04	153.74
	5	-64.14	38.76	-3.100e+04	-9480.05	-7945.56	50.55
	42	-142.84	435.49	-4.415e+04	-5.446e+05	-2.101e+04	91.39
	41	-95.99	-55.56	-4.574e+04	4.706e+05	-8924.09	607.86
	37	-4570.15	64.09	-4.465e+04	-1.786e+04	-8.254e+05	454.33
	38	4569.83	38.49	-4.450e+04	-1.198e+04	8.254e+05	-81.58
33	4	106.90	17.11	-6.858e+04	-1.619e+04	1.138e+04	42.53
	5	46.72	3.46	-3.079e+04	-5603.96	4948.84	-64.44
	42	44.34	176.74	-4.461e+04	-4.907e+05	2650.96	5474.49
	41	89.13	-105.45	-4.474e+04	4.625e+05	1.072e+04	-4215.50
	37	-4584.72	19.13	-4.107e+04	-1.066e+04	-8.280e+05	344.80
	38	4584.55	9.43	-4.769e+04	-9851.22	8.279e+05	-26.20
35	42	45.99	3868.84	-3.834e+04	-9.162e+05	4031.03	-1324.39
	41	162.35	-3701.29	-1.361e+04	8.815e+05	1.877e+04	1460.04
	42	45.99	3868.84	-3.834e+04	-9.162e+05	4031.03	-1324.39
	41	162.35	-3701.29	-1.361e+04	8.815e+05	1.877e+04	1460.04
	37	-3592.92	68.36	-2.408e+04	-1.792e+04	-6.522e+05	1530.39
	38	3592.82	28.79	-2.754e+04	-1.194e+04	6.522e+05	-1487.13
37	42	-39.67	4009.91	-4.284e+04	-9.634e+05	746.03	2319.19
	41	-224.68	-3780.81	-1.637e+04	9.040e+05	-3.037e+04	-2257.46
	42	-39.67	4009.91	-4.284e+04	-9.634e+05	746.03	2319.19
	41	-224.68	-3780.81	-1.637e+04	9.040e+05	-3.037e+04	-2257.46
	37	-3778.23	2.56	-3.245e+04	-9294.92	-6.853e+05	1712.04
	38	3777.95	63.59	-2.654e+04	-1.810e+04	6.853e+05	-1291.39
39	4	451.29	2589.82	-8.171e+04	-3.127e+05	5.233e+04	117.93
	5	37.97	898.78	-4.170e+04	-1.088e+05	4102.99	55.46
	42	197.02	6608.25	-5.044e+04	-1.191e+06	1.896e+04	351.27
	41	264.46	-2497.52	-6.569e+04	7.457e+05	3.355e+04	-65.71
	37	-4777.64	1536.14	-5.365e+04	-1.861e+05	-8.616e+05	-1719.78
	38	4777.59	1737.38	-5.966e+04	-2.093e+05	8.615e+05	1805.68
41	4	-478.07	2576.28	-8.553e+04	-3.115e+05	-5.566e+04	-5.98
	5	-62.52	900.86	-4.452e+04	-1.092e+05	-7283.44	-26.22
	42	-274.78	6645.81	-5.322e+04	-1.198e+06	-3.196e+04	1191.06
	41	-234.38	-2662.11	-6.814e+04	7.763e+05	-2.697e+04	-1324.77
	37	-4805.60	1727.54	-6.284e+04	-2.083e+05	-8.663e+05	-1747.06
	38	4805.18	1523.61	-5.544e+04	-1.855e+05	8.663e+05	1527.83
43	11	26.59	118.01	-2.636e+04	-2.706e+04	2466.35	63.15
	42	-44.65	4619.03	-1.497e+04	-8.395e+05	-9631.87	-647.92
	34	-17.09	4445.07	-1.517e+04	-8.399e+05	-5037.05	-518.45
	33	44.48	-4421.77	-1.957e+04	8.399e+05	6814.06	498.68
	37	-3266.17	86.98	-1.902e+04	-1.921e+04	-5.984e+05	299.26
	38	3167.83	85.63	-1.941e+04	-1.942e+04	5.984e+05	-284.54
45	4	74.80	43.24	-7.100e+04	-1.991e+04	9628.12	68.78
	5	36.47	24.99	-3.383e+04	-8170.18	4554.99	167.17
	42	77.89	-119.62	-4.722e+04	-4.913e+05	1.193e+04	3.899e+04
	33	33.33	-319.60	-4.612e+04	4.583e+05	3291.61	-2.524e+04
	37	-4541.69	13.79	-4.578e+04	-1.088e+04	-8.151e+05	138.84
	38	4541.52	33.40	-4.661e+04	-1.366e+04	8.151e+05	-333.51
47	4	-39.12	9.65	-4.190e+04	-1.539e+04	-5232.64	193.46
	5	-20.47	6.92	-2.135e+04	-5855.43	-2760.35	62.72
	42	-158.83	600.48	-2.927e+04	-5.681e+05	-2.440e+04	-1372.60
	41	66.86	-473.58	-2.704e+04	5.251e+05	1.058e+04	2056.48
	37	-3797.85	-21.62	-2.920e+04	-4869.62	-6.888e+05	146.14
	38	3797.63	17.43	-2.797e+04	-1.261e+04	6.888e+05	286.06
49	4	146.19	130.89	-7.904e+04	-2.971e+04	1.766e+04	24.73
	5	55.35	67.64	-3.839e+04	-1.295e+04	6663.82	21.91
	42	104.75	459.10	-5.166e+04	-5.647e+05	1.445e+04	-7281.41
	41	113.05	-65.74	-5.277e+04	4.858e+05	1.247e+04	6300.94
	37	-4573.67	52.56	-5.279e+04	-1.418e+04	-8.261e+05	304.94
	38	4573.54	79.33	-5.154e+04	-2.004e+04	8.260e+05	-336.57
51	4	29.91	-13.51	-5.204e+04	-1.380e+04	3507.72	-5.57
	5	13.11	-9.52	-2.871e+04	-4520.31	1477.96	34.09
	42	193.98	546.84	-3.684e+04	-5.769e+05	3.293e+04	679.36
	41	-119.58	-411.44	-3.434e+04	5.299e+05	-2.127e+04	-1358.15
	37	-3997.97	8.78	-3.616e+04	-1.223e+04	-7.246e+05	-28.74
	38	3997.80	-19.68	-3.641e+04	-6197.18	7.245e+05	-160.56
53	4	702.41	-365.06	-4.264e+04	2.473e+04	8.548e+04	610.17
	41	584.16	-5043.93	-2.310e+04	9.551e+05	8.146e+04	4657.98
	42	326.73	4358.18	-3.684e+04	-8.926e+05	2.741e+04	-5177.97
	41	584.16	-5043.93	-2.310e+04	9.551e+05	8.146e+04	4657.98
	37	-3751.13	-173.07	-2.421e+04	3440.08	-6.806e+05	-82.46

	38	3751.21	-287.24	-3.355e+04	2.860e+04	6.806e+05	1057.64
55	4	169.03	-1186.20	-7.337e+04	1.212e+05	2.241e+04	162.47
	5	-19.12	-398.61	-3.625e+04	4.016e+04	-1157.78	155.20
	42	-104.95	3821.17	-6.293e+04	-8.857e+05	-2.271e+04	-2959.76
	41	234.24	-5631.36	-3.852e+04	1.071e+06	3.921e+04	2238.66
	37	-4660.00	-636.30	-4.829e+04	6.069e+04	-8.412e+05	1002.98
	38	4659.83	-830.82	-5.067e+04	8.932e+04	8.411e+05	-729.37
57	4	265.02	-280.12	-4.995e+04	7490.37	3.449e+04	372.30
	5	194.59	-145.56	-2.827e+04	7475.08	2.429e+04	322.29
	34	-16.52	6196.34	-3.572e+04	-1.323e+06	-1.585e+04	-6969.74
	33	380.84	-6591.59	-3.249e+04	1.323e+06	6.040e+04	6088.01
	37	-4042.45	-62.87	-3.753e+04	-1.237e+04	-7.344e+05	3136.43
	38	4042.31	-309.73	-3.277e+04	2.455e+04	7.344e+05	-3155.00
59	4	10.14	-22.69	-5.965e+04	-1.248e+04	3209.03	-80.62
	5	2.88	-8.68	-2.813e+04	-4487.27	1130.86	15.63
	42	-118.19	400.03	-4.072e+04	-5.247e+05	-2.216e+04	-5936.61
	41	86.43	-398.08	-3.804e+04	4.955e+05	1.929e+04	4689.36
	37	-4364.10	-12.61	-3.941e+04	-9048.40	-7.895e+05	62.77
	38	4363.88	-18.20	-3.822e+04	-6590.47	7.894e+05	-274.10
61	42	573.52	3857.39	-7.237e+04	-9.468e+05	6.212e+04	-3346.16
	41	408.57	-4415.26	-2.374e+04	9.745e+05	5.313e+04	1852.90
	42	573.52	3857.39	-7.237e+04	-9.468e+05	6.212e+04	-3346.16
	41	408.57	-4415.26	-2.374e+04	9.745e+05	5.313e+04	1852.90
	37	-4605.71	-319.29	-4.727e+04	2.770e+04	-8.317e+05	-184.65
	38	4605.68	-115.65	-4.152e+04	2899.76	8.317e+05	-811.00
63	41	-386.63	-5809.59	-5.319e+04	1.325e+06	-3.594e+04	2245.45
	42	-554.48	5193.42	-4545.85	-1.325e+06	-7.518e+04	-4240.17
	42	-554.48	5193.42	-4545.85	-1.325e+06	-7.518e+04	-4240.17
	41	-386.63	-5809.59	-5.319e+04	1.325e+06	-3.594e+04	2245.45
	37	-4049.15	-382.57	-2.811e+04	2.870e+04	-7.356e+05	-482.56
	38	4048.65	-140.01	-3.484e+04	-668.04	7.355e+05	-904.26
65	4	36.76	-3626.43	-6.412e+04	4.032e+05	4949.30	-71.32
	5	56.27	-1258.06	-3.308e+04	1.391e+05	6721.96	-42.63
	42	63.99	-530.75	-3.861e+04	-4.495e+05	4787.84	-73.08
	41	-35.88	-5931.69	-4.525e+04	1.107e+06	-1540.38	-647.54
	37	-4413.48	-2597.68	-4.491e+04	2.893e+05	-7.979e+05	107.10
	38	4413.31	-1955.53	-4.032e+04	2.153e+05	7.979e+05	-774.55
67	4	88.53	-3707.71	-6.716e+04	4.130e+05	1.013e+04	231.61
	5	-2.70	-1279.04	-3.457e+04	1.417e+05	-565.68	106.56
	42	50.95	-703.68	-4.058e+04	-4.180e+05	8865.07	2369.51
	41	103.51	-6022.59	-4.707e+04	1.128e+06	9431.18	-1518.00
	37	-4504.65	-2052.00	-4.357e+04	2.274e+05	-8.140e+05	774.11
	38	4504.47	-2644.37	-4.657e+04	2.944e+05	8.139e+05	93.34
69	41	-208.38	-4108.06	-4.549e+04	8.976e+05	-2.960e+04	-1255.99
	42	5.77	3844.95	2650.66	-8.980e+05	6790.48	2806.42
	42	5.77	3844.95	2650.66	-8.980e+05	6790.48	2806.42
	41	-208.38	-4108.06	-4.549e+04	8.976e+05	-2.960e+04	-1255.99
	37	-3521.59	-34.52	-2.339e+04	-4715.81	-6.394e+05	385.71
	38	3521.33	-122.92	-2.357e+04	5596.98	6.394e+05	556.65
71	42	-930.68	8490.38	-7.531e+04	-2.381e+06	-1.048e+05	4704.99
	41	-722.18	-8882.63	-2.493e+04	2.379e+06	-8.873e+04	-2554.74
	42	-930.68	8490.38	-7.531e+04	-2.381e+06	-1.048e+05	4704.99
	41	-722.18	-8882.63	-2.493e+04	2.379e+06	-8.873e+04	-2554.74
	37	-5171.17	-7.97	-4.305e+04	-2.884e+04	-9.395e+05	509.90
	38	5170.28	-175.33	-5.146e+04	-9633.19	9.395e+05	946.41
73	4	146.91	87.28	-5.958e+04	-5.593e+04	1.517e+04	110.26
	5	54.62	29.47	-2.873e+04	-1.988e+04	5236.68	-71.49
	42	254.92	4612.61	-4.096e+04	-2.065e+06	3.737e+04	4057.58
	41	10.35	-4426.98	-3.840e+04	1.968e+06	-7187.40	-2754.82
	37	-4559.18	52.07	-3.861e+04	-3.306e+04	-8.304e+05	370.52
	38	4558.94	58.52	-3.846e+04	-3.584e+04	8.303e+05	128.80
75	4	2.06	12.00	-2.759e+04	-1.515e+04	-1131.60	41.28
	39	-3310.11	-5.63	-1.666e+04	-1595.89	-6.016e+05	765.09
	42	223.00	799.10	-1.822e+04	-5.571e+05	3.452e+04	2910.88
	41	-168.71	-745.22	-2.053e+04	5.280e+05	-2.763e+04	-2177.13
	37	-3311.06	5.26	-1.701e+04	-8437.00	-6.017e+05	-5.05
	38	3310.91	14.77	-2.189e+04	-1.073e+04	6.017e+05	291.03
77	41	488.12	-4688.05	-3.616e+04	1.069e+06	4.146e+04	-2562.36
	42	993.90	4776.64	-1367.37	-1.070e+06	1.335e+05	3930.21
	34	897.83	4659.95	-2168.18	-1.072e+06	1.170e+05	3033.23
	33	563.00	-4577.77	-3.540e+04	1.072e+06	5.468e+04	-1514.56
	37	-3271.78	-90.58	-1.671e+04	-182.84	-5.965e+05	2764.43
	38	3272.04	218.82	-2.253e+04	-4.056e+04	5.965e+05	-3147.49
79	4	-242.63	-306.09	-3.290e+04	1.189e+04	-3.033e+04	89.68
	38	3767.07	-108.11	-1.862e+04	-3731.52	6.852e+05	-2537.27
	34	-32.35	5873.77	-2.149e+04	-1.235e+06	4386.18	3895.15

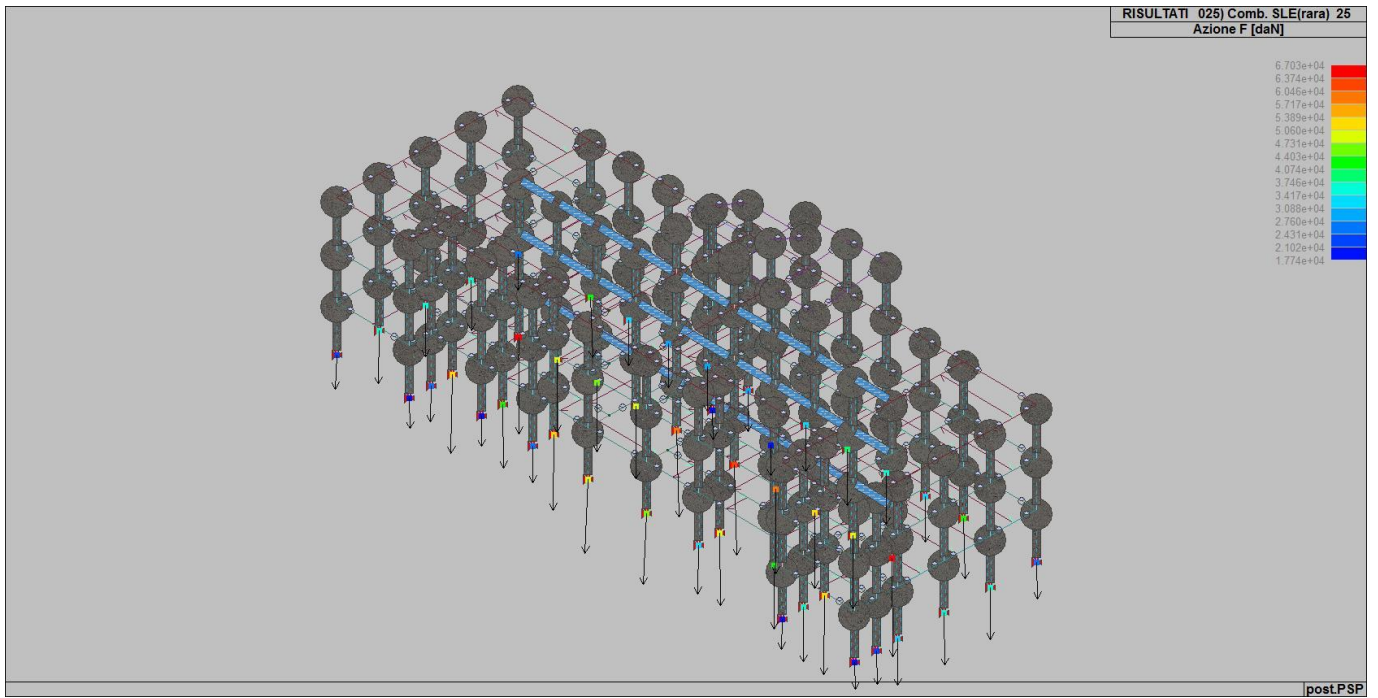
	33	-269.45	-6302.03	-1.997e+04	1.235e+06	-4.039e+04	-3027.51
	37	-3767.35	-331.53	-2.819e+04	2.758e+04	-6.852e+05	2378.36
	38	3767.07	-108.11	-1.862e+04	-3731.52	6.852e+05	-2537.27
81	4	185.03	-1406.01	-7.359e+04	1.476e+05	1.988e+04	-21.60
	5	119.97	-492.42	-3.551e+04	5.122e+04	1.308e+04	-102.05
	42	280.85	3486.55	-6.341e+04	-8.372e+05	3.930e+04	3450.53
	41	19.40	-5773.61	-3.995e+04	1.081e+06	-5150.79	-2825.57
	37	-4606.81	-910.13	-5.262e+04	9.875e+04	-8.319e+05	692.76
	38	4606.66	-863.54	-4.623e+04	8.916e+04	8.318e+05	-683.99
83	4	-1222.25	-38.53	-3.215e+04	-1.994e+04	-1.461e+05	89.45
	42	-477.30	4235.11	-1.425e+04	-1.118e+06	-3.851e+04	3061.65
	42	-477.30	4235.11	-1.425e+04	-1.118e+06	-3.851e+04	3061.65
	41	-998.35	-4458.50	-3.020e+04	1.124e+06	-1.335e+05	-2150.07
	37	-3526.91	-108.21	-2.735e+04	6476.56	-6.421e+05	1059.78
	38	3526.17	58.89	-1.807e+04	-3.172e+04	6.421e+05	-1328.77
85	4	-1042.47	-383.01	-4.968e+04	2.875e+04	-1.245e+05	-135.66
	5	-409.89	-81.08	-2.619e+04	2900.24	-4.914e+04	-136.53
	42	-549.46	4141.29	-3.727e+04	-8.795e+05	-5.741e+04	2842.79
	41	-762.40	-4837.02	-3.141e+04	9.486e+05	-9.823e+04	-2141.41
	37	-4034.79	-259.21	-3.800e+04	2.550e+04	-7.312e+05	-761.55
	38	4034.21	-164.17	-2.895e+04	3925.46	7.311e+05	-281.76
87	4	-51.85	237.20	-4.819e+04	-4.285e+04	-7658.99	-152.35
	5	-17.99	94.47	-2.378e+04	-1.730e+04	-2853.28	-112.65
	42	0.59	4406.39	-3.219e+04	-9.105e+05	593.41	1723.28
	41	-74.28	-4120.01	-3.235e+04	8.686e+05	-1.253e+04	-1537.45
	37	-3660.96	125.78	-3.229e+04	-1.937e+04	-7.354e+05	-1504.36
	38	3423.93	190.40	-3.190e+04	-3.631e+04	7.353e+05	595.72
115	4	975.22	59.51	-3.079e+04	-2.416e+04	1.181e+05	440.44
	39	-2147.12	178.67	-1.507e+04	-4.409e+04	-5.590e+05	1110.73
	34	449.37	4106.15	-2.283e+04	-7.840e+05	4.012e+04	-5056.73
	33	765.81	-4183.73	-1.945e+04	7.840e+05	1.048e+05	4413.36
	37	-3073.38	115.40	-1.659e+04	-3.018e+04	-5.592e+05	1271.08
	38	3073.53	-48.41	-2.613e+04	1584.64	5.592e+05	-852.09
201	41	-163.56	-5399.72	-3.715e+04	1.277e+06	1.044e+04	7105.92
	42	-866.63	5119.94	1134.71	-1.283e+06	-1.314e+05	-8456.92
	42	-866.63	5119.94	1134.71	-1.283e+06	-1.314e+05	-8456.92
	41	-163.56	-5399.72	-3.715e+04	1.277e+06	1.044e+04	7105.92
	37	-4042.42	-39.30	-2.492e+04	-1.466e+04	-7.344e+05	3727.10
	38	4041.90	-188.75	-1.505e+04	1.035e+04	7.344e+05	-4176.50
205	41	813.42	-3667.41	-3.111e+04	7.830e+05	1.210e+05	5646.03
	42	167.67	3588.81	-2466.98	-7.810e+05	-6030.88	-6963.77
	42	167.67	3588.81	-2466.98	-7.810e+05	-6030.88	-6963.77
	41	813.42	-3667.41	-3.111e+04	7.830e+05	1.210e+05	5646.03
	37	-3073.41	84.27	-1.173e+04	-2.680e+04	-5.592e+05	1320.88
	38	3073.56	-45.99	-2.207e+04	1509.70	5.592e+05	-1423.40
208	4	-149.27	19.53	-6.927e+04	-1.783e+04	-1.645e+04	-35.25
	5	-50.22	6.44	-3.134e+04	-6732.29	-5550.54	43.28
	42	-54.71	1578.00	-4.545e+04	-9.151e+05	-3281.33	-6809.17
	41	-121.72	-1571.43	-4.491e+04	8.506e+05	-1.505e+04	5327.82
	37	-4541.82	16.60	-4.619e+04	-1.226e+04	-8.151e+05	123.49
	38	4541.52	12.80	-4.335e+04	-1.037e+04	8.151e+05	-344.26



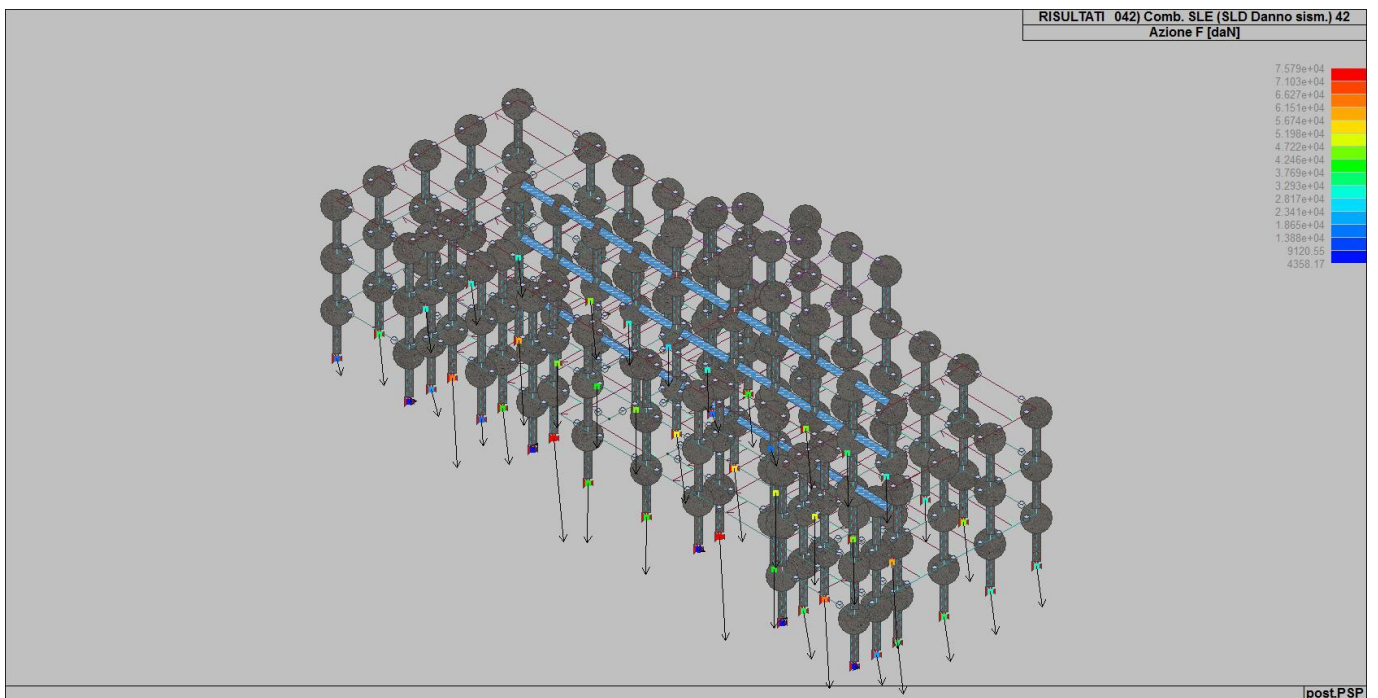
42_RIS_REAZIONI_004_Comb. SLU A1 4



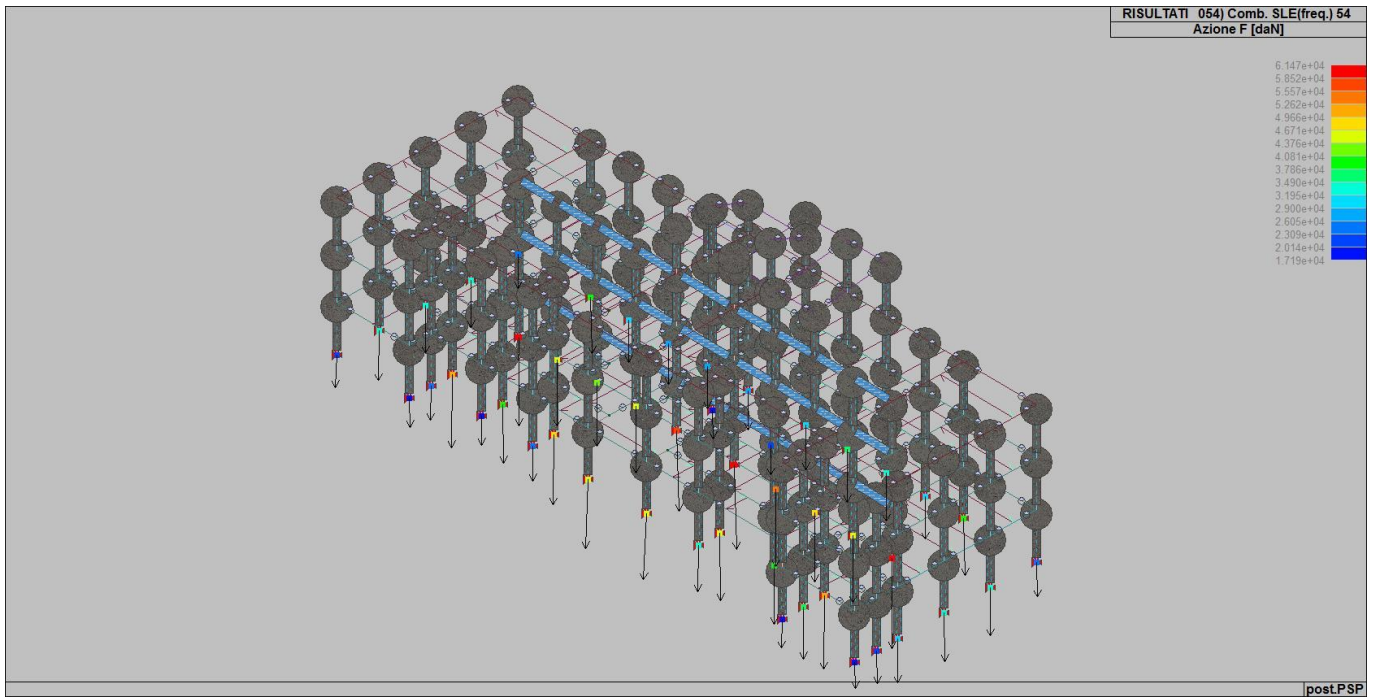
42_RIS_REAZIONI_018_Comb. SLU A2 18



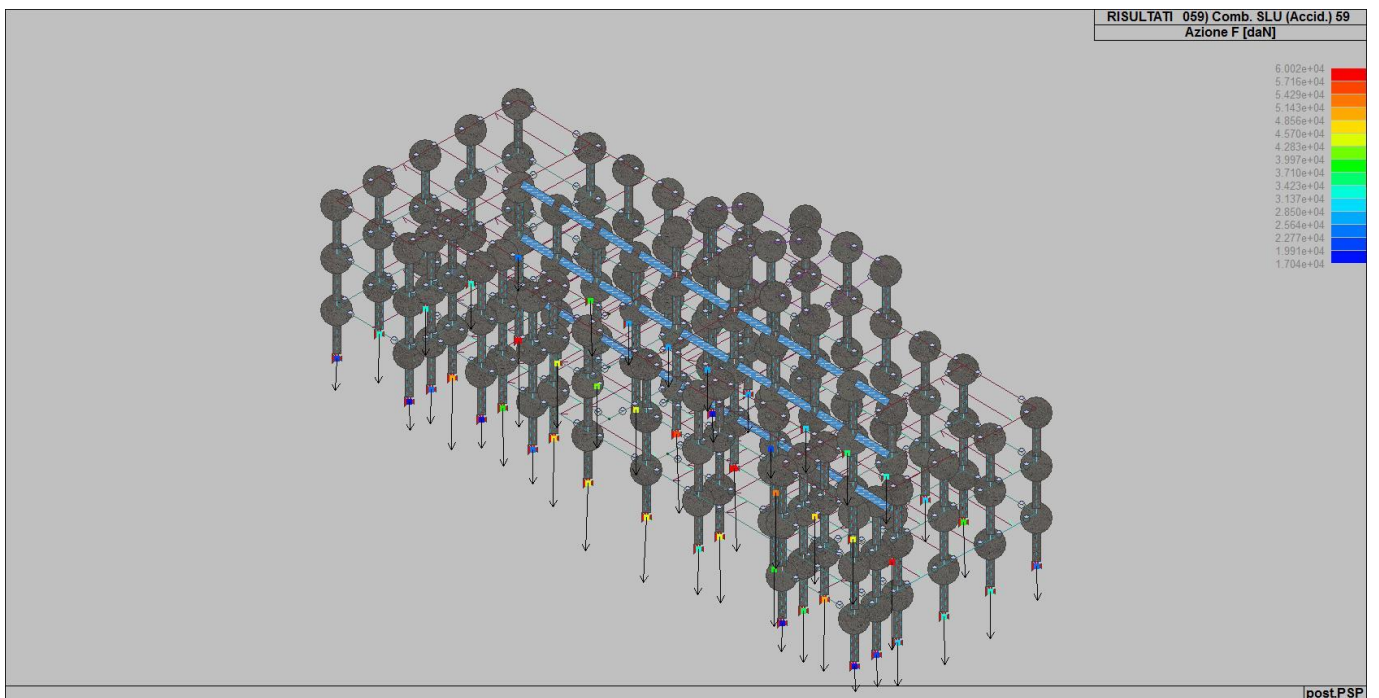
42_RIS_REAZIONI_025_Comb. SLE(rara) 25



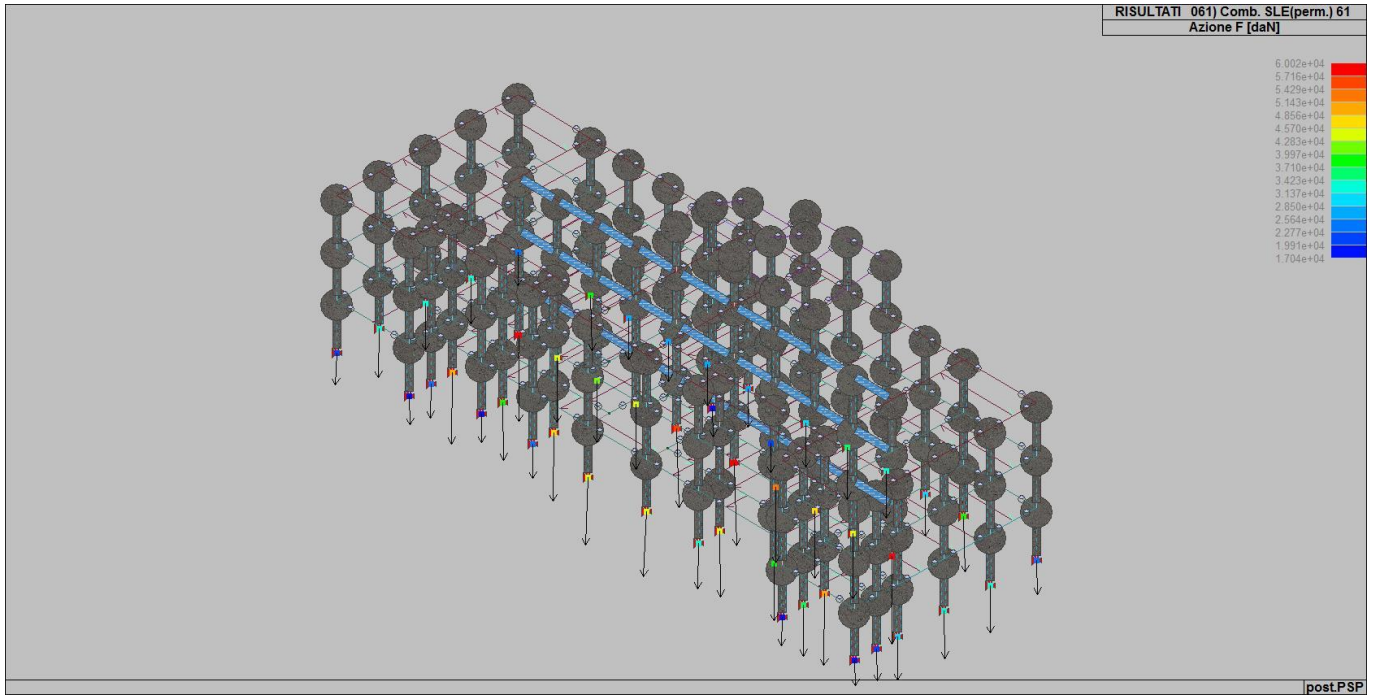
42_RIS_REAZIONI_042_Comb. SLE (SLD Danno sism.) 42



42_RIS_REAZIONI_054_Comb. SLE(freq.) 54



42_RIS_REAZIONI_059_Comb. SLU (Accid.) 59



42_RIS_REAZIONI_061_Comb. SLE(perm.) 61

RISULTATI ELEMENTI TIPO TRAVE

LEGENDA RISULTATI ELEMENTI TIPO TRAVE

Il controllo dei risultati delle analisi condotte, per quanto concerne gli elementi tipo trave, è possibile in relazione alle tabelle sotto riportate.

Gli elementi vengono suddivisi in relazione alle proprietà in elementi:

- tipo **pilastro**
- tipo **trave in elevazione**
- tipo **trave in fondazione**

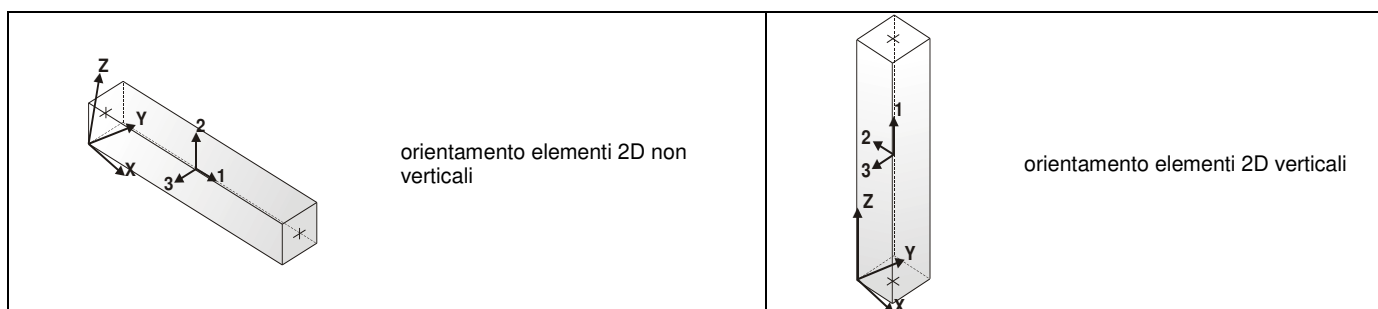
Per ogni elemento e per ogni combinazione (o caso di carico) vengono riportati i risultati più significativi.

Per gli elementi tipo *pilastro* sono riportati in tabella i seguenti valori:

Pilas.	numero dell'elemento pilastro
Cmb	combinazione in cui si verificano i valori riportati
M3 mx/mn	momento flettente in campata M3 max (prima riga) / min (seconda riga)
M2 mx/mn	momento flettente in campata M2 max (prima riga) / min (seconda riga)
D2/D3	freccia massima in direzione 2 (prima riga) / direzione 3 (seconda riga)
Q2/Q3	carico totale in direzione 2 (prima riga) / direzione 3 (seconda riga)
Pos.	ascissa del punto iniziale e finale dell'elemento
N, V2, ecc..	sei componenti di sollecitazione al piede ed in sommità dell'elemento

Per gli elementi tipo *trave in elevazione* sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri.

Per gli elementi tipo *trave in fondazione* (trave f.) sono riportati, oltre al numero dell'elemento, i medesimi risultati visti per i pilastri e la massima pressione sul terreno.



Pilas.	Cmb	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3	Pos.	N	V 2	V 3	T	M 2	M 3
		daN cm	daN cm	cm	daN	cm	daN	daN	daN	daN cm	daN cm	daN cm
1	2	-9273.02	4987.21	-2.59e-03	0.0	0.0-3.993e+04	8.25	-37.73	-65.54	4987.21	-1.224e+04	0.0
		-1.224e+04	-8593.90	3.26e-04	0.0	360.0-3.642e+04	8.25	-37.73	-65.54	-8593.90	-9273.02	0.0
1	4	-1.544e+04	4346.75	-3.54e-03	0.0	0.0-4.781e+04	-0.15	-34.97	20.70	4346.75	-1.544e+04	0.0
		-1.550e+04	-8242.38	2.51e-04	0.0	360.0-4.430e+04	-0.15	-34.97	20.70	-8242.38	-1.550e+04	0.0
1	5	-5004.16	2759.97	-1.29e-03	0.0	0.0-2.578e+04	-5.46	-23.60	50.93	2759.97	-5004.16	0.0
		-6968.63	-5735.58	1.43e-04	0.0	360.0-2.308e+04	-5.46	-23.60	50.93	-5735.58	-6968.63	0.0
1	15	-8081.70	2972.68	-1.92e-03	0.0	0.0-3.040e+04	-2.68	-24.56	31.16	2972.68	-8081.70	0.0
		-9048.18	-5868.47	1.62e-04	0.0	360.0-2.770e+04	-2.68	-24.56	31.16	-5868.47	-9048.18	0.0
1	18	-1.255e+04	3417.59	-2.90e-03	0.0	0.0-3.817e+04	0.56	-27.32	11.49	3417.59	-1.275e+04	0.0
		-1.275e+04	-6416.89	2.00e-04	0.0	360.0-3.547e+04	0.56	-27.32	11.49	-6416.89	-1.255e+04	0.0
1	21	-1.142e+04	3447.72	-2.66e-03	0.0	0.0-3.694e+04	-1.60	-28.21	30.38	3447.72	-1.142e+04	0.0
		-1.199e+04	-6706.16	1.91e-04	0.0	360.0-3.424e+04	-1.60	-28.21	30.38	-6706.16	-1.199e+04	0.0
1	22	-7371.50	2923.59	-1.78e-03	0.0	0.0-2.933e+04	-3.32	-24.34	35.72	2923.59	-7371.50	0.0
		-8568.28	-5837.81	1.58e-04	0.0	360.0-2.663e+04	-3.32	-24.34	35.72	-5837.81	-8568.28	0.0
1	25	-1.096e+04	3265.83	-2.53e-03	0.0	0.0-3.531e+04	-0.83	-26.46	20.59	3265.83	-1.096e+04	0.0
		-1.126e+04	-6259.67	1.85e-04	0.0	360.0-3.261e+04	-0.83	-26.46	20.59	-6259.67	-1.126e+04	0.0
1	28	-9937.33	3289.01	-2.34e-03	0.0	0.0-3.437e+04	-2.49	-27.14	35.12	3289.01	-9937.33	0.0
		-1.083e+04	-6482.18	1.80e-04	0.0	360.0-3.167e+04	-2.49	-27.14	35.12	-6482.18	-1.083e+04	0.0
1	32	-6900.47	7.261e+05	-1.63e-03	0.0	0.0-3.383e+04	-1.78	-4006.40	-394.18	7.261e+05	-6900.47	0.0
		-7540.24	-7.162e+05	0.16	0.0	360.0-3.113e+04	-1.78	-4006.40	-394.18	-7.162e+05	-7540.24	0.0
1	37	-9088.32	7.165e+05	-2.29e-03	0.0	0.0-3.154e+04	-7.87	4007.93	-203.44	7.263e+05	-9088.32	0.0
		-1.192e+04	-7.263e+05	-0.37	0.0	360.0-2.884e+04	-7.87	4007.93	-203.44	7.165e+05	-1.192e+04	0.0
1	38	-9117.44	7.263e+05	-2.15e-03	0.0	0.0-3.326e+04	1.06	-4007.77	85.94	7.263e+05	-9497.38	0.0
		-9497.38	-7.165e+05	0.34	0.0	360.0-3.056e+04	1.06	-4007.77	85.94	-7.165e+05	-9117.44	0.0
1	39	-1.198e+04	7.163e+05	-3.65e-03	0.0	0.0-3.116e+04	16.16	4006.79	577.30	7.261e+05	-1.780e+04	0.0
		-1.780e+04	-7.261e+05	-0.21	0.0	360.0-2.846e+04	16.16	4006.79	577.30	7.163e+05	-1.198e+04	0.0
1	41	5.037e+05	2.067e+04	0.11	0.0	0.0-3.322e+04	-199.51	130.69	2280.71	-2.638e+04	5.037e+05	0.0
		4.319e+05	-2.638e+04	-3.67e-03	0.0	360.0-3.052e+04	-199.51	130.69	2280.71	2.067e+04	4.319e+05	0.0
1	42	-4.286e+05	4.332e+04	-0.12	0.0	0.0-3.200e+04	327.09	-237.93	-3353.40	4.332e+04	-5.463e+05	0.0
		-5.463e+05	-4.233e+04	5.13e-03	0.0	360.0-2.930e+04	327.09	-237.93	-3353.40	-4.233e+04	-4.286e+05	0.0
1	53	-7371.50	2923.59	-1.78e-03	0.0	0.0-2.933e+04	-3.32	-24.34	35.72	2923.59	-7371.50	0.0
		-8568.28	-5837.81	1.58e-04	0.0	360.0-2.663e+04	-3.32	-24.34	35.72	-5837.81	-8568.28	0.0
1	54	-9857.20	3095.39	-2.29e-03	0.0	0.0-3.306e+04	-1.09	-25.11	19.75	3095.39	-9857.20	0.0
		-1.025e+04	-5945.14	1.75e-04	0.0	360.0-3.036e+04	-1.09	-25.11	19.75	-5945.14	-1.025e+04	0.0
1	57	-9518.12	3109.57	-2.22e-03	0.0	0.0-3.279e+04	-1.69	-25.41	25.10	3109.57	-9518.12	0.0
		-1.013e+04	-6037.22	1.73e-04	0.0	360.0-3.009e+04	-1.69	-25.41	25.10	-6037.22	-1.013e+04	0.0
1	58	-7371.50	2923.59	-1.78e-03	0.0	0.0-2.933e+04	-3.32	-24.34	35.72	2923.59	-7371.50	0.0
		-8568.28	-5837.81	1.58e-04	0.0	360.0-2.663e+04	-3.32	-24.34	35.72	-5837.81	-8568.28	0.0
1	59	-9502.10	3070.85	-2.21e-03	0.0	0.0-3.253e+04	-1.41	-25.00	22.03	3070.85	-9502.10	0.0
		-1.001e+04	-5929.81	1.72e-04	0.0	360.0-2.983e+04	-1.41	-25.00	22.03	-5929.81	-1.001e+04	0.0
1	60	-7371.50	2923.59	-1.78e-03	0.0	0.0-2.933e+04	-3.32	-24.34	35.72	2923.59	-7371.50	0.0
		-8568.28	-5837.81	1.58e-04	0.0	360.0-2.663e+04	-3.32	-24.34	35.72	-5837.81	-8568.28	0.0
1	61	-9502.10	3070.85	-2.21e-03	0.0	0.0-3.253e+04	-1.41	-25.00	22.03	3070.85	-9502.10	0.0
		-1.001e+04	-5929.81	1.72e-04	0.0	360.0-2.983e+04	-1.41	-25.00	22.03	-5929.81	-1.001e+04	0.0
2	3	4458.48	7013.05	-3.54e-03	0.0	0.0-4.239e+04	81.45	26.99	-46.47	-2704.54	-2.486e+04	0.0
		-2.486e+04	-2704.54	1.47e-04	0.0	360.0-3.888e+04	81.45	26.99	-46.47	7013.05	4458.48	0.0
2	4	4443.94	7080.69	-3.59e-03	0.0	0.0-4.313e+04	82.17	27.45	-35.52	-2801.55	-2.514e+04	0.0
		-2.514e+04	-2801.55	1.32e-04	0.0	360.0-3.962e+04	82.17	27.45	-35.52	7080.69	4443.94	0.0
2	5	1500.25	715.83	-1.30e-03	0.0	0.0-2.186e+04	29.38	2.99	23.34	-358.79	-9078.21	0.0
		-9078.21	-358.79	-1.94e-05	0.0	360.0-1.916e+04	29.38	2.99	23.34	715.83	1500.25	0.0
2	15	2369.74	2824.42	-1.94e-03	0.0	0.0-2.670e+04	44.38	11.00	-3.29	-1134.67	-1.361e+04	0.0
		-1.361e+04	-1134.67	4.89e-05	0.0	360.0-2.400e+04	44.38	11.00	-3.29	2824.42	2369.74	0.0
2	17	3673.98	5987.30	-2.91e-03	0.0	0.0-3.397e+04	66.87	23.02	-43.23	-2298.49	-2.040e+04	0.0
		-2.040e+04	-2298.49	1.28e-04	0.0	360.0-3.127e+04	66.87	23.02	-43.23	5987.30	3673.98	0.0
2	18	3661.38	6045.93	-2.94e-03	0.0	0.0-3.461e+04	67.49	23.41	-33.74	-2382.56	-2.064e+04	0.0
		-2.064e+04	-2382.56	1.15e-04	0.0	360.0-3.191e+04	67.49	23.41	-33.74	6045.93	3661.38	0.0
2	22	2169.09	2337.82	-1.80e-03	0.0	0.0-2.559e+04	40.92	9.15	2.86	-955.62	-1.256e+04	0.0
		-1.256e+04	-955.62	-4.09e-05	0.0	360.0-2.289e+04	40.92	9.15	2.86	2337.82	2169.09	0.0
2	24	3172.35	4770.81	-2.54e-03	0.0	0.0-3.118e+04	58.22	18.39	-27.87	-1850.87	-1.779e+04	0.0
		-1.779e+04	-1850.87	9.73e-05	0.0	360.0-2.848e+04	58.22	18.39	-27.87	4770.81	3172.35	0.0
2	25	3162.66	4815.90	-2.57e-03	0.0	0.0-3.167e+04	58.70	18.70	-20.57	-1915.54	-1.797e+04	0.0
		-1.797e+04	-1915.54	8.77e-05	0.0	360.0-2.897e+04	58.70	18.70	-20.57	4815.90	3162.66	0.0
2	34	-3.342e+05	3.540e+04	-0.10	0.0	0.0-2.897e+04	409.89	-174.48	-6577.64	3.540e+04	-4.817e+05	0.0
		-4.817e+05	-2.741e+04	4.96e-03	0.0	360.0-2.627e+04	409.89	-174.48	-6577.64	-2.741e+04	-3.342e+05	0.0
2	37	-1.20671	7.056e+05	-2.22e-03	0.0	0.0-2.866e+04	34.76	3947.58	-19.94	-7.156e+05	-1.372e+04	0.0
		-1.372e+04	-7.156e+05	-0.37	0.0	360.0-2.596e+04	34.76	3947.58	-19.94	7.056e+05	-1.20671	0.0
2	38	5292.96	7.155e+05	-2.21e-03	0.0	0.0-2.817e+04	60.98	-3947.38	-147.32	7.155e+05	-1.666e+04	0.0
		-1.666e+04	-7.055e+05	0.34	0.0	360.0-2.547e+04	60.98	-3947.38	-147.32	-7.055e+05	5292.96	0.0
2	39	856.37	7.054e+05	-3.98e-03	0.0	0.0-2.787e+04	74.53	3946.45	468.13	-7.154e+05	-2.597e+04	0.0
		-2.597e+04	-7.154e+05	-0.21	0.0	360.0-2.517e+04	74.53	3946.45	468.13	7.054e+05	856.37	0.0
2	41	4.898e+05	3.490e+04	0.11	0.0	0.0-2.876e+04	-224.68	205.59	6575.42	-3.911e+04	4.898e+05	0.0
		4.089e+05	-3.911e+04	-4.99e-03	0.0	360.0-2.606e+04	-224.68	205.59	6575.42	3.490e+04	4.089e+05	0.0
2	42	-3.593e+05	5.017e+04	-0.11	0.0	0.0-2.895e+04	516.31	-253.32	-8886.30	5.017e+04	-5.452e+05	0.0

		-5.452e+05	-4.102e+04	6.80e-03	0.0	360.0	-2.625e+04	516.31	-253.32	-8886.30	-4.102e+04	-3.593e+05
2	53	2169.09	2337.82	-1.80e-03	0.0	0.0	-2.559e+04	40.92	9.15	2.86	-955.62	-1.256e+04
		-1.256e+04	-955.62	-4.09e-05	0.0	360.0	-2.289e+04	40.92	9.15	2.86	2337.82	2169.09
2	54	2871.37	4040.91	-2.31e-03	0.0	0.0	-2.950e+04	53.03	15.62	-18.65	-1582.29	-1.622e+04
		-1.622e+04	-1582.29	7.91e-05	0.0	360.0	-2.680e+04	53.03	15.62	-18.65	4040.91	2871.37
2	58	2169.09	2337.82	-1.80e-03	0.0	0.0	-2.559e+04	40.92	9.15	2.86	-955.62	-1.256e+04
		-1.256e+04	-955.62	-4.09e-05	0.0	360.0	-2.289e+04	40.92	9.15	2.86	2337.82	2169.09
2	59	2771.05	3797.61	-2.24e-03	0.0	0.0	-2.894e+04	51.30	14.70	-15.58	-1492.77	-1.570e+04
		-1.570e+04	-1492.77	7.31e-05	0.0	360.0	-2.624e+04	51.30	14.70	-15.58	3797.61	2771.05
2	60	2169.09	2337.82	-1.80e-03	0.0	0.0	-2.559e+04	40.92	9.15	2.86	-955.62	-1.256e+04
		-1.256e+04	-955.62	-4.09e-05	0.0	360.0	-2.289e+04	40.92	9.15	2.86	2337.82	2169.09
2	61	2771.05	3797.61	-2.24e-03	0.0	0.0	-2.894e+04	51.30	14.70	-15.58	-1492.77	-1.570e+04
		-1.570e+04	-1492.77	7.31e-05	0.0	360.0	-2.624e+04	51.30	14.70	-15.58	3797.61	2771.05
3	3	4.560e+05	7122.22	-9.90e-03	0.0	0.0	-5.610e+04	1928.48	-55.44	64.93	7122.22	-2.383e+05
		-2.383e+05	-1.284e+04	4.40e-04	0.0	360.0	-5.259e+04	1928.48	-55.44	64.93	-1.284e+04	4.560e+05
3	4	4.573e+05	7041.60	-9.96e-03	0.0	0.0	-5.696e+04	1934.73	-55.20	84.38	7041.60	-2.392e+05
		-2.392e+05	-1.283e+04	4.29e-04	0.0	360.0	-5.345e+04	1934.73	-55.20	84.38	-1.283e+04	4.573e+05
3	5	1.536e+05	2.020e+04	-3.41e-03	0.0	0.0	-2.939e+04	651.85	83.00	106.16	-9682.28	-8.105e+04
		-8.105e+04	-9682.28	-5.01e-04	0.0	360.0	-2.669e+04	651.85	83.00	106.16	2.020e+04	1.536e+05
3	12	1.562e+05	2.020e+04	-3.52e-03	0.0	0.0	-3.113e+04	664.36	83.47	145.07	-9843.52	-8.292e+04
		-8.292e+04	-9843.52	-5.18e-04	0.0	360.0	-2.843e+04	664.36	83.47	145.07	2.020e+04	1.562e+05
3	15	2.425e+05	6644.69	-5.31e-03	0.0	0.0	-3.559e+04	1026.62	26.37	80.83	-2849.76	-1.271e+05
		-1.271e+05	-2849.76	-1.30e-04	0.0	360.0	-3.289e+04	1026.62	26.37	80.83	6644.69	2.425e+05
3	17	3.757e+05	7399.01	-8.15e-03	0.0	0.0	-4.489e+04	1588.78	-58.56	42.82	7399.01	-1.962e+05
		-1.962e+05	-1.368e+04	4.42e-04	0.0	360.0	-4.219e+04	1588.78	-58.56	42.82	-1.368e+04	3.757e+05
3	18	3.769e+05	7329.14	-8.20e-03	0.0	0.0	-4.564e+04	1594.20	-58.36	59.68	7329.14	-1.970e+05
		-1.970e+05	-1.368e+04	4.32e-04	0.0	360.0	-4.294e+04	1594.20	-58.36	59.68	-1.368e+04	3.769e+05
3	22	2.220e+05	9771.94	-4.87e-03	0.0	0.0	-3.416e+04	940.13	39.44	86.67	-4426.50	-1.165e+05
		-1.165e+05	-4426.50	-2.16e-04	0.0	360.0	-3.146e+04	940.13	39.44	86.67	9771.94	2.220e+05
3	24	3.245e+05	3457.18	-7.06e-03	0.0	0.0	-4.132e+04	1372.56	-25.89	57.44	3457.18	-1.697e+05
		-1.697e+05	-5864.29	2.30e-04	0.0	360.0	-3.862e+04	1372.56	-25.89	57.44	-5864.29	3.245e+05
3	25	3.254e+05	3403.43	-7.09e-03	0.0	0.0	-4.189e+04	1376.73	-25.74	70.41	3403.43	-1.703e+05
		-1.703e+05	-5861.63	2.22e-04	0.0	360.0	-3.919e+04	1376.73	-25.74	70.41	-5861.63	3.254e+05
3	26	2.237e+05	9777.25	-4.94e-03	0.0	0.0	-3.532e+04	948.47	39.75	112.61	-4533.99	-1.177e+05
		-1.177e+05	-4533.99	-2.27e-04	0.0	360.0	-3.262e+04	948.47	39.75	112.61	9777.25	2.237e+05
3	30	2.841e+05	7.736e+05	-6.11e-03	0.0	0.0	-4.281e+04	1199.90	-4272.95	-275.52	7.736e+05	-1.479e+05
		-1.479e+05	-7.647e+05	0.26	0.0	360.0	-4.011e+04	1199.90	-4272.95	-275.52	-7.647e+05	2.841e+05
3	37	2.723e+05	7.649e+05	-6.01e-03	0.0	0.0	-3.482e+04	1154.14	4273.82	185.86	-7.737e+05	-1.432e+05
		-1.432e+05	-7.737e+05	-0.37	0.0	360.0	-3.212e+04	1154.14	4273.82	185.86	7.649e+05	2.723e+05
3	38	2.873e+05	7.737e+05	-6.22e-03	0.0	0.0	-4.260e+04	1214.60	-4273.62	-140.06	7.737e+05	-1.499e+05
		-1.499e+05	-7.648e+05	0.34	0.0	360.0	-3.990e+04	1214.60	-4273.62	-140.06	-7.648e+05	2.873e+05
3	41	5.510e+05	3.796e+04	0.10	0.0	0.0	-3.240e+04	-988.04	229.63	2509.96	-4.470e+04	5.510e+05
		1.953e+05	-4.470e+04	-5.91e-03	0.0	360.0	-2.970e+04	-988.04	229.63	2509.96	3.796e+04	1.953e+05
3	42	6.476e+05	6.044e+04	-0.10	0.0	0.0	-4.264e+04	4480.66	-312.11	-3832.10	6.044e+04	-9.655e+05
		-9.655e+05	-5.192e+04	7.92e-03	0.0	360.0	-3.994e+04	4480.66	-312.11	-3832.10	-5.192e+04	6.476e+05
3	53	2.220e+05	9771.94	-4.87e-03	0.0	0.0	-3.416e+04	940.13	39.44	86.67	-4426.50	-1.165e+05
		-1.165e+05	-4426.50	-2.16e-04	0.0	360.0	-3.146e+04	940.13	39.44	86.67	9771.94	2.220e+05
3	54	2.937e+05	1092.08	-6.40e-03	0.0	0.0	-3.917e+04	1242.84	-6.29	66.21	1092.08	-1.537e+05
		-1.537e+05	-1173.42	1.18e-04	0.0	360.0	-3.647e+04	1242.84	-6.29	66.21	-1173.42	2.937e+05
3	55	2.223e+05	9773.00	-4.88e-03	0.0	0.0	-3.439e+04	941.80	39.50	91.86	-4448.00	-1.167e+05
		-1.167e+05	-4448.00	-2.18e-04	0.0	360.0	-3.169e+04	941.80	39.50	91.86	9773.00	2.223e+05
3	58	2.220e+05	9771.94	-4.87e-03	0.0	0.0	-3.416e+04	940.13	39.44	86.67	-4426.50	-1.165e+05
		-1.165e+05	-4426.50	-2.16e-04	0.0	360.0	-3.146e+04	940.13	39.44	86.67	9771.94	2.220e+05
3	59	2.835e+05	390.20	-6.18e-03	0.0	0.0	-3.846e+04	1199.59	0.24	69.13	390.20	-1.484e+05
		-1.484e+05	303.71	1.09e-04	0.0	360.0	-3.576e+04	1199.59	0.24	69.13	390.20	2.835e+05
3	60	2.220e+05	9771.94	-4.87e-03	0.0	0.0	-3.416e+04	940.13	39.44	86.67	-4426.50	-1.165e+05
		-1.165e+05	-4426.50	-2.16e-04	0.0	360.0	-3.146e+04	940.13	39.44	86.67	9771.94	2.220e+05
3	61	2.835e+05	390.20	-6.18e-03	0.0	0.0	-3.846e+04	1199.59	0.24	69.13	390.20	-1.484e+05
		-1.484e+05	303.71	1.09e-04	0.0	360.0	-3.576e+04	1199.59	0.24	69.13	390.20	2.835e+05
4	3	-9418.82	6.470e+04	-3.60e-03	0.0	0.0	-9.042e+04	-54.69	-542.31	112.97	6.470e+04	-9418.82
		-2.911e+04	-1.305e+05	3.46e-03	0.0	360.0	-8.691e+04	-54.69	-542.31	112.97	-1.305e+05	-2.911e+04
4	4	-9788.70	6.462e+04	-3.65e-03	0.0	0.0	-9.222e+04	-53.56	-541.74	113.99	6.462e+04	-9788.70
		-2.907e+04	-1.304e+05	3.46e-03	0.0	360.0	-8.871e+04	-53.56	-541.74	113.99	-1.304e+05	-2.907e+04
4	5	-4141.87	1.719e+04	-1.37e-03	0.0	0.0	-4.163e+04	-15.87	-143.75	29.38	1.719e+04	-4141.87
		-9853.91	-3.456e+04	9.22e-04	0.0	360.0	-3.893e+04	-15.87	-143.75	29.38	-3.456e+04	-9853.91
4	15	-5540.46	3.187e+04	-2.00e-03	0.0	0.0	-5.422e+04	-27.67	-266.97	55.30	3.187e+04	-5540.46
		-1.550e+04	-6.424e+04	1.71e-03	0.0	360.0	-5.152e+04	-27.67	-266.97	55.30	-6.424e+04	-1.550e+04
4	17	-7638.34	5.390e+04	-2.95e-03	0.0	0.0	-7.309e+04	-45.38	-451.79	94.18	5.390e+04	-7638.34
		-2.398e+04	-1.087e+05	2.88e-03	0.0	360.0	-7.039e+04	-45.38	-451.79	94.18	-1.087e+05	-2.398e+04
4	18	-7958.90	5.383e+04	-2.99e-03	0.0	0.0	-7.465e+04	-44.41	-451.30	95.07	5.383e+04	-7958.90
		-2.395e+04	-1.086e+05	2.88e-03	0.0	360.0	-7.195e+04	-44.41	-451.30	95.07	-1.086e+05	-2.395e+04
4	22	-5217.71	2.848e+04	-1.85e-03	0.0	0.0	-5.131e+04	-24.95	-238.53	49.32	2.848e+04	-5217.71
		-1.420e+04	-5.739e+04	1.53e-03	0.0	360.0	-4.861e+04	-24.95	-238.53	49.32	-5.739e+04	-1.420e+04
4	24	-6831.46	4.543e+04	-2.58e-03	0.0	0.0	-6.583e+04	-38.57	-380.70	79.23	4.543e+04	-6831.46
		-2.072e+04	-9.163e+04	2.43e-03	0.0	360.0	-6.313e+04	-38.57	-380.70	79.23	-9.163e+04	-2.072e+04
4	25	-7078.05	4.537e+04	-2.62e-03	0.0	0.0	-6.703e+04	-37.82	-380.33	79.91	4.537e+04	-7078.05

		-2.069e+04	-9.154e+04	2.43e-03	0.0	360.0	-6.433e+04	-37.82	-380.33	79.91	-9.154e+04	-2.069e+04
4	37	-1.015e+04	7.957e+05	-2.60e-03	0.0	0.0	-4.943e+04	-10.61	4406.63	464.20	-7.907e+05	-1.015e+04
		-1.397e+04	7.907e+05	-0.37	0.0	360.0	-4.673e+04	-10.61	4406.63	464.20	7.957e+05	-1.397e+04
4	38	-3290.50	7.907e+05	-1.90e-03	0.0	0.0	-7.197e+04	-43.52	-4406.63	-230.58	7.907e+05	-3290.50
		-1.896e+04	7.957e+05	0.34	0.0	360.0	-6.927e+04	-43.52	-4406.63	-230.58	-7.957e+05	-1.896e+04
4	39	-4353.35	5.022e+05	-4.33e-03	0.0	0.0	-4.799e+04	59.52	3590.73	991.54	-7.905e+05	-2.578e+04
		-2.578e+04	7.905e+05	-0.21	0.0	360.0	-4.529e+04	59.52	3590.73	991.54	5.022e+05	-4353.35
4	40	1.069e+04	7.905e+05	3.25e-04	0.0	0.0	-7.361e+04	-104.79	-4118.36	-923.24	7.905e+05	1.069e+04
		-2.703e+04	6.921e+05	0.20	0.0	360.0	-7.091e+04	-104.79	-4118.36	-923.24	6.921e+05	-2.703e+04
4	41	9.069e+05	3.419e+04	0.10	0.0	0.0	-6.161e+04	-4133.82	-298.57	3.869e+04	3.419e+04	9.069e+05
		-5.812e+05	7.330e+04	1.72e-03	0.0	360.0	-5.891e+04	-4133.82	-298.57	3.869e+04	-7.330e+04	-5.812e+05
4	42	5.220e+05	4.550e+04	-0.10	0.0	0.0	-6.057e+04	3969.09	-358.39	-4.394e+04	4.550e+04	-9.069e+05
		-9.069e+05	8.352e+04	2.75e-03	0.0	360.0	-5.787e+04	3969.09	-358.39	-4.394e+04	-8.352e+04	5.220e+05
4	53	-5217.71	2.848e+04	-1.85e-03	0.0	0.0	-5.131e+04	-24.95	-238.53	49.32	2.848e+04	-5217.71
		-1.420e+04	5.739e+04	1.53e-03	0.0	360.0	-4.861e+04	-24.95	-238.53	49.32	-5.739e+04	-1.420e+04
4	54	-6347.34	4.034e+04	-2.36e-03	0.0	0.0	-6.147e+04	-34.49	-338.05	70.26	4.034e+04	-6347.34
		-1.876e+04	8.136e+04	2.16e-03	0.0	360.0	-5.877e+04	-34.49	-338.05	70.26	-8.136e+04	-1.876e+04
4	58	-5217.71	2.848e+04	-1.85e-03	0.0	0.0	-5.131e+04	-24.95	-238.53	49.32	2.848e+04	-5217.71
		-1.420e+04	5.739e+04	1.53e-03	0.0	360.0	-4.861e+04	-24.95	-238.53	49.32	-5.739e+04	-1.420e+04
4	59	-6185.96	3.865e+04	-2.29e-03	0.0	0.0	-6.002e+04	-33.12	-323.84	67.26	3.865e+04	-6185.96
		-1.811e+04	7.793e+04	2.07e-03	0.0	360.0	-5.732e+04	-33.12	-323.84	67.26	-7.793e+04	-1.811e+04
4	60	-5217.71	2.848e+04	-1.85e-03	0.0	0.0	-5.131e+04	-24.95	-238.53	49.32	2.848e+04	-5217.71
		-1.420e+04	5.739e+04	1.53e-03	0.0	360.0	-4.861e+04	-24.95	-238.53	49.32	-5.739e+04	-1.420e+04
4	61	-6185.96	3.865e+04	-2.29e-03	0.0	0.0	-6.002e+04	-33.12	-323.84	67.26	3.865e+04	-6185.96
		-1.811e+04	7.793e+04	2.07e-03	0.0	360.0	-5.732e+04	-33.12	-323.84	67.26	-7.793e+04	-1.811e+04
5	2	1.635e+04	4329.63	-2.70e-03	0.0	0.0	-2.679e+04	115.02	16.38	68.68	-1565.91	-2.505e+04
		-2.505e+04	1565.91	1.14e-04	0.0	360.0	-2.328e+04	115.02	16.38	68.68	4329.63	1.635e+04
5	4	1.404e+04	6477.03	-3.44e-03	0.0	0.0	-2.746e+04	118.69	25.76	127.56	-2796.30	-2.869e+04
		-2.869e+04	2796.30	-1.29e-04	0.0	360.0	-2.395e+04	118.69	25.76	127.56	6477.03	1.404e+04
5	5	8149.59	270.83	-1.26e-03	0.0	0.0	-1.999e+04	55.74	0.80	70.19	-16.15	-1.192e+04
		-1.192e+04	16.15	2.53e-05	0.0	360.0	-1.729e+04	55.74	0.80	70.19	270.83	8149.59
5	11	1.484e+04	5389.68	-3.16e-03	0.0	0.0	-2.798e+04	117.00	21.41	130.11	-2317.41	-2.728e+04
		-2.728e+04	2317.41	-1.06e-04	0.0	360.0	-2.447e+04	117.00	21.41	130.11	5389.68	1.484e+04
5	15	8925.79	2389.70	-1.87e-03	0.0	0.0	-2.027e+04	69.82	9.34	80.11	-972.18	-1.621e+04
		-1.621e+04	972.18	-4.13e-05	0.0	360.0	-1.757e+04	69.82	9.34	80.11	2389.70	8925.79
5	18	1.113e+04	5579.12	-2.82e-03	0.0	0.0	-2.127e+04	95.80	22.22	101.66	-2421.41	-2.335e+04
		-2.335e+04	2421.41	-1.12e-04	0.0	360.0	-1.857e+04	95.80	22.22	101.66	5579.12	1.113e+04
5	21	1.183e+04	4636.75	-2.58e-03	0.0	0.0	-2.172e+04	94.34	18.45	103.87	-2006.38	-2.213e+04
		-2.213e+04	2006.38	-9.26e-05	0.0	360.0	-1.902e+04	94.34	18.45	103.87	4636.75	1.183e+04
5	22	8746.66	1900.73	-1.73e-03	0.0	0.0	-2.021e+04	66.57	7.37	77.82	-751.56	-1.522e+04
		-1.522e+04	751.56	3.56e-05	0.0	360.0	-1.751e+04	66.57	7.37	77.82	1900.73	8746.66
5	25	1.045e+04	4354.13	-2.46e-03	0.0	0.0	-2.097e+04	86.56	17.28	94.40	-1866.35	-2.071e+04
		-2.071e+04	1866.35	-8.51e-05	0.0	360.0	-1.827e+04	86.56	17.28	94.40	4354.13	1.045e+04
5	28	1.098e+04	3629.23	-2.27e-03	0.0	0.0	-2.132e+04	85.43	14.38	96.10	-1547.09	-1.977e+04
		-1.977e+04	1547.09	-7.01e-05	0.0	360.0	-1.862e+04	85.43	14.38	96.10	3629.23	1.098e+04
5	33	8.693e+05	7757.46	0.10	0.0	0.0	-2.195e+04	-4555.84	43.42	1581.67	-7872.97	8.693e+05
		-7.708e+05	7872.97	-9.26e-04	0.0	360.0	-1.925e+04	-4555.84	43.42	1581.67	7757.46	-7.708e+05
5	34	7.786e+05	5433.52	-0.10	0.0	0.0	-1.453e+04	4577.42	-15.64	-1720.20	5433.52	8.693e+05
		-8.693e+05	198.24	1.19e-03	0.0	360.0	-1.183e+04	4577.42	-15.64	-1720.20	-198.24	7.786e+05
5	37	9785.38	5.974e+05	-2.27e-03	0.0	0.0	-2.079e+04	80.49	3379.07	226.76	-6.191e+05	-1.919e+04
		-1.919e+04	6.191e+05	-0.36	0.0	360.0	-1.809e+04	80.49	3379.07	226.76	5.974e+05	9785.38
5	38	1.397e+04	6.190e+05	-2.29e-03	0.0	0.0	-1.980e+04	97.97	-3199.34	-263.43	6.190e+05	-2.130e+04
		-2.130e+04	5.327e+05	0.34	0.0	360.0	-1.710e+04	97.97	-3199.34	-263.43	-5.327e+05	1.397e+04
5	42	8.532e+05	8378.25	-0.12	0.0	0.0	-1.407e+04	4784.39	-27.76	-2181.75	8378.25	8.532e+05
		-8.692e+05	1615.33	1.69e-03	0.0	360.0	-1.137e+04	4784.39	-27.76	-2181.75	-1615.33	8.532e+05
5	43	8.477e+05	5608.14	0.08	0.0	0.0	-2.313e+04	-4252.07	32.72	1420.53	-6172.03	8.477e+05
		-6.831e+05	6172.03	-7.76e-04	0.0	360.0	-2.043e+04	-4252.07	32.72	1420.53	5608.14	-6.831e+05
5	53	8746.66	1900.73	-1.73e-03	0.0	0.0	-2.021e+04	66.57	7.37	77.82	-751.56	-1.522e+04
		-1.522e+04	751.56	3.56e-05	0.0	360.0	-1.751e+04	66.57	7.37	77.82	1900.73	8746.66
5	54	9373.59	3612.12	-2.22e-03	0.0	0.0	-2.043e+04	77.94	14.27	85.84	-1523.74	-1.868e+04
		-1.868e+04	1523.74	-6.81e-05	0.0	360.0	-1.773e+04	77.94	14.27	85.84	3612.12	9373.59
5	57	9605.53	3371.06	-2.16e-03	0.0	0.0	-2.058e+04	77.81	13.30	86.74	-1418.10	-1.841e+04
		-1.841e+04	1418.10	-6.31e-05	0.0	360.0	-1.788e+04	77.81	13.30	86.74	3371.06	9605.53
5	58	8746.66	1900.73	-1.73e-03	0.0	0.0	-2.021e+04	66.57	7.37	77.82	-751.56	-1.522e+04
		-1.522e+04	751.56	3.56e-05	0.0	360.0	-1.751e+04	66.57	7.37	77.82	1900.73	8746.66
5	59	9284.03	3367.63	-2.15e-03	0.0	0.0	-2.040e+04	76.31	13.28	84.69	-1413.43	-1.819e+04
		-1.819e+04	1413.43	-6.27e-05	0.0	360.0	-1.770e+04	76.31	13.28	84.69	3367.63	9284.03
5	60	8746.66	1900.73	-1.73e-03	0.0	0.0	-2.021e+04	66.57	7.37	77.82	-751.56	-1.522e+04
		-1.522e+04	751.56	3.56e-05	0.0	360.0	-1.751e+04	66.57	7.37	77.82	1900.73	8746.66
5	61	9284.03	3367.63	-2.15e-03	0.0	0.0	-2.040e+04	76.31	13.28	84.69	-1413.43	-1.819e+04
		-1.819e+04	1413.43	-6.27e-05	0.0	360.0	-1.770e+04	76.31	13.28	84.69	3367.63	9284.03
6	1	1.375e+05	3.615e+04	-3.86e-03	0.0	0.0	-2.870e+04	606.05	-297.30	-162.82	3.615e+04	-8.072e+04
		-8.072e+04	7.087e+04	1.98e-03	0.0	360.0	-2.519e+04	606.05	-297.30	-162.82	-7.087e+04	1.375e+05
6	4	2.044e+05	3.583e+04	-5.93e-03	0.0	0.0	-3.401e+04	906.12	-298.11	-56.77	3.583e+04	-1.218e+05
		-1.218e+05	7.149e+04	1.94e-03	0.0	360.0	-3.050e+04	906.12	-298.11	-56.77	-7.149e+04	2.044e+05
6	5	7.265e+04	2.636e+04	-2.20e-03	0.0	0.0	-1.966e+04	324.82	-223.12	-9.39	2.636e+04	-4.429e+04

-2.381e+06 -9.395e+05 -0.50 -3.02e-03 -9.222e+04 -8882.63 -5170.28 -4.394e+04
 2.379e+06 9.395e+05 0.46 3.02e-03 5350.66 8490.38 5171.16 4.576e+04

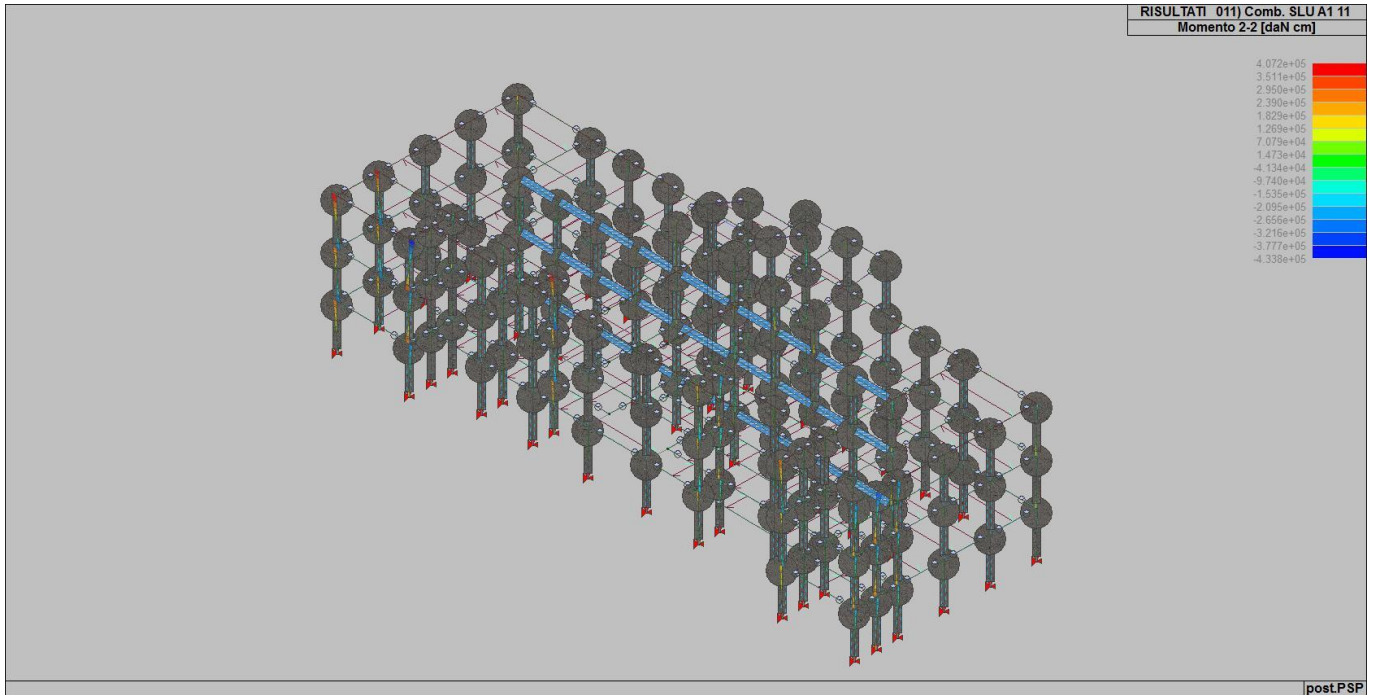
Trave	Cmb	M3 mx/mn daN cm	M2 mx/mn daN cm	D 2 / D 3 cm	Q 2 / Q 3 daN	Pos. cm	N daN	V 2 daN	V 3 daN	T daN cm	M 2 daN cm	M 3 daN cm
45	3	1.596e+04	60.60	-8.28e-03	-2286.38	0.0	24.18	892.95	-0.03	-76.97	60.60	-4.236e+04
		-1.262e+05	51.47	1.52e-05	0.0	335.0	24.18	-1393.43	-0.03	-76.97	51.47	-1.262e+05
45	9	2.381e+04	85.48	-6.57e-03	-2286.38	0.0	6.13	1004.40	-0.25	-19.25	85.48	-5.010e+04
		-9.659e+04	1.35	1.01e-04	0.0	335.0	6.13	-1281.97	-0.25	-19.25	1.35	-9.659e+04
45	12	2.284e+04	73.85	-4.09e-03	-1758.75	0.0	-4.29	828.80	-0.28	14.62	73.85	-4.234e+04
		-5.928e+04	-21.14	1.14e-04	0.0	335.0	-4.29	-929.95	-0.28	14.62	-21.14	-5.928e+04
45	15	1.781e+04	52.51	-4.94e-03	-1758.75	0.0	6.50	762.95	-0.12	-18.99	52.51	-3.762e+04
		-7.662e+04	13.10	5.12e-05	0.0	335.0	6.50	-995.80	-0.12	-18.99	13.10	-7.662e+04
45	17	1.124e+04	45.71	-6.70e-03	-1758.75	0.0	21.39	669.34	1.34e-03	-68.48	45.26	-3.142e+04
		-1.018e+05	45.26	-1.37e-05	0.0	335.0	21.39	-1089.41	1.34e-03	-68.48	45.71	-1.018e+05
45	19	1.774e+04	66.82	-5.22e-03	-1758.75	0.0	5.75	765.94	-0.19	-18.46	66.82	-3.813e+04
		-7.613e+04	2.27	7.72e-05	0.0	335.0	5.75	-992.81	-0.19	-18.46	2.27	-7.613e+04
45	22	1.897e+04	53.62	-4.66e-03	-1758.75	0.0	4.21	777.35	-0.14	-11.37	53.62	-3.857e+04
		-7.275e+04	8.08	5.86e-05	0.0	335.0	4.21	-981.40	-0.14	-11.37	8.08	-7.275e+04
45	24	1.338e+04	48.05	-6.02e-03	-1758.75	0.0	15.66	705.35	-0.04	-49.44	48.05	-3.381e+04
		-9.211e+04	33.16	2.13e-05	0.0	335.0	15.66	-1053.40	-0.04	-49.44	33.16	-9.211e+04
45	26	1.891e+04	64.63	-4.88e-03	-1758.75	0.0	3.63	779.65	-0.19	-10.97	64.63	-3.897e+04
		-7.237e+04	-0.25	7.86e-05	0.0	335.0	3.63	-979.10	-0.19	-10.97	-0.25	-7.237e+04
45	30	1.700e+04	2032.72	-5.18e-03	-1758.75	0.0	-260.76	689.72	-12.83	697.08	2032.72	-2.822e+04
		-9.175e+04	-2265.29	1.63e-03	0.0	335.0	-260.76	-1069.03	-12.83	697.08	-2265.29	-9.175e+04
45	41	5.329e+05	957.29	9.05e-03	-1758.75	0.0	-690.10	5008.95	-4.87	-185.89	957.29	-8.505e+05
		-8.505e+05	-675.21	1.76e-03	0.0	335.0	-690.10	3250.20	-4.87	-185.89	-675.21	5.329e+05
45	42	7.748e+05	1494.05	-0.01	-1758.75	0.0	477.72	-3568.60	9.77	285.18	-1780.12	7.748e+05
		-7.153e+05	-1780.12	-2.65e-03	0.0	335.0	477.72	-5327.35	9.77	285.18	1494.05	-7.153e+05
45	53	1.897e+04	53.62	-4.66e-03	-1758.75	0.0	4.21	777.35	-0.14	-11.37	53.62	-3.857e+04
		-7.275e+04	8.08	5.86e-05	0.0	335.0	4.21	-981.40	-0.14	-11.37	8.08	-7.275e+04
45	54	1.492e+04	49.72	-5.61e-03	-1758.75	0.0	12.22	726.95	-0.07	-38.02	49.72	-3.524e+04
		-8.630e+04	25.64	3.25e-05	0.0	335.0	12.22	-1031.80	-0.07	-38.02	25.64	-8.630e+04
45	55	1.896e+04	55.82	-4.71e-03	-1758.75	0.0	4.09	777.81	-0.15	-11.29	55.82	-3.865e+04
		-7.267e+04	6.41	6.26e-05	0.0	335.0	4.09	-980.94	-0.15	-11.29	6.41	-7.267e+04
45	58	1.897e+04	53.62	-4.66e-03	-1758.75	0.0	4.21	777.35	-0.14	-11.37	53.62	-3.857e+04
		-7.275e+04	8.08	5.86e-05	0.0	335.0	4.21	-981.40	-0.14	-11.37	8.08	-7.275e+04
45	59	1.550e+04	50.28	-5.48e-03	-1758.75	0.0	11.08	734.15	-0.08	-34.21	50.28	-3.571e+04
		-8.436e+04	23.13	3.62e-05	0.0	335.0	11.08	-1024.60	-0.08	-34.21	23.13	-8.436e+04
45	60	1.897e+04	53.62	-4.66e-03	-1758.75	0.0	4.21	777.35	-0.14	-11.37	53.62	-3.857e+04
		-7.275e+04	8.08	5.86e-05	0.0	335.0	4.21	-981.40	-0.14	-11.37	8.08	-7.275e+04
45	61	1.550e+04	50.28	-5.48e-03	-1758.75	0.0	11.08	734.15	-0.08	-34.21	50.28	-3.571e+04
		-8.436e+04	23.13	3.62e-05	0.0	335.0	11.08	-1024.60	-0.08	-34.21	23.13	-8.436e+04
46	3	2.454e+05	609.74	-0.01	-1.397e+04	0.0	57.34	6461.70	-3.33	-1.866e+04	609.74	-2.948e+05
		-4.845e+05	-597.66	4.20e-04	0.0	362.5	57.34	-7508.14	-3.33	-1.866e+04	-597.66	4.845e+05
46	4	2.456e+05	597.35	-0.01	-1.397e+04	0.0	54.80	6457.74	-3.27	-1.871e+04	597.35	-2.939e+05
		-4.850e+05	-588.72	4.26e-04	0.0	362.5	54.80	-7512.10	-3.27	-1.871e+04	-588.72	4.850e+05
46	12	8.006e+04	133.82	-3.60e-03	-4576.56	0.0	-12.24	2083.63	-0.79	-7488.51	133.82	-9.162e+04
		-1.658e+05	-153.09	1.98e-04	0.0	362.5	-12.24	-2492.94	-0.79	-7488.51	-153.09	1.658e+05
46	17	2.026e+05	508.35	-9.97e-03	-1.153e+04	0.0	50.60	5335.21	-2.77	-1.524e+04	508.35	-2.437e+05
		-3.990e+05	-496.31	3.40e-04	0.0	362.5	50.60	-6192.29	-2.77	-1.524e+04	-496.31	3.990e+05
46	18	2.028e+05	497.61	-1.00e-02	-1.153e+04	0.0	48.40	5331.78	-2.72	-1.528e+04	497.61	-2.429e+05
		-3.995e+05	-488.56	3.45e-04	0.0	362.5	48.40	-6195.72	-2.72	-1.528e+04	-488.56	3.995e+05
46	19	1.292e+05	277.03	-6.16e-03	-7356.94	0.0	11.54	3382.15	-1.55	-1.061e+04	277.03	-1.520e+05
		-2.594e+05	-285.61	2.58e-04	0.0	362.5	11.54	-3974.79	-1.55	-1.061e+04	-285.61	2.594e+05
46	24	1.742e+05	427.64	-8.49e-03	-9923.44	0.0	37.27	4586.67	-2.34	-1.342e+04	427.64	-2.090e+05
		-3.449e+05	-421.23	3.05e-04	0.0	362.5	37.27	-5336.77	-2.34	-1.342e+04	-421.23	3.449e+05
46	25	1.743e+05	419.38	-8.50e-03	-9923.44	0.0	35.58	4584.03	-2.30	-1.346e+04	419.38	-2.084e+05
		-3.453e+05	-415.27	3.09e-04	0.0	362.5	35.58	-5339.40	-2.30	-1.346e+04	-415.27	3.453e+05
46	26	1.177e+05	249.70	-5.56e-03	-6715.31	0.0	7.22	3084.32	-1.40	-9869.56	249.70	-1.384e+05
		-2.375e+05	-259.15	2.41e-04	0.0	362.5	7.22	-3631.00	-1.40	-9869.56	-259.15	2.375e+05
46	29	1.522e+05	3497.63	-6.69e-03	-8640.19	0.0	227.39	3969.58	-18.33	-5.838e+04	3497.63	-1.776e+05
		-3.047e+05	-3147.75	1.89e-03	0.0	362.5	227.39	-4670.61	-18.33	-5.838e+04	-3147.75	3.047e+05
46	37	1.519e+05	5845.98	-6.64e-03	-8640.19	0.0	187.80	3983.50	-31.19	-8.269e+04	5845.98	-1.802e+05
		-3.022e+05	-5461.69	3.87e-03	0.0	362.5	187.80	-4656.69	-31.19	-8.269e+04	-5461.69	3.022e+05
46	41	3.053e+05	448.43	-0.01	-8640.19	0.0	-919.62	6861.75	-3.34	-1.162e+04	448.43	-6.818e+05
		-6.818e+05	-760.88	1.79e-03	0.0	362.5	-919.62	-1778.43	-3.34	-1.162e+04	-760.88	2.395e+05
46	42	3.589e+05	688.62	-9.41e-03	-8640.19	0.0	165.91	1120.06	2.20	-1.249e+04	688.62	-3.26e+05
		-8.274e+05	-109.45	-2.03e-03	0.0	362.5	165.91	-7520.13	2.20	-1.249e+04	-109.45	8.274e+05
46	54	1.572e+05	379.22	-7.60e-03	-8961.00	0.0	29.27	4137.55	-2.08	-1.234e+04	379.22	-1.882e+05
		-3.125e+05	-376.19	2.83e-04	0.0	362.5	29.27	-4823.45	-2.08	-1.234e+04	-376.19	3.125e+05
46	55	1.175e+05	262.92	-5.53e-03	-6715.31	0.0	9.93	3088.54	-1.47	-9814.74	262.92	-1.394e+05
		-2.369e+05	-268.69	2.35e-04	0.0	362.5	9.93	-3626.77	-1.47	-9814.74	-268.69	2.369e+05
46	58	1.174e+05	266.23	-5.52e-03	-6715.31	0.0	10.61	3089.59	-1.48	-9801.03	266.23	-1.396e+05
		-2.368e+05	-271.07	2.33e-04	0.0	362.5	10.61	-3625.72	-1.48	-9801.03	-271.07	2.368e+05
46	59	1.515e+05	363.08	-7.30e-03	-8640.19	0.0	26.61	3987.84	-2.00	-1.197e+04	363.08	-1.812e+05

		-3.017e+05	-361.17	2.76e-04	0.0	362.5	26.61	-4652.35	-2.00	-1.197e+04	-361.17	-3.017e+05
46	60	1.174e+05	266.23	-5.52e-03	-6715.31	0.0	10.61	3089.59	-1.48	-9801.03	266.23	-1.396e+05
		-2.368e+05	-271.07	2.33e-04	0.0	362.5	10.61	-3625.72	-1.48	-9801.03	-271.07	-2.368e+05
46	61	1.515e+05	363.08	-7.30e-03	-8640.19	0.0	26.61	3987.84	-2.00	-1.197e+04	363.08	-1.812e+05
		-3.017e+05	-361.17	2.76e-04	0.0	362.5	26.61	-4652.35	-2.00	-1.197e+04	-361.17	-3.017e+05
47	3	1.976e+05	98.56	-8.92e-03	-1.378e+04	0.0	28.90	6759.69	-0.93	-502.36	98.56	-3.950e+05
		-4.411e+05	-234.47	1.00e-04	0.0	357.5	28.90	-7017.47	-0.93	-502.36	-234.47	-4.411e+05
47	4	1.977e+05	97.16	-8.91e-03	-1.378e+04	0.0	27.99	6756.04	-0.92	-495.61	97.16	-3.943e+05
		-4.417e+05	-233.49	1.07e-04	0.0	357.5	27.99	-7021.12	-0.92	-495.61	-233.49	-4.417e+05
47	12	6.427e+04	16.96	-2.88e-03	-4513.44	0.0	-11.67	2190.55	-0.28	-73.28	16.96	-1.256e+05
		-1.492e+05	-82.66	8.22e-05	0.0	357.5	-11.67	-2322.89	-0.28	-73.28	-82.66	-1.492e+05
47	17	1.631e+05	82.92	-7.36e-03	-1.137e+04	0.0	26.30	5580.00	-0.77	-424.39	82.92	-3.263e+05
		-3.635e+05	-192.49	7.87e-05	0.0	357.5	26.30	-5788.50	-0.77	-424.39	-192.49	-3.635e+05
47	18	1.632e+05	81.70	-7.36e-03	-1.137e+04	0.0	25.51	5576.84	-0.76	-418.53	81.70	-3.256e+05
		-3.640e+05	-191.64	8.45e-05	0.0	357.5	25.51	-5791.66	-0.76	-418.53	-191.64	-3.640e+05
47	19	1.038e+05	42.59	-4.67e-03	-7255.46	0.0	3.03	3544.38	-0.47	-210.12	42.59	-2.055e+05
		-2.353e+05	-126.07	8.34e-05	0.0	357.5	3.03	-3711.08	-0.47	-210.12	-126.07	-2.353e+05
47	24	1.403e+05	68.34	-6.33e-03	-9786.56	0.0	17.95	4799.51	-0.66	-346.48	68.34	-2.803e+05
		-3.138e+05	-167.59	7.57e-05	0.0	357.5	17.95	-4987.06	-0.66	-346.48	-167.59	-3.138e+05
47	25	1.403e+05	67.41	-6.33e-03	-9786.56	0.0	17.35	4797.07	-0.66	-341.98	67.41	-2.798e+05
		-3.142e+05	-166.94	8.02e-05	0.0	357.5	17.35	-4989.49	-0.66	-341.98	-166.94	-3.142e+05
47	26	9.469e+04	37.33	-4.26e-03	-6622.69	0.0	0.06	3233.64	-0.43	-181.66	37.33	-1.874e+05
		-2.151e+05	-116.50	7.96e-05	0.0	357.5	0.06	-3389.04	-0.43	-181.66	-116.50	-2.151e+05
47	40	1.249e+05	287.90	-5.71e-03	-8521.01	0.0	185.03	4088.34	-0.13	-557.14	287.90	-2.251e+05
		-2.866e+05	-240.78	4.09e-04	0.0	357.5	185.03	-4432.67	-0.13	-557.14	-240.78	-2.866e+05
47	41	2.972e+05	1575.63	-8.18e-03	-8521.01	0.0	-848.40	7257.34	-7.84	-29.52	1575.63	-8.068e+05
		-8.068e+05	-1228.54	2.19e-03	0.0	357.5	-848.40	-1263.68	-7.84	-29.52	-1228.54	2.646e+05
47	42	3.132e+05	1663.55	-8.38e-03	-8521.01	0.0	-12.31	1274.90	10.69	-472.96	1663.55	2.801e+05
		-7.873e+05	-2156.81	-2.70e-03	0.0	357.5	-12.31	-7246.11	10.69	-472.96	-2156.81	2.801e+05
47	54	1.266e+05	59.60	-5.71e-03	-8837.40	0.0	12.95	4331.21	-0.59	-299.74	59.60	-2.527e+05
		-2.840e+05	-152.66	7.39e-05	0.0	357.5	12.95	-4506.19	-0.59	-299.74	-152.66	-2.840e+05
47	55	9.464e+04	38.83	-4.26e-03	-6622.69	0.0	1.03	3237.54	-0.44	-188.87	38.83	-1.881e+05
		-2.145e+05	-117.54	7.18e-05	0.0	357.5	1.03	-3385.15	-0.44	-188.87	-117.54	-2.145e+05
47	58	9.463e+04	39.20	-4.26e-03	-6622.69	0.0	1.27	3238.51	-0.44	-190.67	39.20	-1.883e+05
		-2.143e+05	-117.80	6.99e-05	0.0	357.5	1.27	-3384.18	-0.44	-190.67	-117.80	-2.143e+05
47	59	1.220e+05	56.69	-5.50e-03	-8521.01	0.0	11.28	4175.11	-0.57	-284.16	56.69	-2.435e+05
		-2.740e+05	-147.68	7.33e-05	0.0	357.5	11.28	-4345.91	-0.57	-284.16	-147.68	-2.740e+05
47	60	9.463e+04	39.20	-4.26e-03	-6622.69	0.0	1.27	3238.51	-0.44	-190.67	39.20	-1.883e+05
		-2.143e+05	-117.80	6.99e-05	0.0	357.5	1.27	-3384.18	-0.44	-190.67	-117.80	-2.143e+05
47	61	1.220e+05	56.69	-5.50e-03	-8521.01	0.0	11.28	4175.11	-0.57	-284.16	56.69	-2.435e+05
		-2.740e+05	-147.68	7.33e-05	0.0	357.5	11.28	-4345.91	-0.57	-284.16	-147.68	-2.740e+05
48	1	1.679e+05	84.56	-7.06e-03	-9220.81	0.0	-11.54	4709.10	0.46	5397.33	84.56	-2.708e+05
		-2.708e+05	-81.82	-1.83e-04	0.0	365.0	-11.54	-4511.72	0.46	5397.33	-81.82	-2.708e+05
48	3	2.554e+05	55.65	-0.01	-1.407e+04	0.0	22.42	7167.25	-0.33	5372.54	55.65	-4.108e+05
		-4.108e+05	-65.98	-7.06e-05	0.0	365.0	22.42	-6898.94	-0.33	5372.54	-65.98	-3.618e+05
48	4	2.555e+05	59.75	-0.01	-1.407e+04	0.0	20.18	7157.61	-0.35	5391.14	59.75	-4.090e+05
		-4.090e+05	-69.48	-5.99e-05	0.0	365.0	20.18	-6908.58	-0.35	5391.14	-69.48	-3.635e+05
48	12	8.404e+04	11.61	-3.43e-03	-4608.13	0.0	-17.36	2313.73	0.06	4227.85	11.61	-1.280e+05
		-1.280e+05	-11.54	1.53e-06	0.0	365.0	-17.36	-2294.39	0.06	4227.85	-11.54	-1.244e+05
48	17	2.108e+05	50.73	-8.82e-03	-1.161e+04	0.0	21.06	5916.10	-0.30	4125.39	50.73	-3.394e+05
		-3.394e+05	-59.54	-5.86e-05	0.0	365.0	21.06	-5690.90	-0.30	4125.39	-59.54	-2.983e+05
48	18	2.108e+05	54.29	-8.76e-03	-1.161e+04	0.0	19.12	5907.74	-0.32	4141.51	54.29	-3.378e+05
		-3.378e+05	-62.58	-4.94e-05	0.0	365.0	19.12	-5699.26	-0.32	4141.51	-62.58	-2.997e+05
48	19	1.348e+05	15.56	-5.54e-03	-7407.68	0.0	-3.19	3749.54	-0.09	4196.79	15.56	-2.116e+05
		-2.116e+05	-18.72	-1.68e-05	0.0	365.0	-3.19	-3658.14	-0.09	4196.79	-18.72	-1.949e+05
48	24	1.815e+05	34.47	-7.61e-03	-9991.88	0.0	13.23	5089.24	-0.21	4140.45	34.47	-2.914e+05
		-2.914e+05	-41.51	-4.97e-05	0.0	365.0	13.23	-4902.64	-0.21	4140.45	-41.51	-2.574e+05
48	25	1.815e+05	37.20	-7.56e-03	-9991.88	0.0	11.73	5082.81	-0.22	4152.85	37.20	-2.902e+05
		-2.902e+05	-43.84	-4.26e-05	0.0	365.0	11.73	-4909.07	-0.22	4152.85	-43.84	-2.585e+05
48	26	1.230e+05	7.41	-5.09e-03	-6761.63	0.0	-5.42	3422.65	-0.05	4195.37	7.41	-1.931e+05
		-1.931e+05	-10.10	-1.75e-05	0.0	365.0	-5.42	-3338.98	-0.05	4195.37	-10.10	-1.778e+05
48	35	4.664e+05	961.23	-0.01	-8699.78	0.0	-680.69	7672.51	-4.31	4551.28	961.23	-7.684e+05
		-7.684e+05	-610.41	2.14e-03	0.0	365.0	-680.69	-1027.26	-4.31	4551.28	-610.41	4.443e+05
48	37	1.588e+05	4618.88	-7.57e-03	-8699.78	0.0	-18.84	4548.01	25.47	6.754e+04	4618.88	-2.742e+05
		-2.742e+05	-4678.63	-4.14e-03	0.0	365.0	-18.84	-4151.76	25.47	6.754e+04	-4678.63	-2.019e+05
48	40	1.568e+05	1877.19	-5.65e-03	-8699.78	0.0	64.24	4253.20	-10.23	-3.808e+04	1877.19	-2.225e+05
		-2.578e+05	-1858.20	1.82e-03	0.0	365.0	64.24	-4446.57	-10.23	-3.808e+04	-1858.20	-2.578e+05
48	41	5.668e+05	2058.75	-0.01	-8699.78	0.0	-601.73	8254.03	-9.89	4326.72	2058.75	-8.624e+05
		-8.624e+05	-1552.28	3.13e-03	0.0	365.0	-601.73	-445.74	-9.89	4326.72	-1552.28	5.626e+05
48	42	3.367e+05	2158.33	-7.52e-03	-8699.78	0.0	-259.54	997.22	12.95	4175.99	2158.33	-9.077e+05
		-9.077e+05	-2566.78	-3.72e-03	0.0	365.0	-259.54	-7702.56	12.95	4175.99	-2566.78	3.160e+05
48	54	1.639e+05	24.71	-6.88e-03	-9022.80	0.0	8.53	4593.12	-0.15	4149.48	24.71	-2.627e+05
		-2.627e+05	-30.69	-4.43e-05	0.0	365.0	8.53	-4429.68	-0.15	4149.48	-30.69	-2.328e+05
48	55	1.230e+05	3.03	-5.17e-03	-6761.63	0.0	-3.03	3432.93	-0.03	4175.53	3.03	-1.950e+05
		-1.950e+05	-6.37	-2.90e-05	0.0	365.0	-3.03	-3328.69	-0.03	4175.53	-6.37	-1.760e+05
48	58	1.230e+05	1.94	-5.19e-03	-6761.63	0.0	-2.44	3435.51	-0.02	4170.57	1.94	-1.955e+05

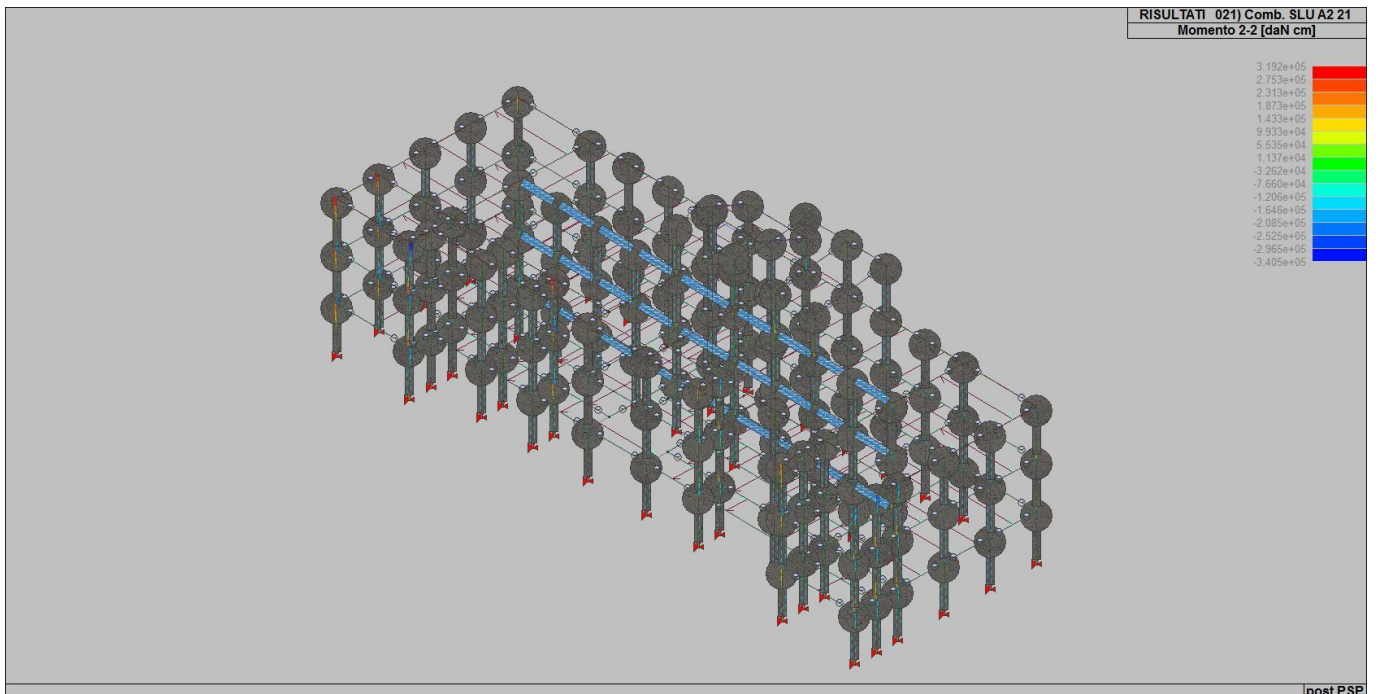
		-1.955e+05	-5.44	-3.18e-05	0.0	365.0	-2.44	-3326.12	-0.02	4170.57	-5.44-1.756e+05
48	59	1.581e+05	21.46	-6.64e-03	-8699.78	0.0	6.96	4427.74	-0.13	4152.49	21.46-2.531e+05
		-2.531e+05	-27.08	-4.25e-05	0.0	365.0	6.96	-4272.03	-0.13	4152.49	-27.08-2.246e+05
48	60	1.230e+05	1.94	-5.19e-03	-6761.63	0.0	-2.44	3435.51	-0.02	4170.57	1.94-1.955e+05
		-1.955e+05	-5.44	-3.18e-05	0.0	365.0	-2.44	-3326.12	-0.02	4170.57	-5.44-1.756e+05
48	61	1.581e+05	21.46	-6.64e-03	-8699.78	0.0	6.96	4427.74	-0.13	4152.49	21.46-2.531e+05
		-2.531e+05	-27.08	-4.25e-05	0.0	365.0	6.96	-4272.03	-0.13	4152.49	-27.08-2.246e+05
49	2	1.144e+05	35.58	-0.02	-4026.75	0.0	154.05	1997.77	-0.07	5491.73	35.58-1.780e+05
		-1.872e+05	-4.37	-1.17e-04	0.0	590.0	154.05	-2028.98	-0.07	5491.73	-4.37-1.872e+05
49	3	1.104e+05	184.71	-0.02	-4026.75	0.0	142.04	1985.88	-0.55	8736.65	184.71-1.785e+05
		-1.947e+05	-137.61	1.38e-04	0.0	590.0	142.04	-2040.87	-0.55	8736.65	-137.61-1.947e+05
49	9	1.145e+05	188.52	-0.02	-4026.75	0.0	136.00	1999.03	-0.56	5918.09	188.52-1.782e+05
		-1.867e+05	-142.86	2.65e-04	0.0	590.0	136.00	-2027.72	-0.56	5918.09	-142.86-1.867e+05
49	11	1.116e+05	200.78	-0.02	-4026.75	0.0	139.49	1992.44	-0.60	7934.07	200.78-1.792e+05
		-1.915e+05	-152.08	2.20e-04	0.0	590.0	139.49	-2034.31	-0.60	7934.07	-152.08-1.915e+05
49	12	9.025e+04	140.95	-0.01	-3097.50	0.0	101.82	1543.41	-0.42	3089.64	140.95-1.366e+05
		-1.398e+05	-107.39	2.52e-04	0.0	590.0	101.82	-1554.09	-0.42	3089.64	-107.39-1.398e+05
49	17	8.423e+04	144.93	-0.01	-3097.50	0.0	110.07	1526.07	-0.43	7188.19	144.93-1.375e+05
		-1.509e+05	-107.99	9.60e-05	0.0	590.0	110.07	-1571.43	-0.43	7188.19	-107.99-1.509e+05
49	19	8.785e+04	148.23	-0.01	-3097.50	0.0	104.84	1537.47	-0.44	4745.44	148.23-1.371e+05
		-1.439e+05	-112.55	2.06e-04	0.0	590.0	104.84	-1560.03	-0.44	4745.44	-112.55-1.439e+05
49	21	8.532e+04	158.85	-0.01	-3097.50	0.0	107.86	1531.76	-0.47	6492.62	158.85-1.381e+05
		-1.481e+05	-120.54	1.67e-04	0.0	590.0	107.86	-1565.74	-0.47	6492.62	-120.54-1.481e+05
49	24	8.561e+04	139.09	-0.01	-3097.50	0.0	108.41	1529.21	-0.41	6228.20	139.09-1.371e+05
		-1.486e+05	-103.60	1.17e-04	0.0	590.0	108.41	-1568.29	-0.41	6228.20	-103.60-1.486e+05
49	26	8.840e+04	141.63	-0.01	-3097.50	0.0	104.38	1537.98	-0.42	4349.16	141.63-1.369e+05
		-1.432e+05	-107.10	2.02e-04	0.0	590.0	104.38	-1559.52	-0.42	4349.16	-107.10-1.432e+05
49	28	8.646e+04	149.80	-0.01	-3097.50	0.0	106.71	1533.58	-0.45	5693.15	149.80-1.375e+05
		-1.465e+05	-113.25	1.72e-04	0.0	590.0	106.71	-1563.92	-0.45	5693.15	-113.25-1.465e+05
49	29	5.225e+05	218.73	0.02	-3097.50	0.0	-490.01	4089.50	0.11	5426.07	218.73-9.765e+05
		-9.765e+05	155.28	-1.31e-03	0.0	590.0	-490.01	992.00	0.11	5426.07	155.28-9.765e+05
49	30	7.542e+05	44.76	-0.04	-3097.50	0.0	1202.65	-1142.16	-0.60	5065.34	44.76-7.542e+05
		-8.334e+05	-312.15	1.16e-03	0.0	590.0	1202.65	-4239.66	-0.60	5065.34	-312.15-8.334e+05
49	39	5.597e+05	143.81	0.03	-3097.50	0.0	-97.63	4334.57	-0.25	5450.05	143.81-1.084e+06
		-1.084e+06	-1.65	-1.16e-03	0.0	590.0	-97.63	1237.07	-0.25	5450.05	-1.65-5.597e+05
49	40	8.751e+05	18.93	-0.05	-3097.50	0.0	-249.86	-1411.58	0.43	4940.23	-232.24-8.751e+05
		-8.715e+05	-232.24	7.50e-04	0.0	590.0	-249.86	-4509.08	0.43	4940.23	-232.24-8.715e+05
49	41	8.624e+04	2910.19	-0.01	-3097.50	0.0	-241.67	1523.17	-9.18	1.618e+04	2910.19-1.347e+05
		-1.497e+05	-2505.45	8.69e-03	0.0	590.0	-241.67	-1574.33	-9.18	1.618e+04	-2505.45-1.497e+05
49	42	8.675e+04	2207.07	-0.01	-3097.50	0.0	501.40	1537.62	8.76	-259.86	-2959.65-1.384e+05
		-1.450e+05	-2959.65	-9.59e-03	0.0	590.0	501.40	-1559.88	8.76	-259.86	2207.07-1.450e+05
49	54	8.644e+04	135.59	-0.01	-3097.50	0.0	107.41	1531.09	-0.40	5652.21	135.59-1.368e+05
		-1.472e+05	-100.97	1.30e-04	0.0	590.0	107.41	-1566.41	-0.40	5652.21	-100.97-1.472e+05
49	55	8.839e+04	130.26	-0.01	-3097.50	0.0	104.95	1535.98	-0.39	4316.41	130.26-1.363e+05
		-1.438e+05	-97.28	1.69e-04	0.0	590.0	104.95	-1561.52	-0.39	4316.41	-97.28-1.438e+05
49	57	8.672e+04	137.26	-0.01	-3097.50	0.0	106.94	1532.22	-0.41	5468.40	137.26-1.368e+05
		-1.466e+05	-102.55	1.43e-04	0.0	590.0	106.94	-1565.28	-0.41	5468.40	-102.55-1.466e+05
49	58	8.839e+04	127.41	-0.01	-3097.50	0.0	105.09	1535.48	-0.38	4308.22	127.41-1.361e+05
		-1.440e+05	-94.82	1.60e-04	0.0	590.0	105.09	-1562.02	-0.38	4308.22	-94.82-1.440e+05
49	59	8.672e+04	134.42	-0.01	-3097.50	0.0	107.08	1531.72	-0.40	5460.21	134.42-1.367e+05
		-1.467e+05	-100.09	1.35e-04	0.0	590.0	107.08	-1565.78	-0.40	5460.21	-100.09-1.467e+05
49	60	8.839e+04	127.41	-0.01	-3097.50	0.0	105.09	1535.48	-0.38	4308.22	127.41-1.361e+05
		-1.440e+05	-94.82	1.60e-04	0.0	590.0	105.09	-1562.02	-0.38	4308.22	-94.82-1.440e+05
49	61	8.672e+04	134.42	-0.01	-3097.50	0.0	107.08	1531.72	-0.40	5460.21	134.42-1.367e+05
		-1.467e+05	-100.09	1.35e-04	0.0	590.0	107.08	-1565.78	-0.40	5460.21	-100.09-1.467e+05
50	2	9.393e+04	359.75	4.45e-03	-7478.48	0.0	79.74	3501.92	-2.47	-1.903e+04	359.75-1.571e+05
		-2.301e+05	-399.84	8.38e-05	0.0	307.5	79.74	-3976.56	-2.47	-1.903e+04	-399.84-2.301e+05
50	3	1.541e+05	337.08	5.46e-03	-1.135e+04	0.0	108.02	5240.25	-2.29	-2.949e+04	337.08-3.508e+05
		-3.508e+05	-366.19	1.24e-04	0.0	307.5	108.02	-6111.67	-2.29	-2.949e+04	-366.19-3.508e+05
50	4	1.543e+05	328.22	5.52e-03	-1.135e+04	0.0	102.45	5235.81	-2.23	-2.957e+04	328.22-2.160e+05
		-3.513e+05	-357.70	1.32e-04	0.0	307.5	102.45	-6116.11	-2.23	-2.957e+04	-357.70-3.513e+05
50	12	4.225e+04	47.04	3.19e-03	-3766.29	0.0	-9.00	1775.43	-0.34	-1.006e+04	47.04-8.596e+04
		-1.191e+05	-58.95	9.16e-05	0.0	307.5	-9.00	-1990.86	-0.34	-1.006e+04	-58.95-1.191e+05
50	17	1.283e+05	283.93	4.34e-03	-9361.27	0.0	93.34	4315.54	-1.92	-2.431e+04	283.93-1.768e+05
		-2.891e+05	-307.75	9.82e-05	0.0	307.5	93.34	-5045.73	-1.92	-2.431e+04	-307.75-2.891e+05
50	18	1.285e+05	276.25	4.39e-03	-9361.27	0.0	88.52	4311.69	-1.88	-2.438e+04	276.25-1.761e+05
		-2.896e+05	-300.39	1.04e-04	0.0	307.5	88.52	-5049.58	-1.88	-2.438e+04	-300.39-2.896e+05
50	19	7.665e+04	137.07	3.68e-03	-6004.28	0.0	28.97	2789.10	-0.95	-1.580e+04	137.07-1.219e+05
		-1.874e+05	-153.94	9.80e-05	0.0	307.5	28.97	-3215.18	-0.95	-1.580e+04	-153.94-1.874e+05
50	24	1.083e+05	233.35	4.05e-03	-8070.12	0.0	72.29	3731.41	-1.59	-2.098e+04	233.35-1.562e+05
		-2.496e+05	-254.25	9.31e-05	0.0	307.5	72.29	-4338.71	-1.59	-2.098e+04	-254.25-2.496e+05
50	25	1.084e+05	227.45	4.09e-03	-8070.12	0.0	68.59	3728.45	-1.55	-2.104e+04	227.45-1.557e+05
		-2.500e+05	-248.59	9.79e-05	0.0	307.5	68.59	-4341.67	-1.55	-2.104e+04	-248.59-2.500e+05
50	26	6.858e+04	120.39	3.54e-03	-5487.82	0.0	22.78	2557.23	-0.83	-1.444e+04	120.39-1.139e+05
		-1.714e+05	-135.94	9.31e-05	0.0	307.5	22.78	-2930.60	-0.83	-1.444e+04	-135.94-1.714e+05
50	29	4.735e+05	419.60	6.08e-03	-7037.20	0.0	-285.04	8067.61	-2.36	-1.840e+04	419.60-9.253e+05

		-9.253e+05	-307.06	-6.14e-05	0.0	307.5	-285.04	1030.41	-2.36-1.840e+04	-307.06	4.735e+05
50	30	6.263e+05	149.91	-8.36e-03	-7037.20	0.0	870.68	-1415.38	-1.61-1.779e+04	149.91	6.263e+05
		-8.909e+05	-344.62	1.78e-04	0.0	307.5	870.68	-8452.58	-1.61-1.779e+04	-344.62	-8.909e+05
50	41	9.213e+04	5502.21	-2.72e-03	-7037.20	0.0	-1265.89	3359.64	-36.40 1.729e+04	5502.21	-1.539e+05
		-2.028e+05	-5690.98	5.04e-03	0.0	307.5	-1265.89	-3677.56	-36.40 1.729e+04	-5690.98	-2.028e+05
50	42	9.328e+04	8140.33	5.19e-03	-7037.20	0.0	1613.44	3192.49	53.62-7.082e+04	-8347.07	-1.291e+05
		-2.294e+05	-8347.07	-7.19e-03	0.0	307.5	1613.44	-3844.71	53.62-7.082e+04	8140.33	-2.294e+05
50	54	9.631e+04	203.01	3.87e-03	-7295.43	0.0	59.67	3380.93	-1.38-1.899e+04	203.01	-1.438e+05
		-2.259e+05	-222.15	9.02e-05	0.0	307.5	59.67	-3914.50	-1.38-1.899e+04	-222.15	-2.259e+05
50	55	6.838e+04	129.84	3.48e-03	-5487.82	0.0	28.71	2561.96	-0.89-1.435e+04	129.84	-1.148e+05
		-1.707e+05	-145.00	8.53e-05	0.0	307.5	28.71	-2925.86	-0.89-1.435e+04	-145.00	-1.707e+05
50	58	6.833e+04	132.20	3.46e-03	-5487.82	0.0	30.20	2563.15	-0.91-1.433e+04	132.20	-1.150e+05
		-1.706e+05	-147.26	8.34e-05	0.0	307.5	30.20	-2924.68	-0.91-1.433e+04	-147.26	-1.706e+05
50	59	9.231e+04	192.89	3.81e-03	-7037.20	0.0	55.46	3264.10	-1.31-1.832e+04	192.89	-1.397e+05
		-2.180e+05	-211.46	8.92e-05	0.0	307.5	55.46	-3773.10	-1.31-1.832e+04	-211.46	-2.180e+05
50	60	6.833e+04	132.20	3.46e-03	-5487.82	0.0	30.20	2563.15	-0.91-1.433e+04	132.20	-1.150e+05
		-1.706e+05	-147.26	8.34e-05	0.0	307.5	30.20	-2924.68	-0.91-1.433e+04	-147.26	-1.706e+05
50	61	9.231e+04	192.89	3.81e-03	-7037.20	0.0	55.46	3264.10	-1.31-1.832e+04	192.89	-1.397e+05
		-2.180e+05	-211.46	8.92e-05	0.0	307.5	55.46	-3773.10	-1.31-1.832e+04	-211.46	-2.180e+05
51	1	1.017e+05	103.42	-3.83e-03	-7782.48	0.0	57.16	3924.35	-0.76 -831.82	103.42	-1.017e+05
		-2.149e+05	-139.61	-7.72e-05	0.0	320.0	57.16	-3858.13	-0.76 -831.82	-139.61	-2.043e+05
51	3	1.543e+05	199.43	-5.83e-03	-1.181e+04	0.0	56.78	5950.67	-1.38 -1009.38	199.43	-3.253e+05
		-3.253e+05	-242.49	4.36e-05	0.0	320.0	56.78	-5862.72	-1.38 -1009.38	-242.49	-3.112e+05
51	4	1.542e+05	188.03	-5.82e-03	-1.181e+04	0.0	49.47	5950.51	-1.32 -1010.30	188.03	-3.253e+05
		-3.253e+05	-235.75	4.74e-05	0.0	320.0	49.47	-5862.88	-1.32 -1010.30	-235.75	-3.113e+05
51	12	5.096e+04	-16.17	-1.87e-03	-3919.39	0.0	-44.37	1971.55	-0.04 -334.24	-16.17	-1.077e+05
		-1.077e+05	-29.59	4.27e-05	0.0	320.0	-44.37	-1947.84	-0.04 -334.24	-29.59	-1.039e+05
51	17	1.273e+05	172.00	-4.81e-03	-9741.81	0.0	52.98	4907.48	-1.18 -832.69	172.00	-2.683e+05
		-2.683e+05	-204.70	3.36e-05	0.0	320.0	52.98	-4834.33	-1.18 -832.69	-204.70	-2.566e+05
51	18	1.272e+05	162.12	-4.80e-03	-9741.81	0.0	46.64	4907.34	-1.13 -833.49	162.12	-2.683e+05
		-2.683e+05	-198.86	3.69e-05	0.0	320.0	46.64	-4834.47	-1.13 -833.49	-198.86	-2.566e+05
51	19	8.145e+04	53.01	-3.04e-03	-6248.36	0.0	-9.33	3145.83	-0.47 -534.11	53.01	-1.720e+05
		-1.720e+05	-96.04	4.00e-05	0.0	320.0	-9.33	-3102.53	-0.47 -534.11	-96.04	-1.650e+05
51	24	1.097e+05	133.83	-4.14e-03	-8398.18	0.0	33.89	4230.03	-0.94 -717.24	133.83	-2.312e+05
		-2.312e+05	-167.40	3.35e-05	0.0	320.0	33.89	-4168.15	-0.94 -717.24	-167.40	-2.213e+05
51	25	1.096e+05	126.23	-4.13e-03	-8398.18	0.0	29.01	4229.92	-0.90 -717.85	126.23	-2.312e+05
		-2.312e+05	-162.91	3.60e-05	0.0	320.0	29.01	-4168.25	-0.90 -717.85	-162.91	-2.213e+05
51	26	7.444e+04	42.31	-2.78e-03	-5710.91	0.0	-14.04	2874.92	-0.39 -487.56	42.31	-1.571e+05
		-1.571e+05	-83.82	3.86e-05	0.0	320.0	-14.04	-2835.99	-0.39 -487.56	-83.82	-1.509e+05
51	37	4.494e+05	183.21	-6.93e-03	-7323.27	0.0	21.52	7691.54	-0.67 -853.56	183.21	-8.401e+05
		-8.401e+05	-32.57	2.69e-05	0.0	320.0	21.52	368.27	-0.67 -853.56	-32.57	4.494e+05
51	39	4.494e+05	206.57	-6.92e-03	-7323.27	0.0	-166.98	7696.59	-1.13 -1144.37	206.57	-8.418e+05
		-8.418e+05	-153.65	-4.51e-04	0.0	320.0	-166.98	373.33	-1.13 -1144.37	-153.65	4.494e+05
51	41	9.751e+04	1111.27	-3.83e-03	-7323.27	0.0	-1880.17	3669.65	-11.68 2129.71	1111.27	-1.967e+05
		-1.967e+05	-2626.27	2.78e-03	0.0	320.0	-1880.17	-3653.62	-11.68 2129.71	-2626.27	-1.941e+05
51	42	9.427e+04	3982.46	-3.45e-03	-7323.27	0.0	2424.04	3688.06	18.51 -6246.35	-1940.73	-2.029e+05
		-2.029e+05	-1940.73	-4.34e-03	0.0	320.0	2424.04	-3635.20	18.51 -6246.35	3982.46	-1.944e+05
51	54	9.915e+04	110.94	-3.74e-03	-7591.99	0.0	22.43	3823.56	-0.80 -647.96	110.94	-2.089e+05
		-2.089e+05	-145.02	3.34e-05	0.0	320.0	22.43	-3768.44	-0.80 -647.96	-145.02	-2.001e+05
51	55	7.452e+04	54.47	-2.79e-03	-5710.91	0.0	-6.25	2875.09	-0.45 -486.57	54.47	-1.571e+05
		-1.571e+05	-91.01	3.43e-05	0.0	320.0	-6.25	-2835.82	-0.45 -486.57	-91.01	-1.508e+05
51	58	7.454e+04	57.51	-2.80e-03	-5710.91	0.0	-4.30	2875.13	-0.47 -486.33	57.51	-1.570e+05
		-1.570e+05	-92.80	3.32e-05	0.0	320.0	-4.30	-2835.77	-0.47 -486.33	-92.80	-1.507e+05
51	59	9.563e+04	103.30	-3.60e-03	-7323.27	0.0	18.61	3688.07	-0.75 -624.87	103.30	-2.015e+05
		-2.015e+05	-137.56	3.34e-05	0.0	320.0	18.61	-3635.20	-0.75 -624.87	-137.56	-1.931e+05
51	60	7.454e+04	57.51	-2.80e-03	-5710.91	0.0	-4.30	2875.13	-0.47 -486.33	57.51	-1.570e+05
		-1.570e+05	-92.80	3.32e-05	0.0	320.0	-4.30	-2835.77	-0.47 -486.33	-92.80	-1.507e+05
51	61	9.563e+04	103.30	-3.60e-03	-7323.27	0.0	18.61	3688.07	-0.75 -624.87	103.30	-2.015e+05
		-2.015e+05	-137.56	3.34e-05	0.0	320.0	18.61	-3635.20	-0.75 -624.87	-137.56	-1.931e+05
52	1	9.960e+04	89.02	-4.05e-03	-7721.68	0.0	92.65	3870.15	-0.60 -197.48	89.02	-2.083e+05
		-2.083e+05	-102.41	-1.17e-04	0.0	317.5	92.65	-3851.52	-0.60 -197.48	-102.41	-2.054e+05
52	3	1.517e+05	166.01	-6.11e-03	-1.172e+04	0.0	74.46	5862.91	-1.20 -125.38	166.01	-3.139e+05
		-3.139e+05	-214.60	-2.96e-05	0.0	317.5	74.46	-5858.19	-1.20 -125.38	-214.60	-3.131e+05
52	4	1.517e+05	160.91	-6.11e-03	-1.172e+04	0.0	67.47	5863.50	-1.18 -117.92	160.91	-3.140e+05
		-3.140e+05	-214.05	-2.83e-05	0.0	317.5	67.47	-5857.60	-1.18 -117.92	-214.05	-3.130e+05
52	12	4.989e+04	15.76	-2.07e-03	-3888.77	0.0	-35.69	1949.25	-0.25 22.49	15.76	-1.052e+05
		-1.052e+05	-63.54	7.55e-06	0.0	317.5	-35.69	-1939.52	-0.25 22.49	-63.54	-1.037e+05
52	17	1.251e+05	140.59	-5.03e-03	-9665.70	0.0	67.28	4834.43	-1.00 -109.62	140.59	-2.587e+05
		-2.587e+05	-177.80	-2.53e-05	0.0	317.5	67.28	-4831.27	-1.00 -109.62	-177.80	-2.582e+05
52	18	1.251e+05	136.17	-5.04e-03	-9665.70	0.0	61.22	4834.94	-0.99 -103.16	136.17	-2.588e+05
		-2.588e+05	-177.32	-2.41e-05	0.0	317.5	61.22	-4830.76	-0.99 -103.16	-177.32	-2.581e+05
52	19	7.999e+04	62.97	-3.26e-03	-6199.54	0.0	1.77	3103.64	-0.54 -26.38	62.97	-1.667e+05
		-1.667e+05	-108.95	-9.41e-06	0.0	317.5	1.77	-3095.91	-0.54 -26.38	-108.95	-1.654e+05
52	24	1.078e+05	114.14	-4.35e-03	-8332.56	0.0	46.75	4168.35	-0.84 -82.58	114.14	-2.233e+05
		-2.233e+05	-151.69	-2.01e-05	0.0	317.5	46.75	-4164.22	-0.84 -82.58	-151.69	-2.226e+05
...											

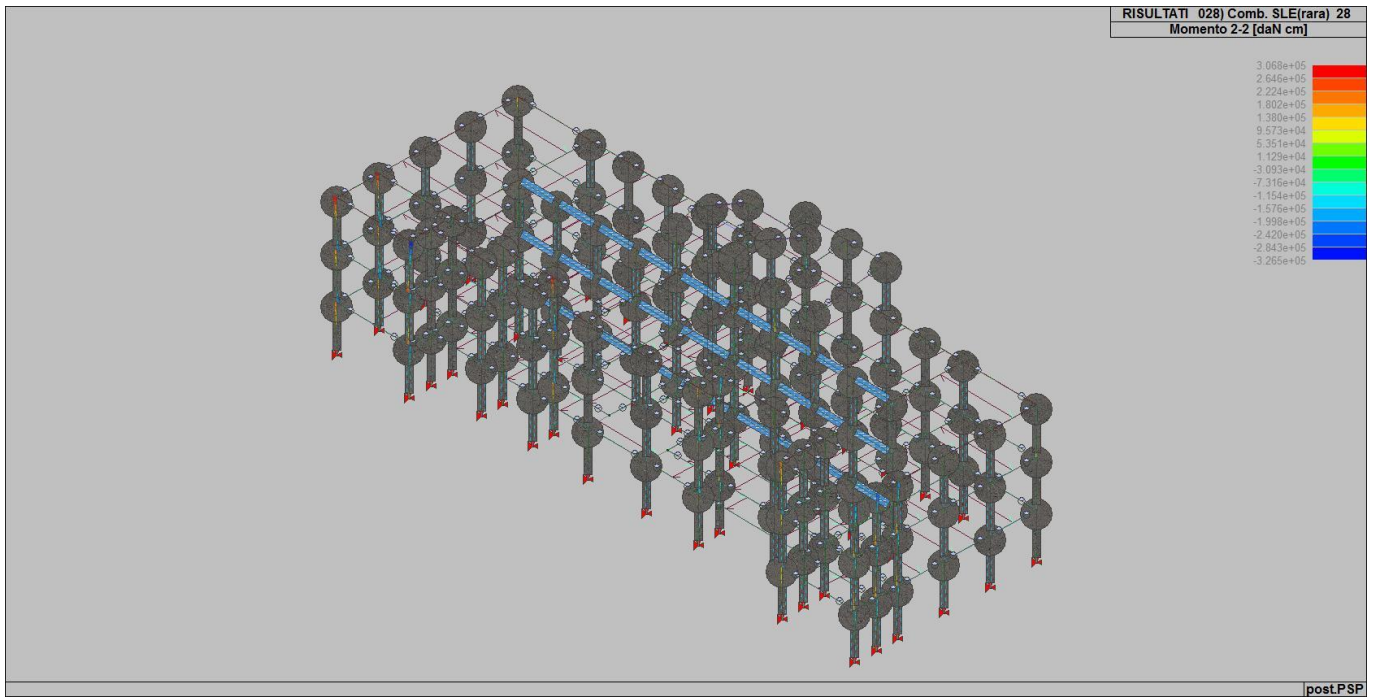
363	61	-3.796e+05	-642.84	3.51e-04	0.0	317.5	-487.03	-4082.29	3.01	-664.78	312.25	-8.804e+04
Trave	M3 mx/mn	M2 mx/mn	D 2 / D 3	Q 2 / Q 3		N	V 2	V 3	T			
	-1.564e+06	-1.071e+05	-0.86	-2.158e+04		-4003.58	-1.421e+04	-1250.37	-2.875e+05			
	1.227e+06	1.278e+05	0.85	0.0		3717.11	1.662e+04	1270.70	4.456e+05			



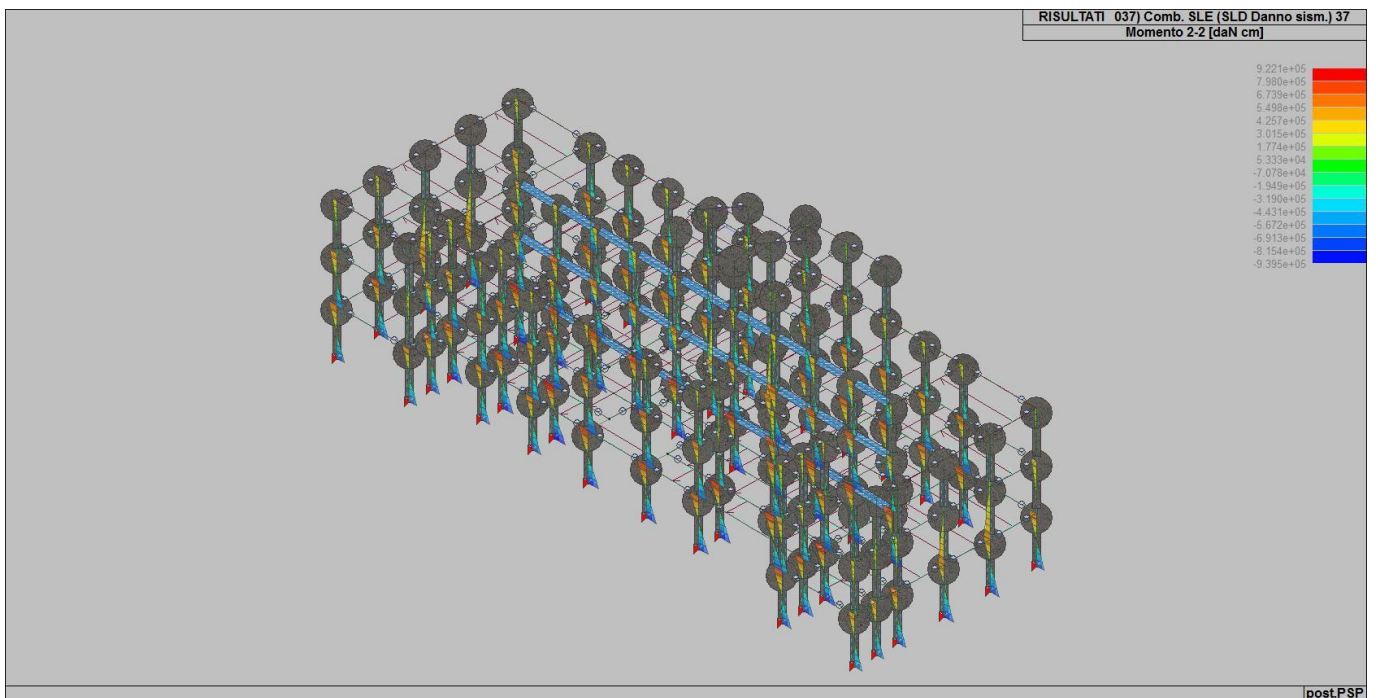
43_RIS_M2_011_Comb. SLU A1 11



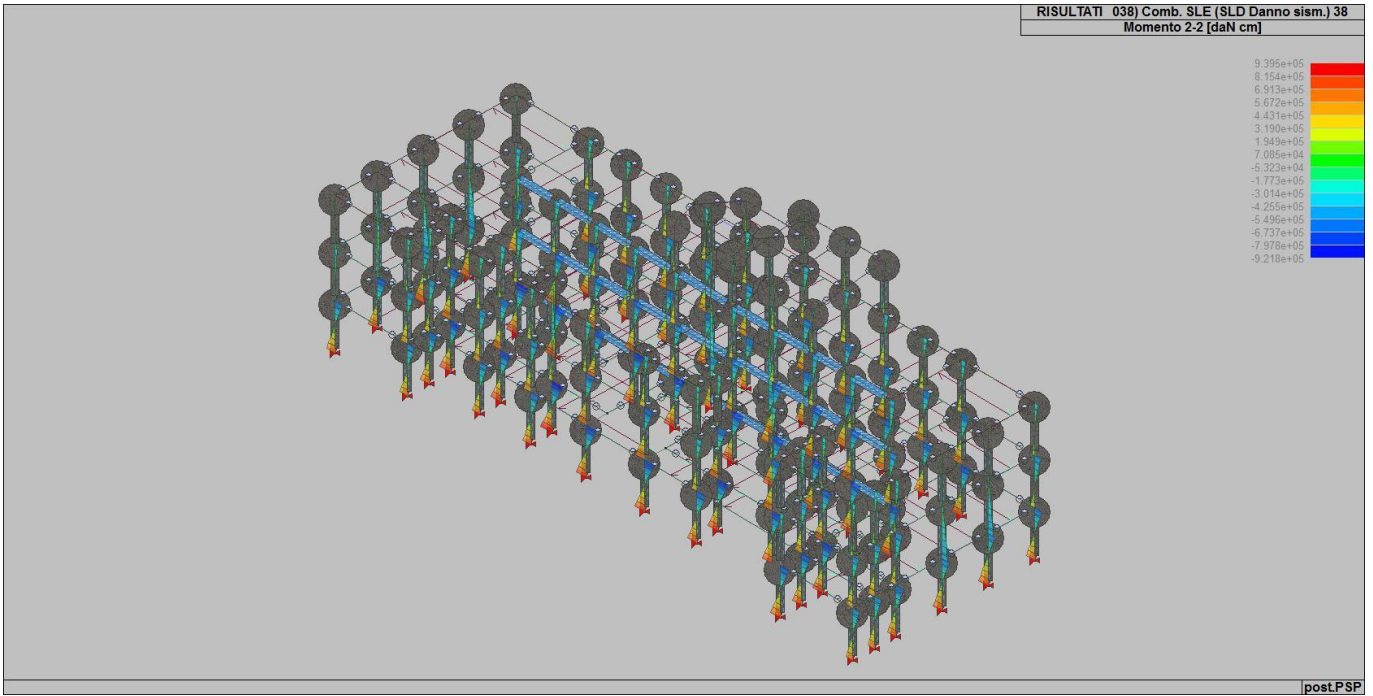
43_RIS_M2_021_Comb. SLU A2 21



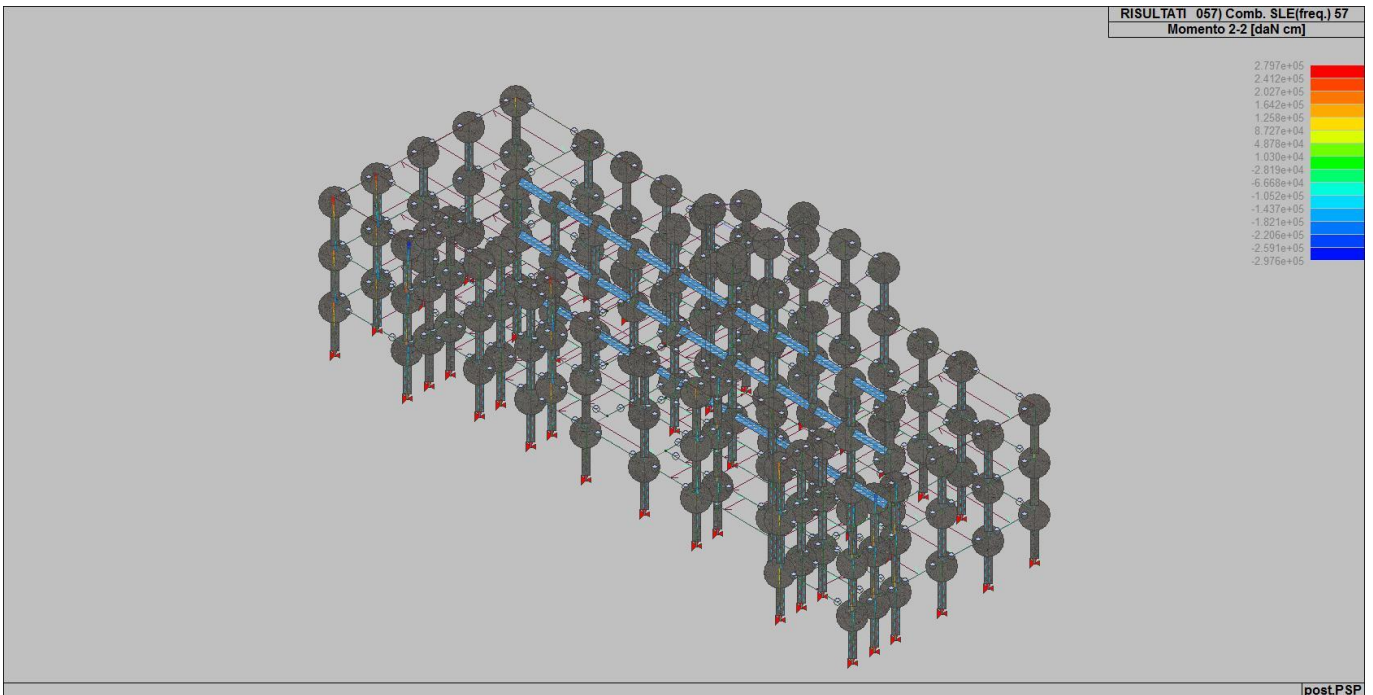
43_RIS_M2_028_Comb. SLE(rara) 28



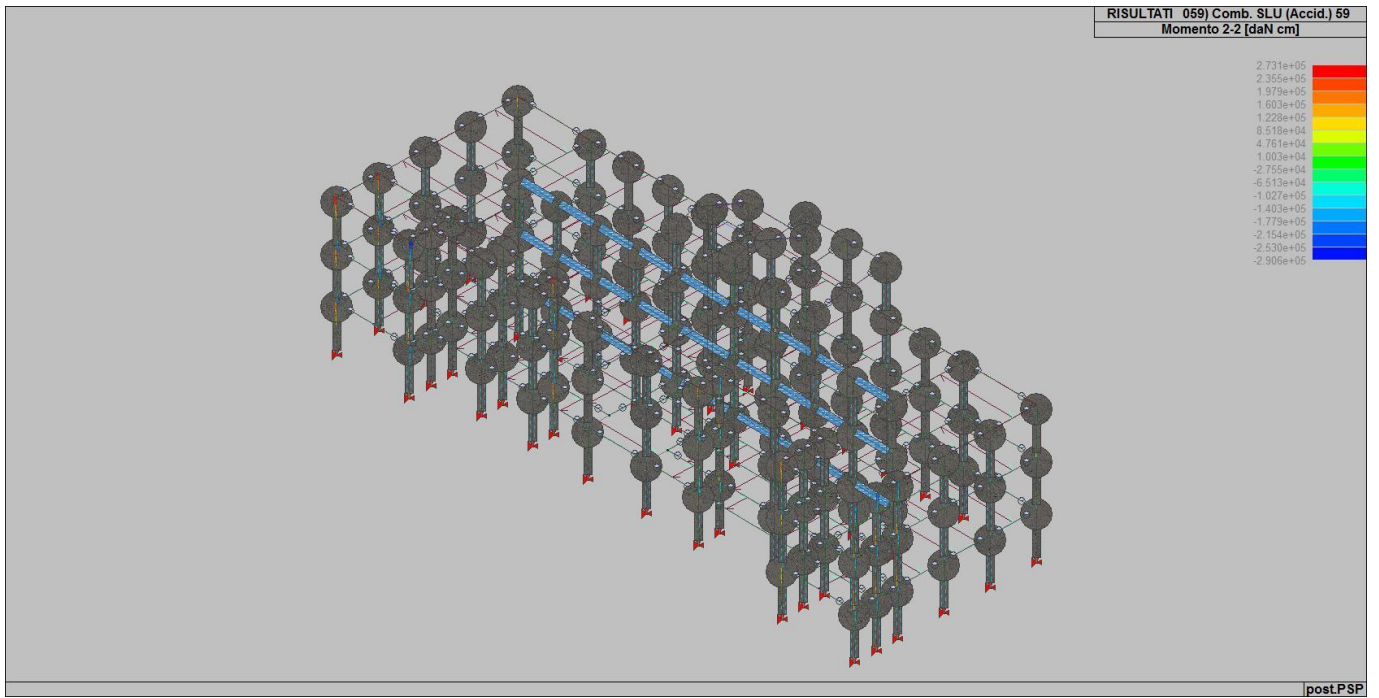
43_RIS_M2_037_Comb. SLE (SLD Danno sism.) 37



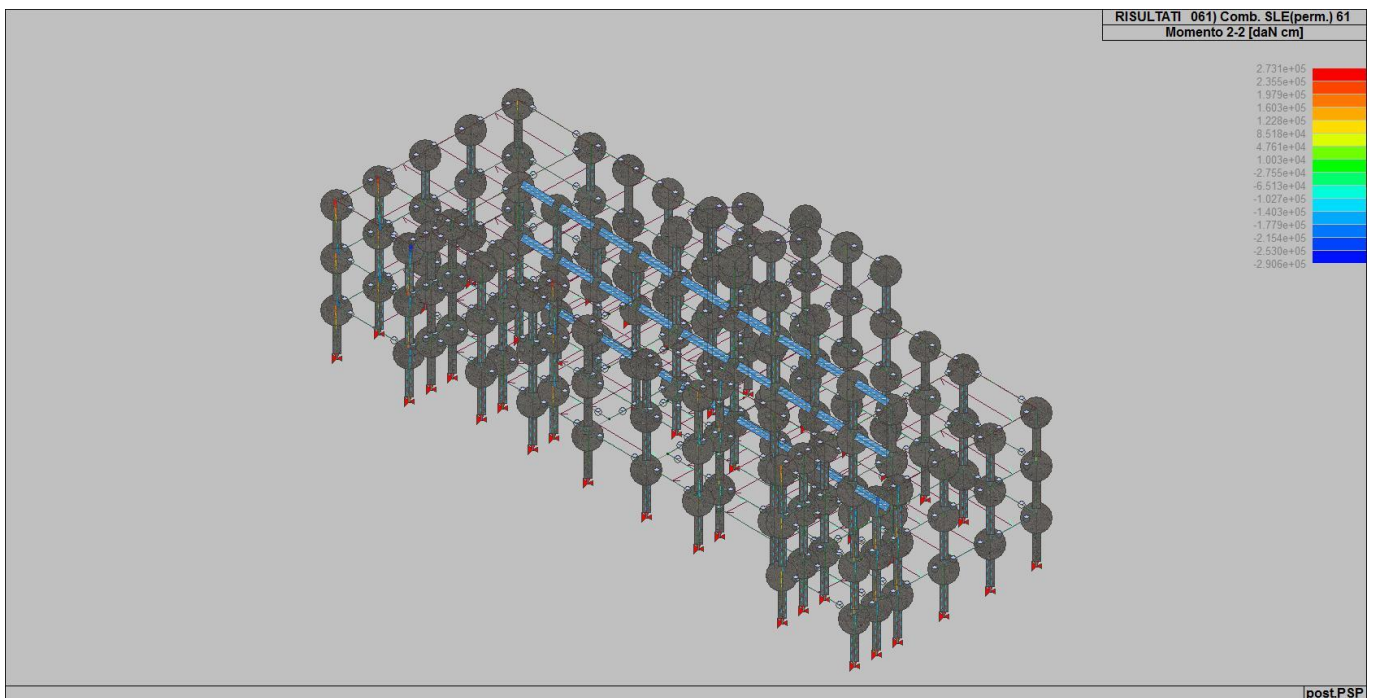
43_RIS_M2_038_Comb. SLE (SLD Danno sism.) 38



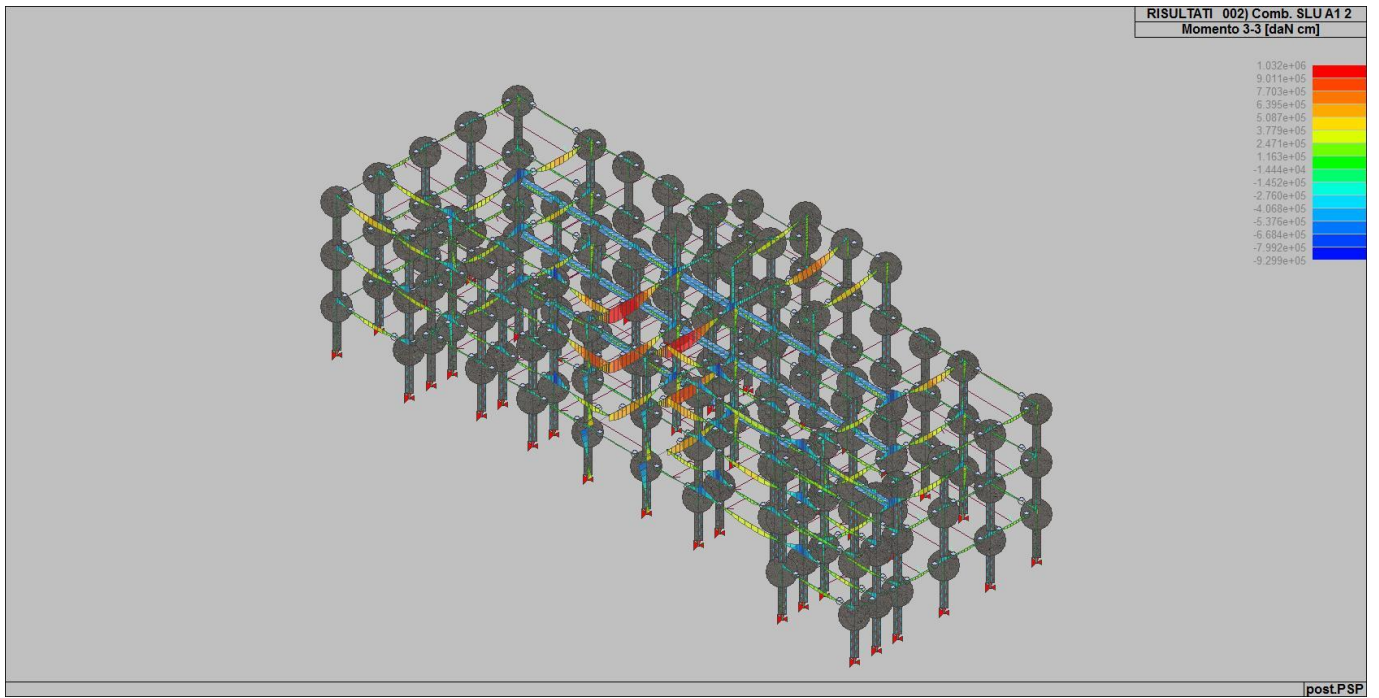
43_RIS_M2_057_Comb. SLE(freq.) 57



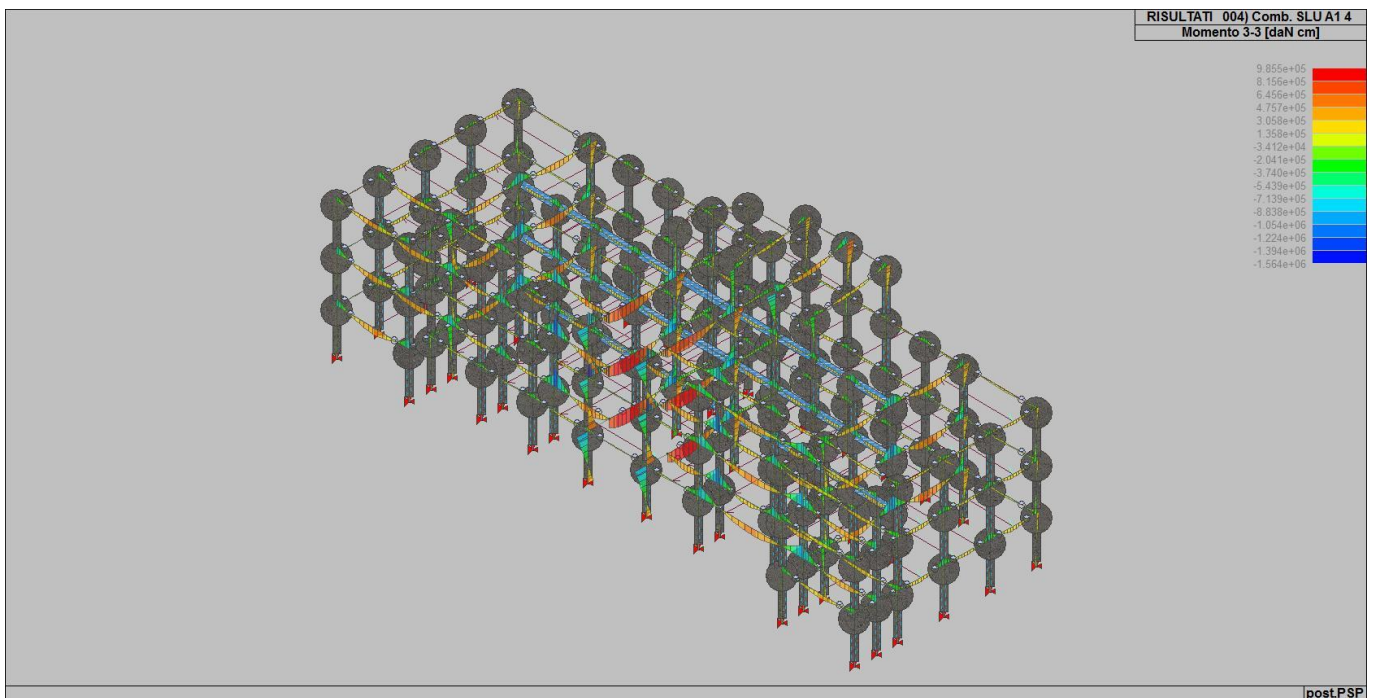
43_RIS_M2_059_Comb. SLU (Accid.) 59



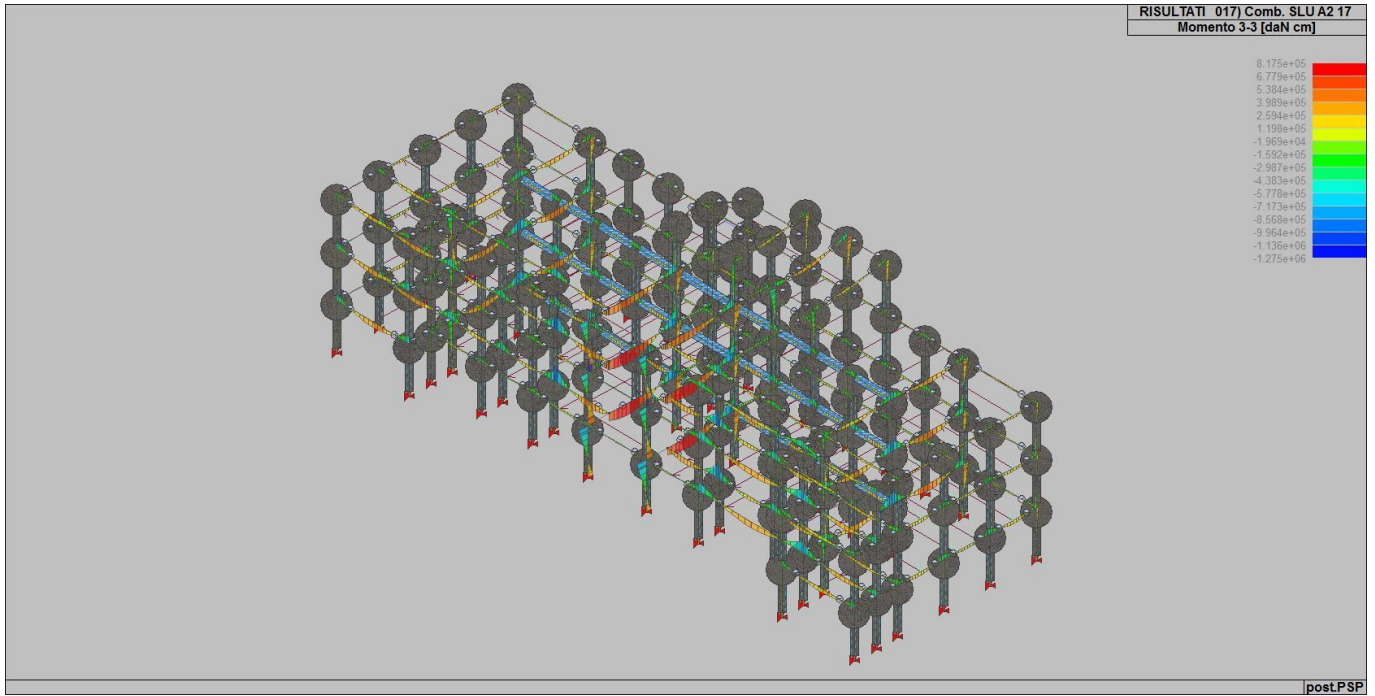
43_RIS_M2_061_Comb. SLE(perm.) 61



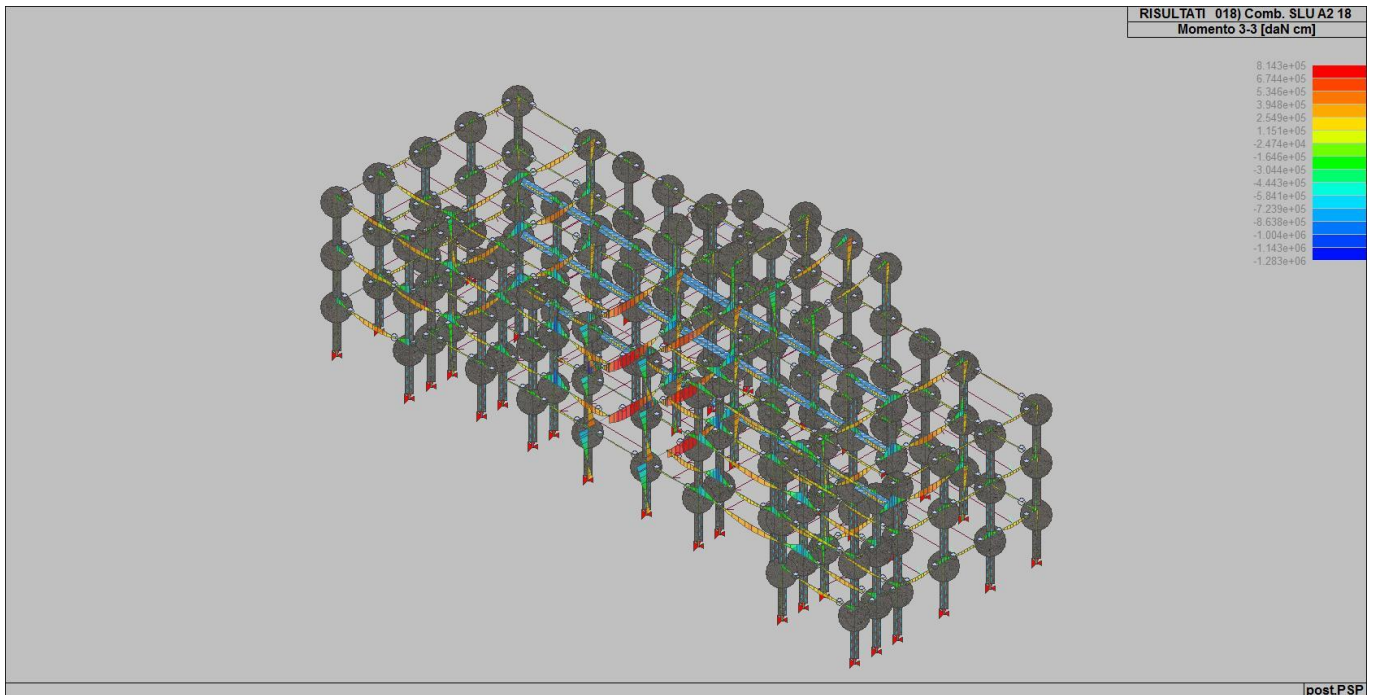
43_RIS_M3_002_Comb. SLU A1 2



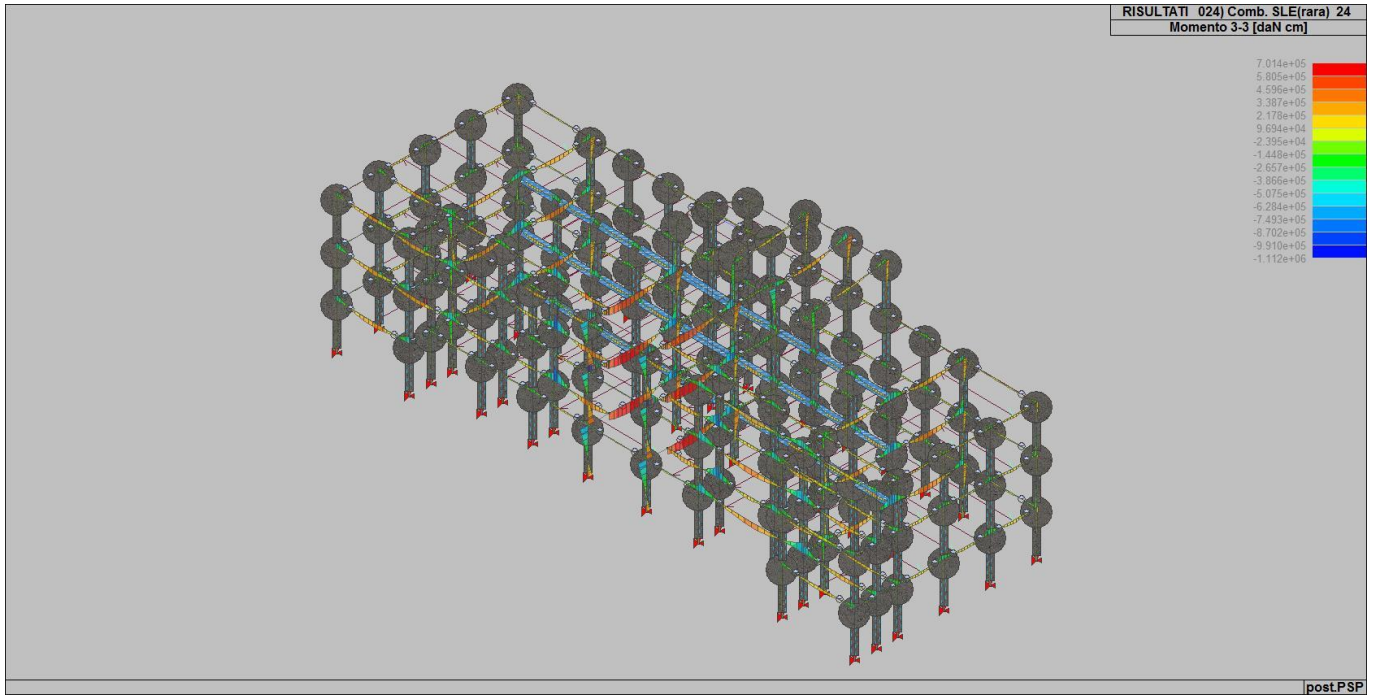
43_RIS_M3_004_Comb. SLU A1 4



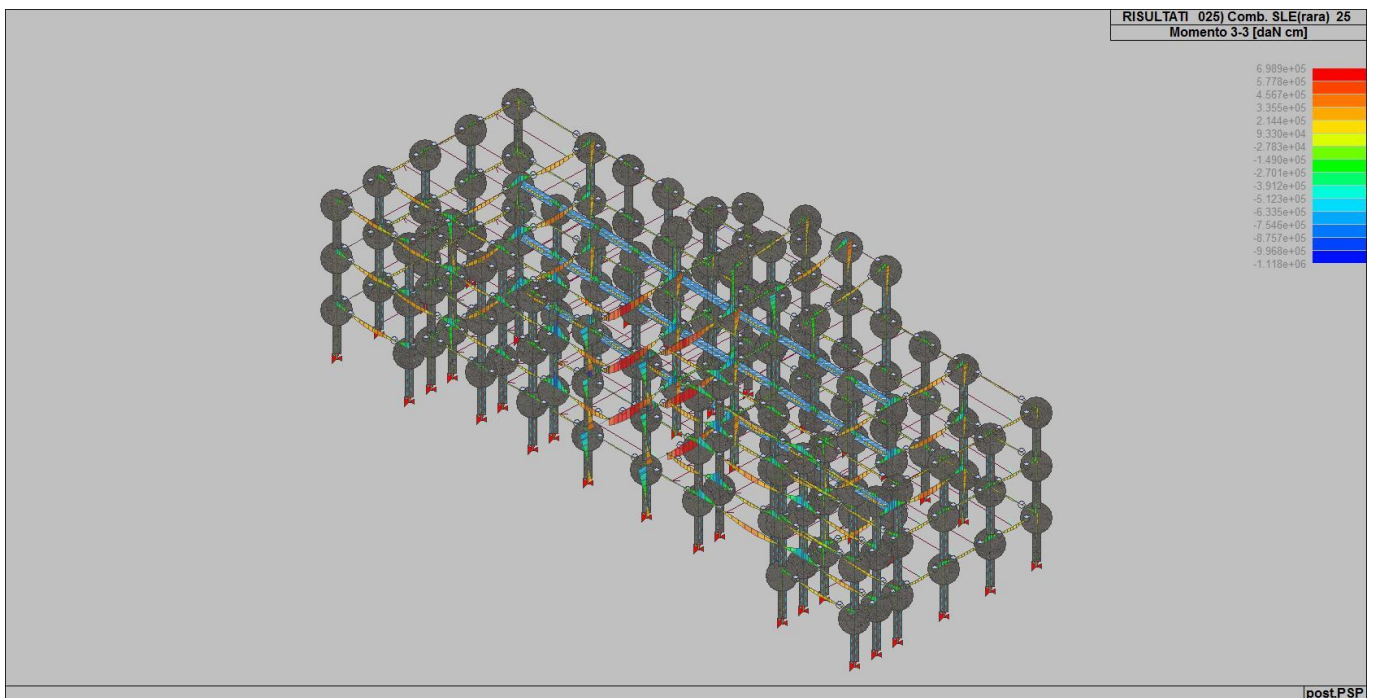
43_RIS_M3_017_Comb. SLU A2 17



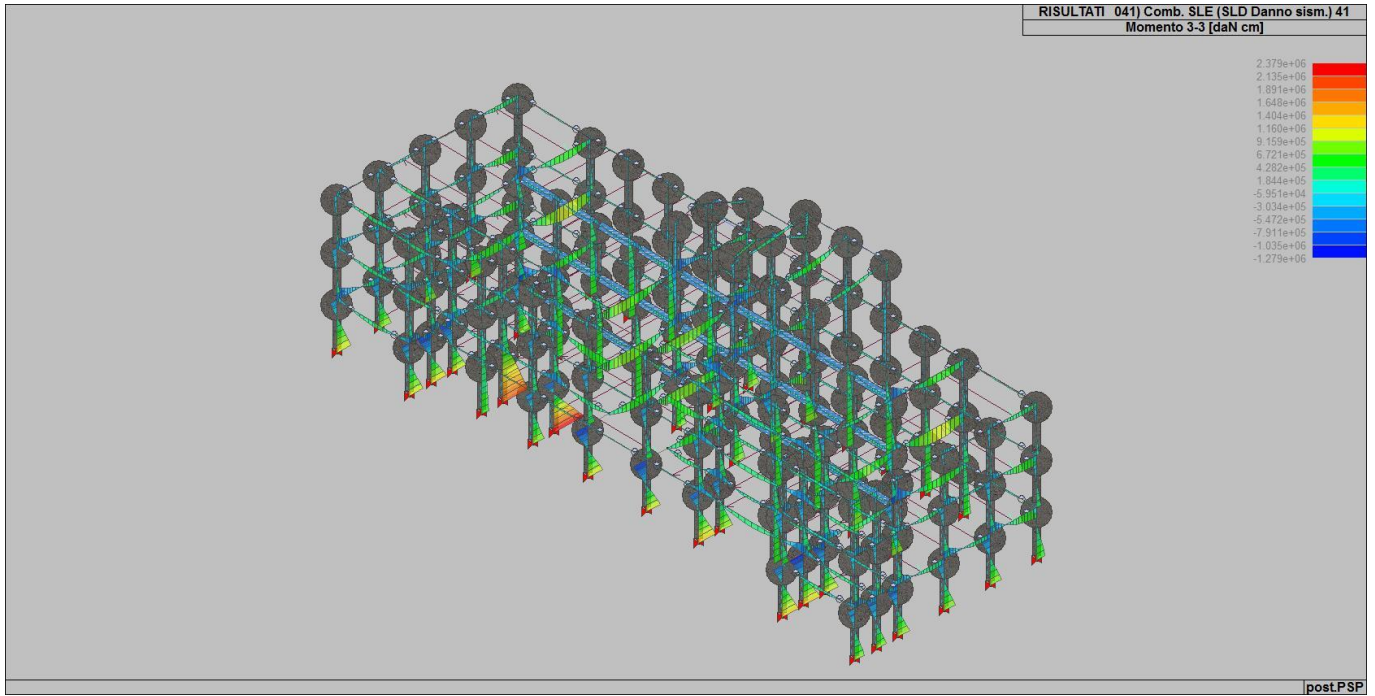
43_RIS_M3_018_Comb. SLU A2 18



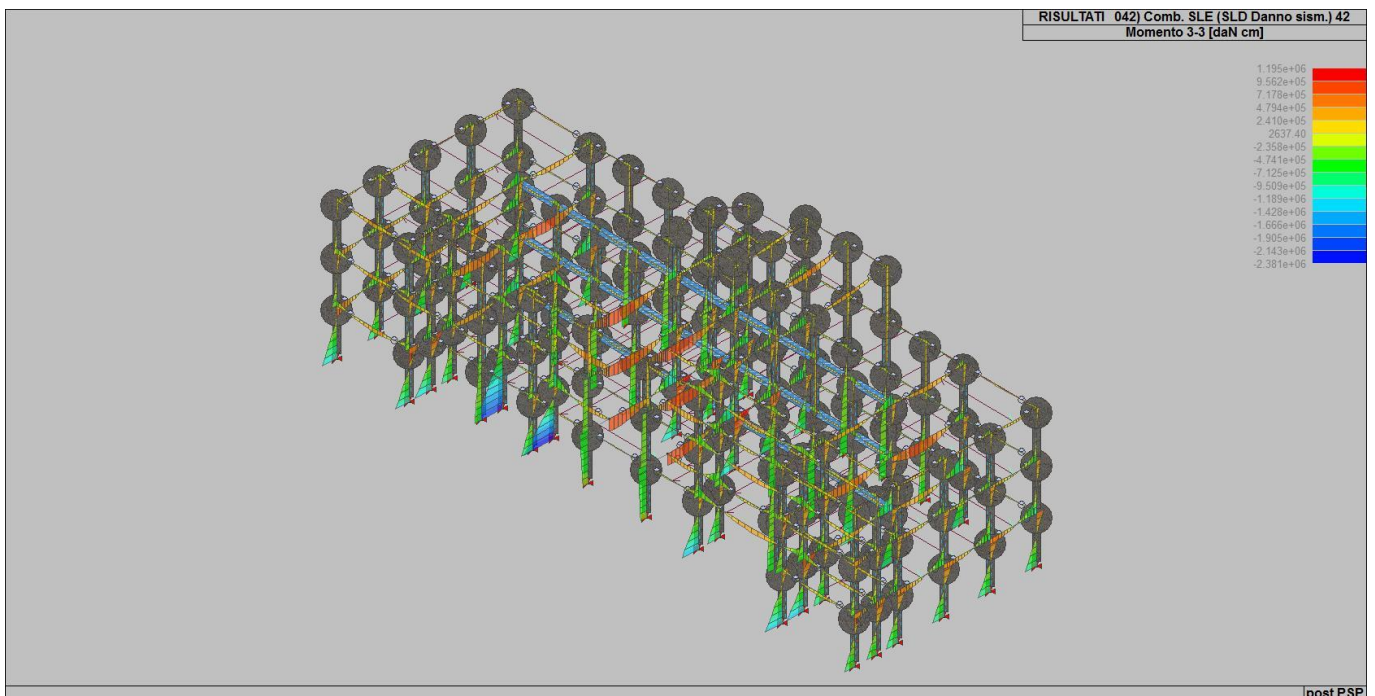
43_RIS_M3_024_Comb. SLE(rara) 24



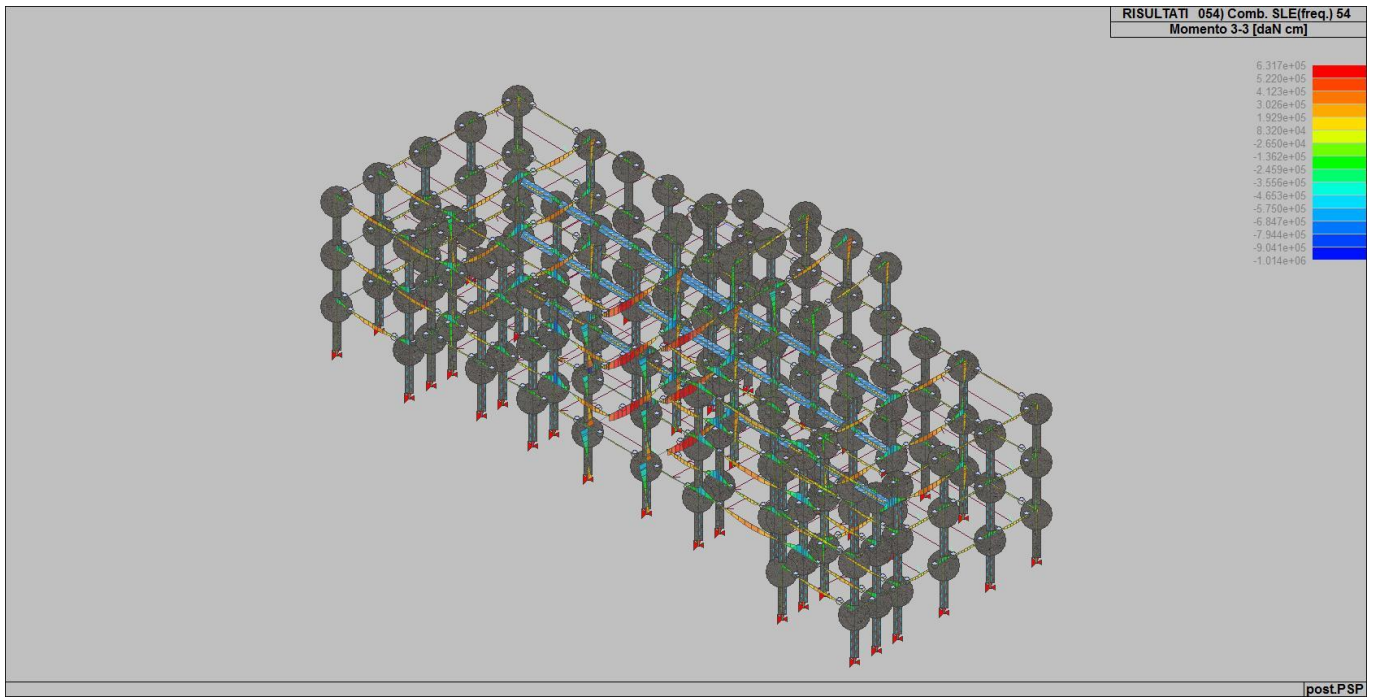
43_RIS_M3_025_Comb. SLE(rara) 25



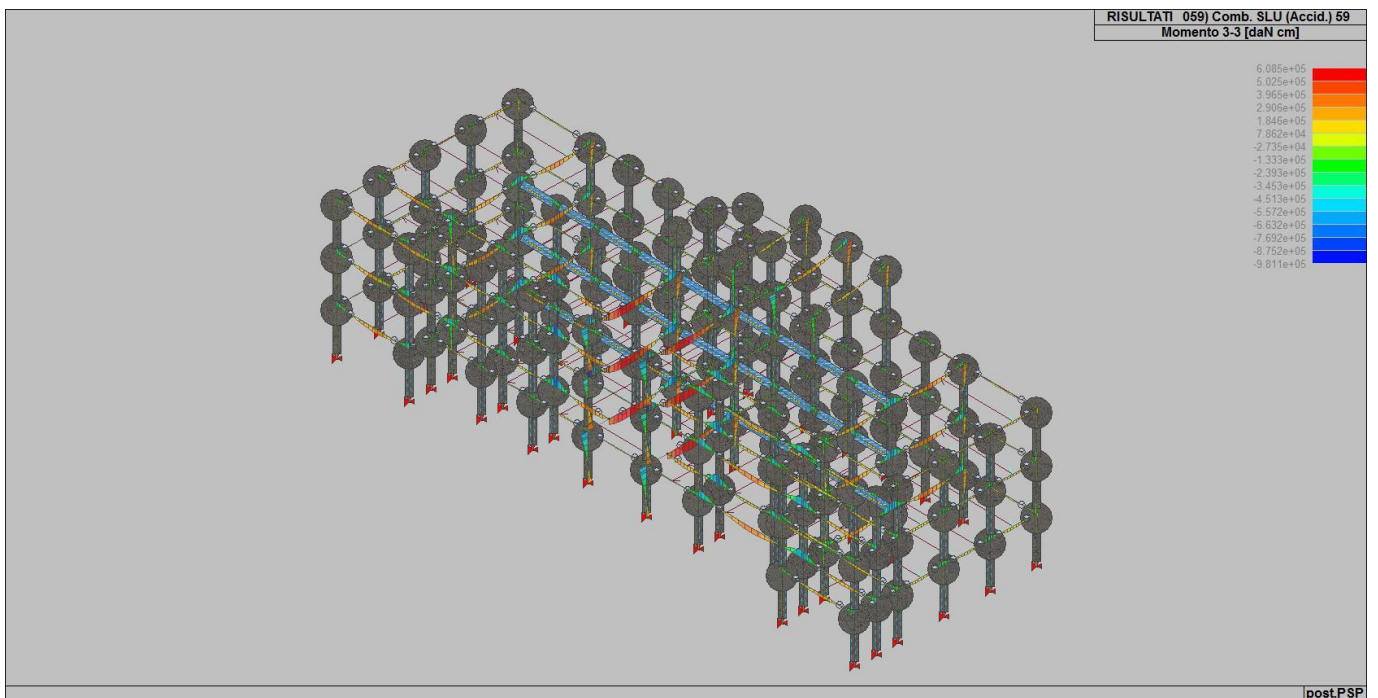
43_RIS_M3_041_Comb. SLE (SLD Danno sism.) 41



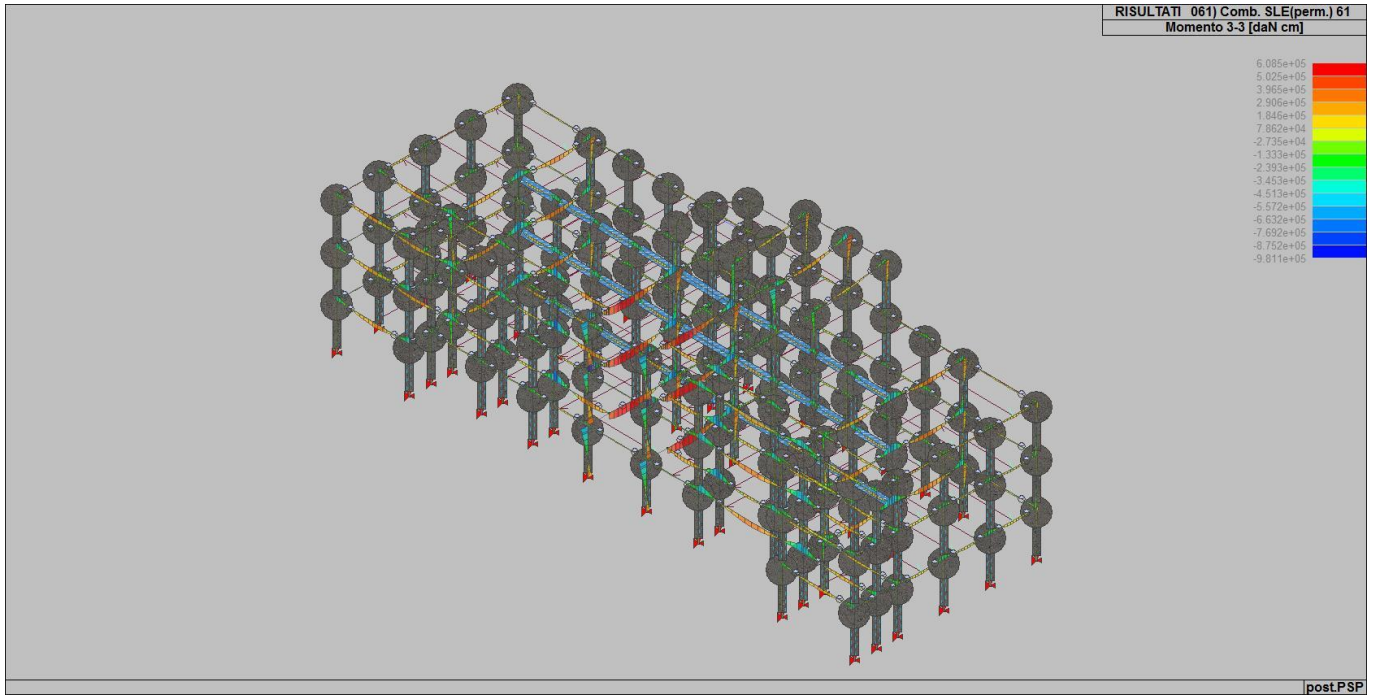
43_RIS_M3_042_Comb. SLE (SLD Danno sism.) 42



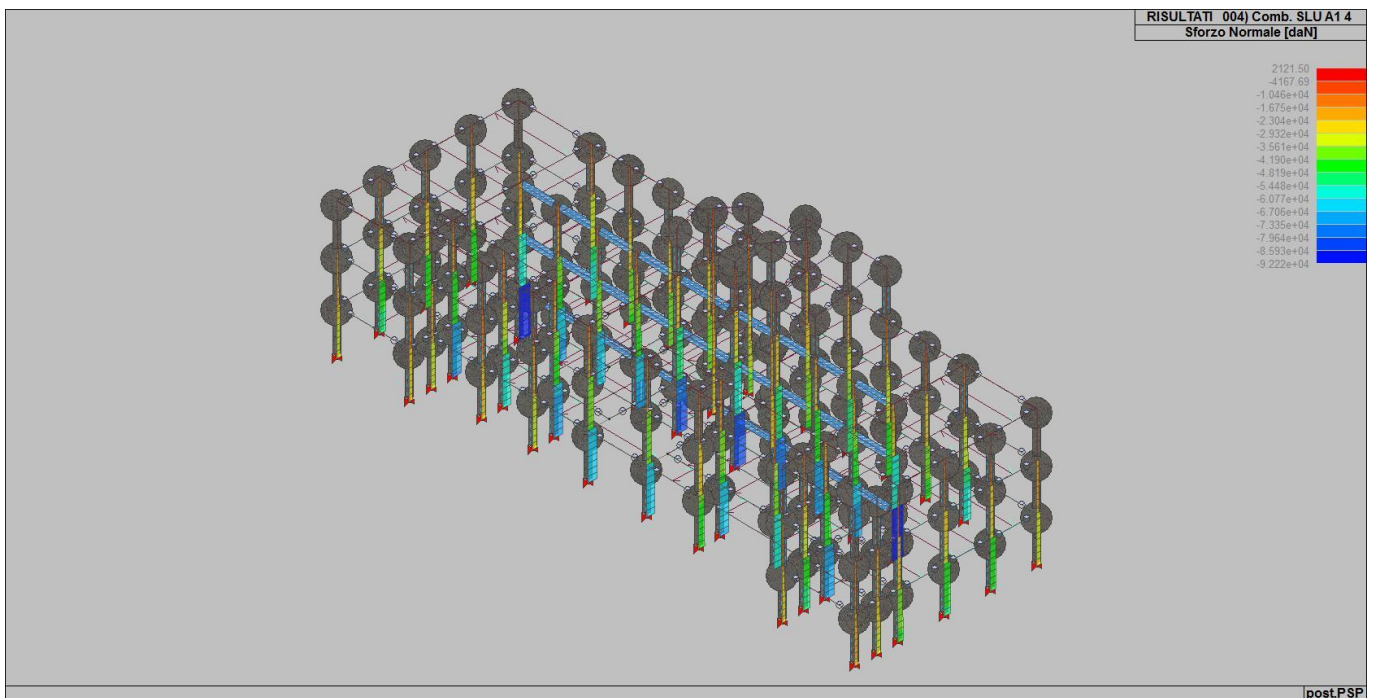
43_RIS_M3_054_Comb. SLE(freq.) 54



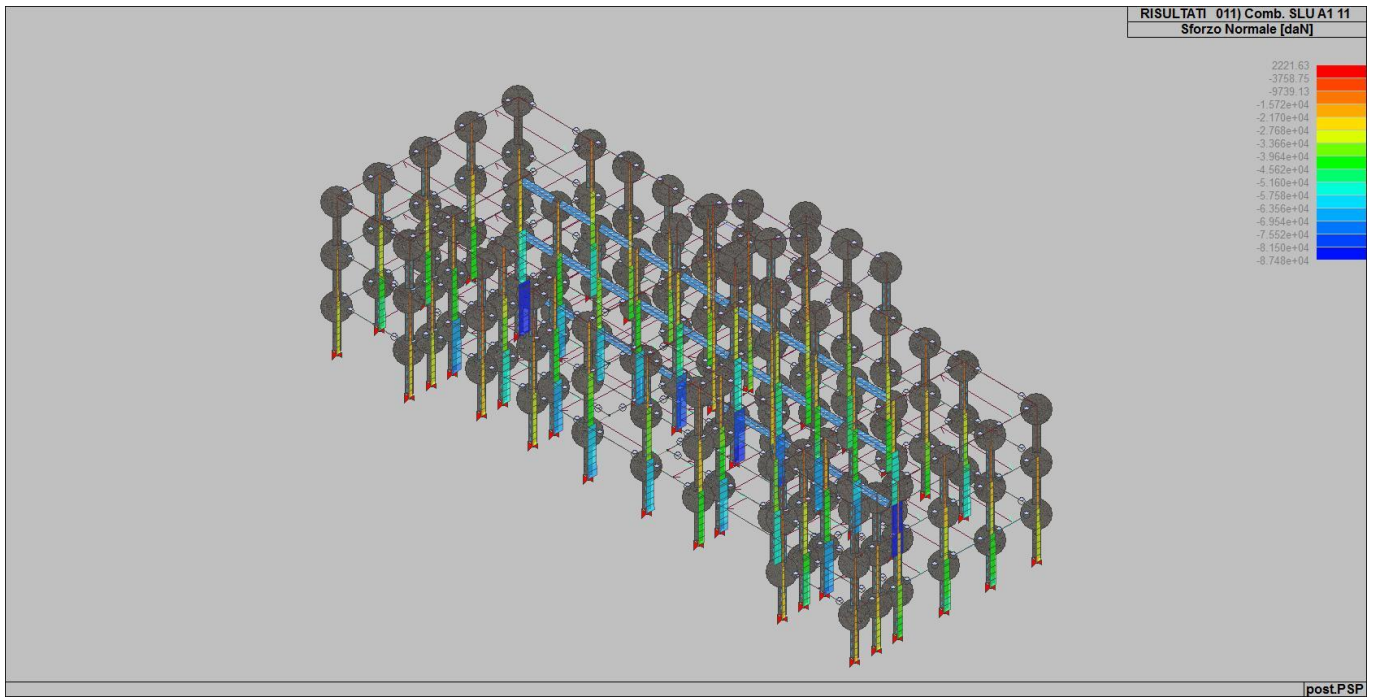
43_RIS_M3_059_Comb. SLU (Accid.) 59



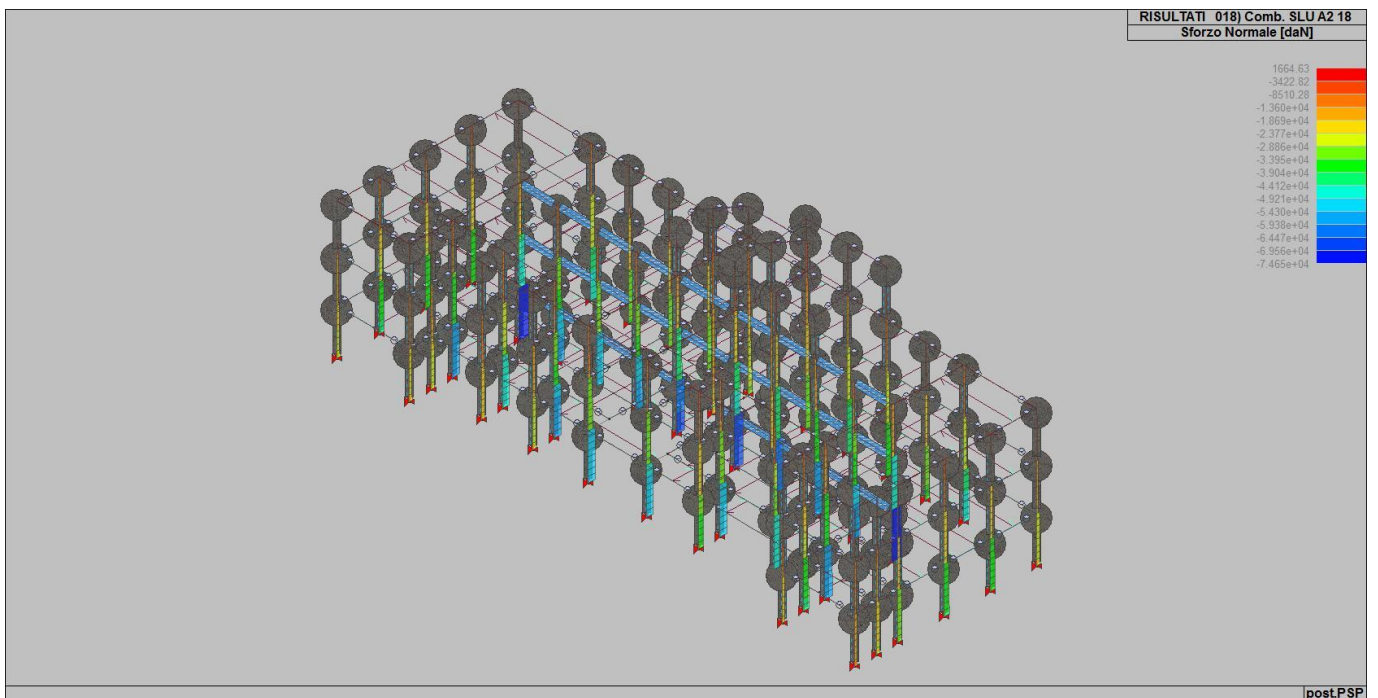
43_RIS_M3_061_Comb. SLE(perm.) 61



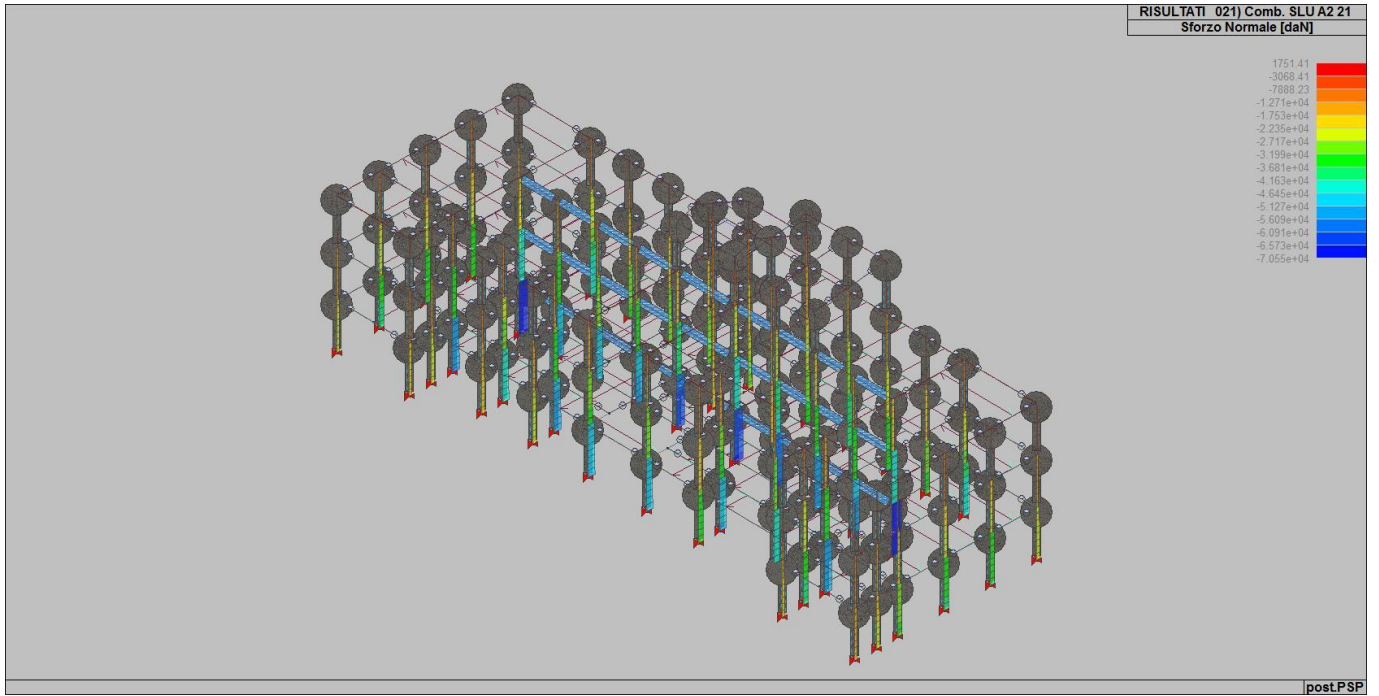
43_RIS_N_004_Comb. SLU A1 4



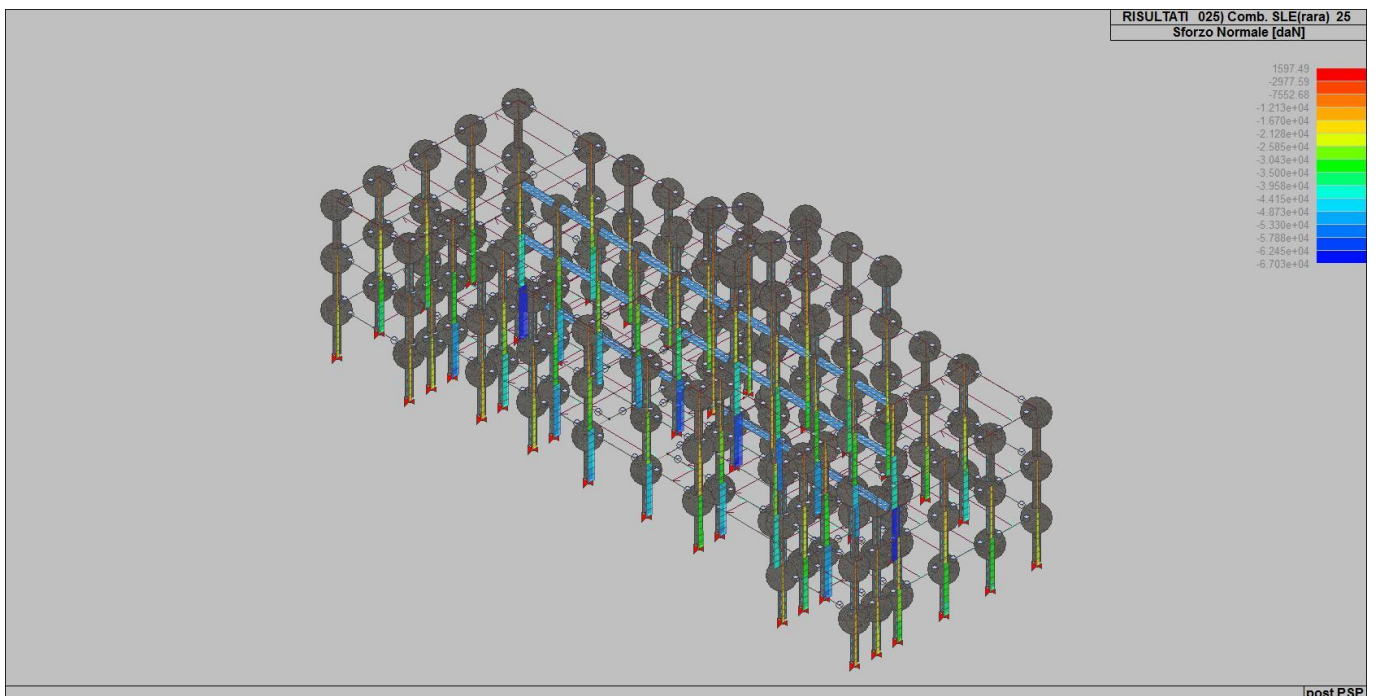
43_RIS_N_011_Comb. SLU A1 11



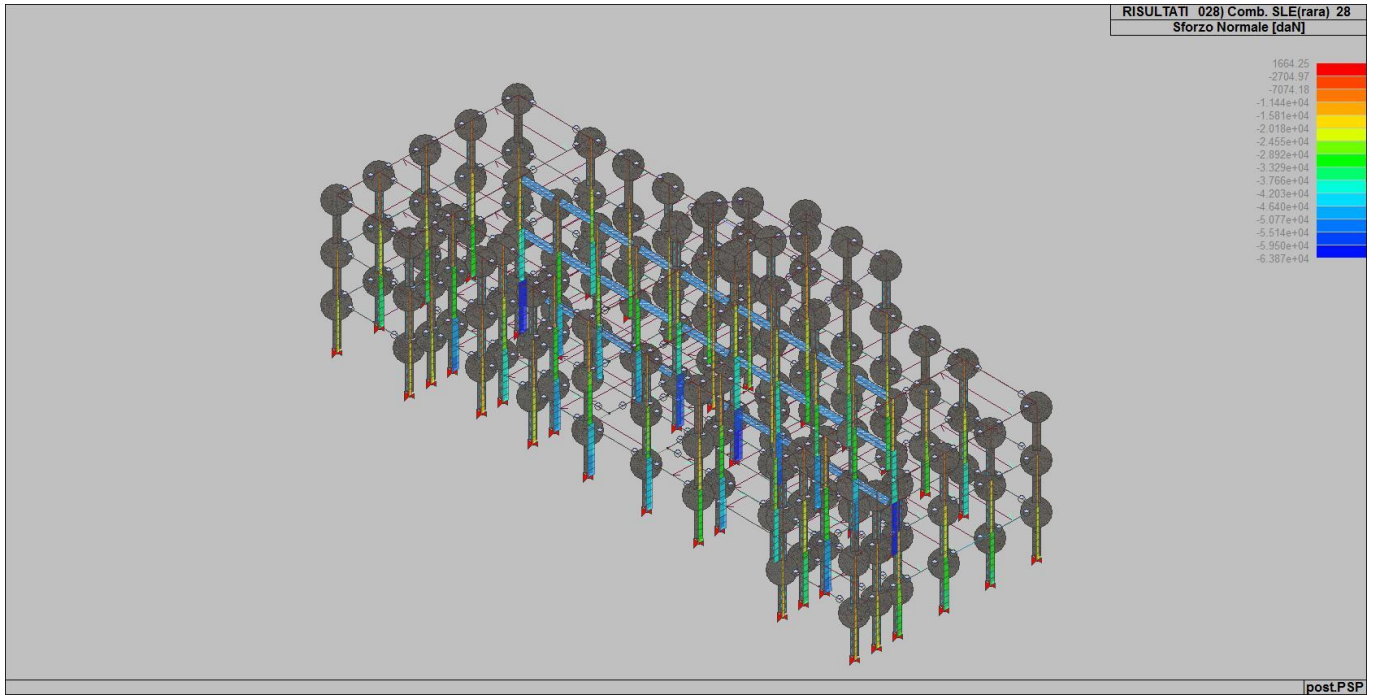
43_RIS_N_018_Comb. SLU A2 18



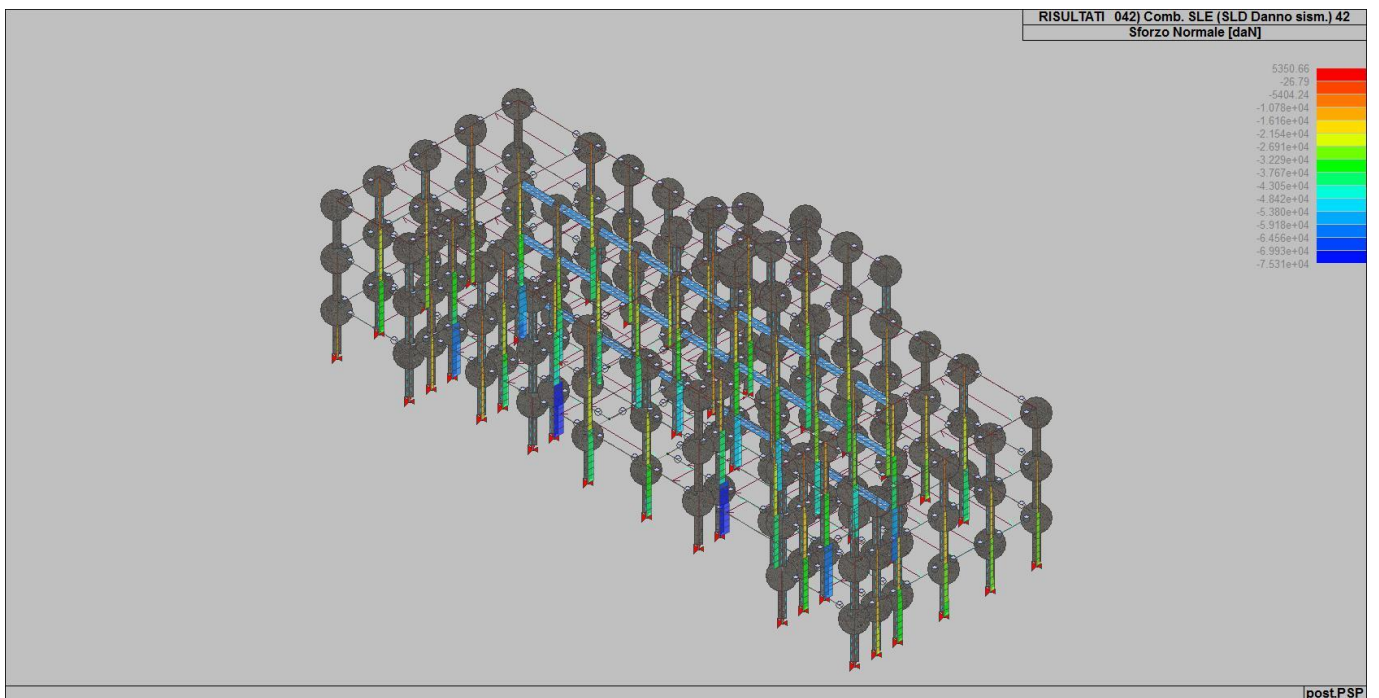
43_RIS_N_021_Comb. SLU A2 21



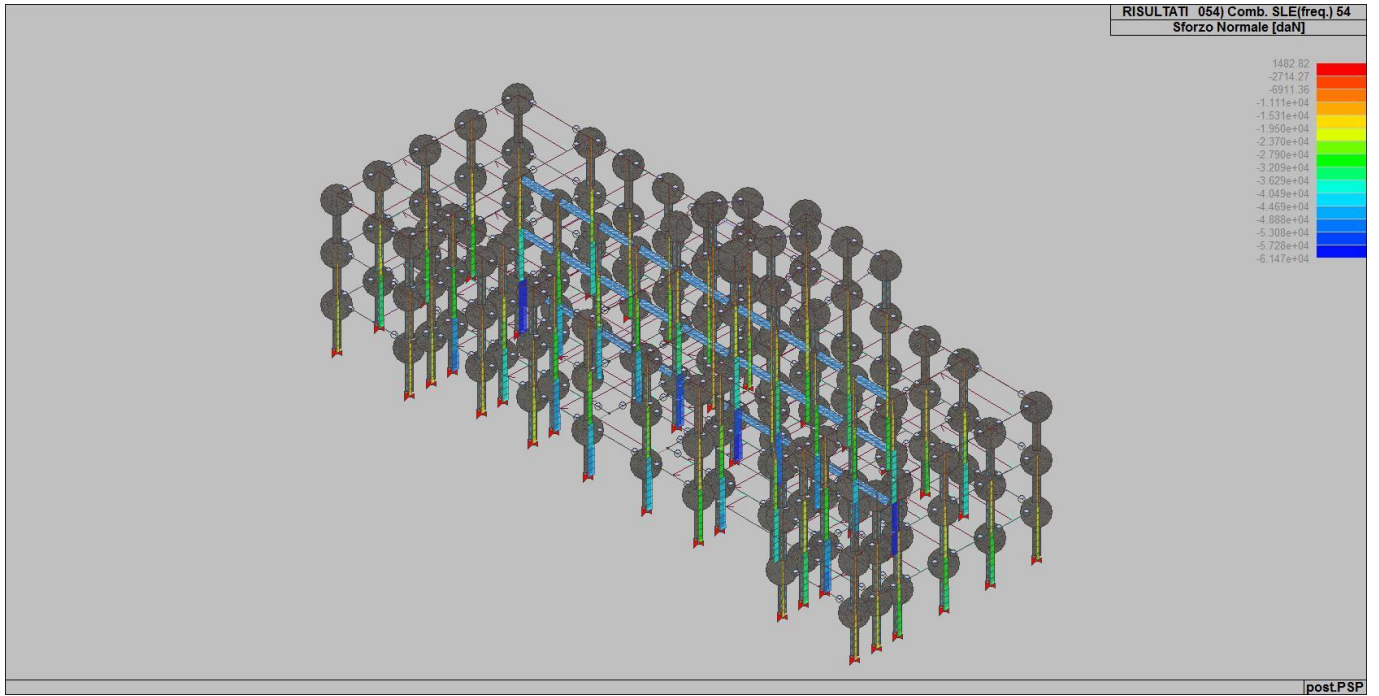
43_RIS_N_025_Comb. SLE(rara) 25



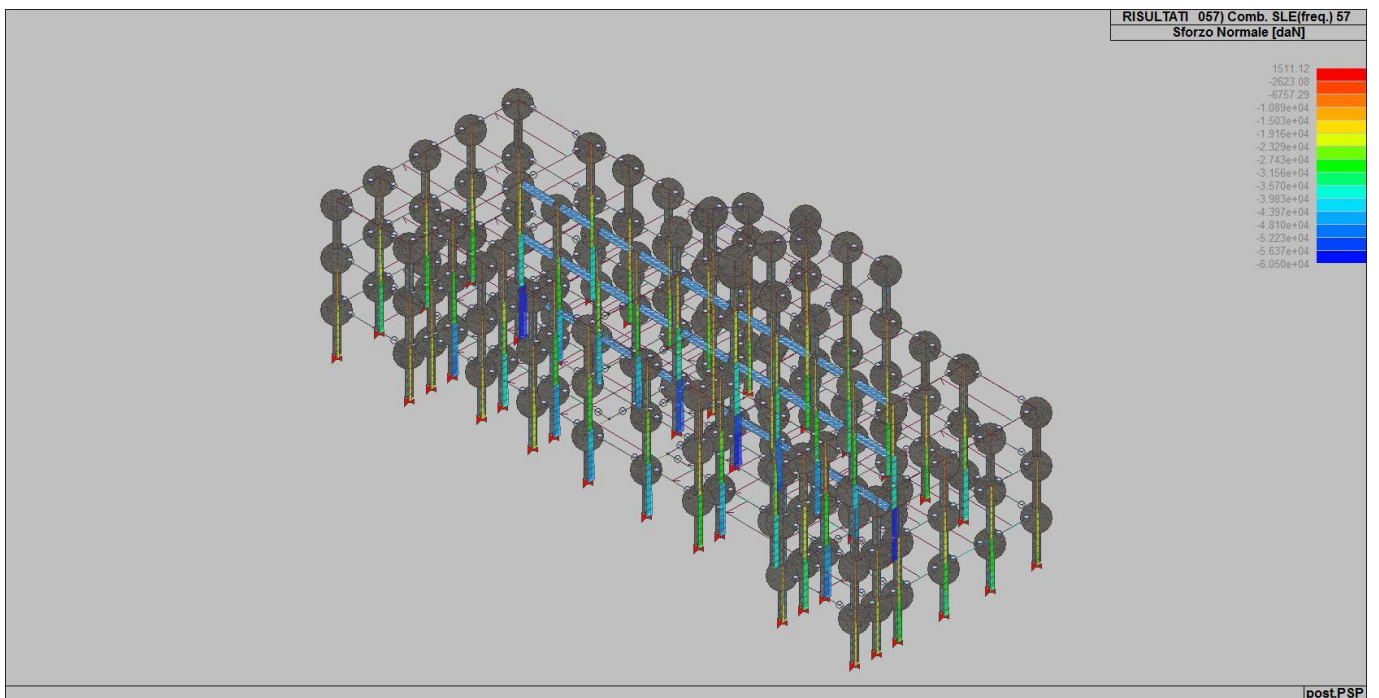
43_RIS_N_028_Comb. SLE(rara) 28



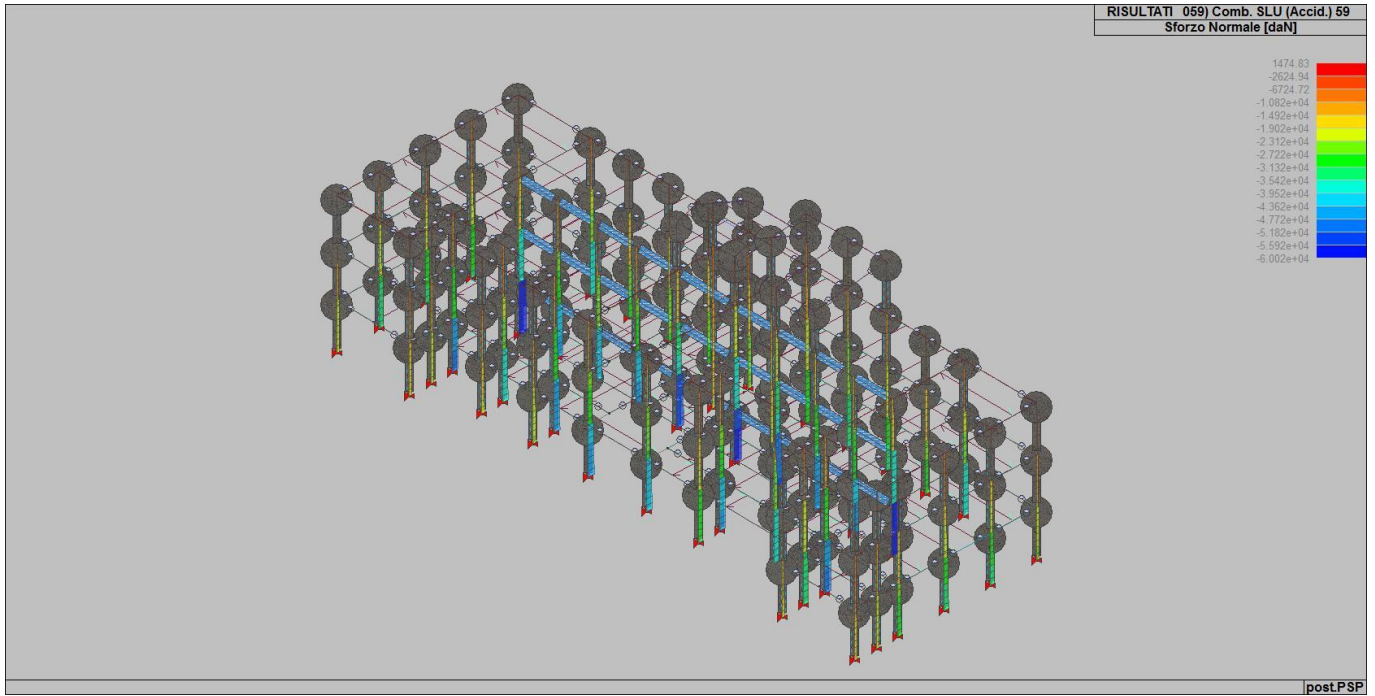
43_RIS_N_042_Comb. SLE (SLD Danno sism.) 42



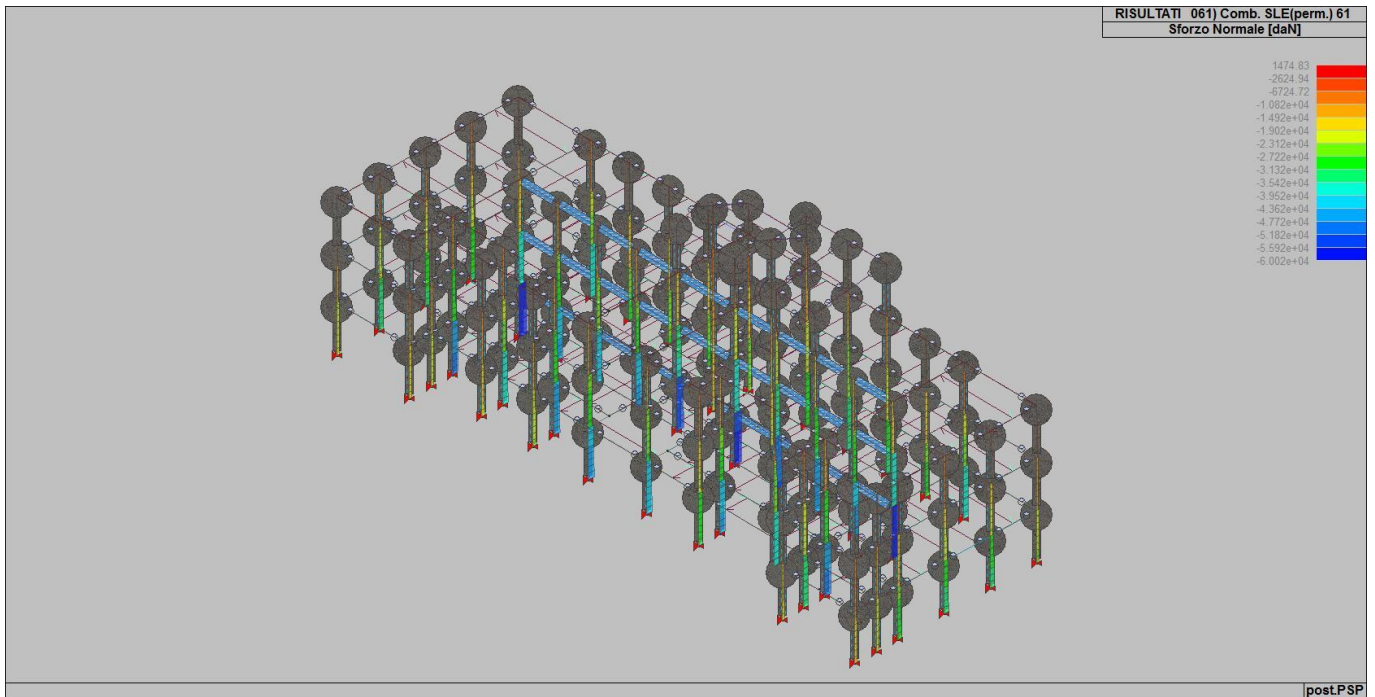
43_RIS_N_054_Comb. SLE(freq.) 54



43_RIS_N_057_Comb. SLE(freq.) 57



43_RIS_N_059_Comb. SLU (Accid.) 59



43_RIS_N_061_Comb. SLE(perm.) 61

VERIFICHE ELEMENTI ESISTENTI

LEGENDA TABELLA VERIFICHE ELEMENTI ESISTENTI

Le verifiche degli elementi esistenti sono state condotte con riferimento al Capitolo 8 del D.M. 14 gennaio 2008. Il metodo adottato è quello previsto nella circolare 617 del 2 febbraio 2009 al punto C8.7.2.4 analisi lineare con spettro elastico.

Le modalità di analisi e le verifiche, che consistono nel confronto tra domanda e capacità, sono riassunte nella tabella C8.4 del succitato documento. Il programma consente di effettuare analisi lineare statica e dinamica e analisi non lineare statica. Qualora l'analisi effettuata sia lineare le verifiche sono precedute da un controllo di accettazione del modello lineare, atto a valutare la dispersione dei rapporti domanda/capacità.

Per gli elementi in c.a. sono previste le seguenti verifiche:

- flessione con e senza sforzo normale
- taglio
- nodi trave-pilastro

Con riferimento ai punti succitati le verifiche vengono così tabellate:

Tabella relativa alle verifiche di accettazione del modello lineare

Pilas. / Trave	numero dell'elemento considerato
ro I (J) acc.	massimo rapporto domanda/capacità in termini di momento flettente di cui al p.to C8.7.2.4 per la verifica di accettazione
ver. f. acc.	massimo rapporto domanda/capacità in termini di taglio di cui al p.to C8.7.2.4 per la verifica di accettazione
Rif. cmb	combinazioni per le quali si sono attinti i valori riportati

Tabella relativa alle verifiche degli elementi duttili e fragili

Pilas. / Trave	numero dell'elemento considerato
SL cod	Stato limite considerato e relativo esito delle verifica (NV non verifica, ok verifica)
ver. (d)	massimo rapporto domanda capacità in termini di deformazione per gli elementi duttili; nello specifico: rot. c / ThetaU per SLC rot. c / 0.75 ThetaU per SLV rot. c / ThetaY per SLD
ver. (f)	massimo rapporto domanda capacità in termini di verifica a taglio
rot. c	valore di rotazione rispetto alla corda (rappresenta la domanda in termini di deformazione) per cui si attinge il massimo valore della verifica ver. (d)
Theta Y	capacità di rotazione rispetto alla corda allo snervamento, calcolata con la formula [8.7.2.1°]
Theta U	capacità di rotazione rispetto alla corda in condizioni di collasso
curv. Y	curvatura della sezione allo snervamento dell'acciaio
curv. U	curvatura ultima della sezione valutata considerando le deformazioni ultime di conglomerato (tenuto conto del confinamento) e acciaio
Lv	luce di taglio; rapporto momento/taglio utilizzato nelle succitate formule per il calcolo di Theta Y (U)
V2(V3)	valore del taglio 2 (3) per cui si attinge il massimo valore della verifica ver. (f)
ro V I (V J)	indicatori del rapporto domanda/capacità per gli elementi duttili; se inferiori a 1 le sollecitazioni degli elementi fragili sono assunte dall'analisi, in caso contrario sono assunte per equilibrio considerando le capacità degli elementi duttili
Rif. cmb	Combinazioni in cui si attingono i massimi valori dei rapporti domanda/capacità; per i pilastri, il numero tra parentesi indica l'asse(locale) di riferimento per le rotazioni riportate

Tabella relativa alle verifiche dei nodi trave pilastro

Pilas. S	numero del pilastro considerato (superiore al nodo)
Pilas. I	numero del relativo pilastro inferiore
Nodo	numero del nodo tra i pilastri
SL cod	Stato limite considerato e relativo esito delle verifica (NV non verifica, ok verifica, nrC non richiesta in quanto confinato)
ver. (+)	massimo rapporto domanda capacità con riferimento alla formula 8.7.2.2 (resistenza per trazione)
ver. (-)	massimo rapporto domanda capacità con riferimento alla formula 8.7.2.3 (resistenza per compressione)
V +	valore del taglio, nel pilastro superiore, in direzione 2 o 3 per cui si attinge il massimo valore della verifica ver. (+)
V + af s	sollecitazione di trazione presente nell'armatura longitudinale superiore della trave da sommare (con segno) a V +
N +	azione assiale presente nel pilastro superiore contemporanea a V +
V -	valore del taglio, nel pilastro superiore, in direzione 2 o 3 per cui si attinge il massimo valore della verifica ver. (-)
V - af s	sollecitazione di trazione presente nell'armatura longitudinale superiore della trave da sommare (con segno) a V -
N -	azione assiale presente nel pilastro superiore contemporanea a V -
Area g	area del nodo (da Pilas. I)
Rif. cmb	combinazioni in cui si attingono i massimi valori dei rapporti domanda/capacità; per i nodi, il numero tra parentesi indica l'asse(locale) di riferimento per le sollecitazioni di taglio

< TABELLA VERIFICHE POST-OPERAM >

Elementi post rinforzo tipo: C8A.7.2 INCAMICIATURA IN ACCIAIO e assimilabili

Elementi post rinforzo tipo: C8A.7.1 INCAMICIATURA IN C.A.

Elementi non rinforzati

Pilas.I	Pilas.S	Nodo	SL	cod ver. (+)	V + daN	V + af s daN	N + daN	ver. (-)	V - daN	V - af s daN	N - daN	Area G cm2	Rif. cmb
1	103	2	SLV:ok	0.0	0.0	0.0	0.0	0.47	-3632.22	2.300e+04	2.396e+04	3000.0	0(2),32(3)
2	104	4	SLV:ok	0.02	3496.71	-2.241e+04	1.723e+04	0.44	-3496.72	2.241e+04	1.873e+04	3000.0	31(3),32(3)
3	105	6	SLV:ok	0.0	0.0	0.0	0.0	0.50	-3730.76	2.425e+04	2.657e+04	3000.0	0(2),30(3)
4	106	8	SLV:ok	0.0	0.0	0.0	0.0	0.56	-2831.44	1.843e+04	3.884e+04	3000.0	0(2),33(2)
5	107	10	SLV:ok	0.04	2198.21	-1.969e+04	1.158e+04	0.44	-2198.12	1.956e+04	1.743e+04	3000.0	34(2),33(2)
6	108	12	SLV:ok	0.0	0.0	0.0	0.0	0.39	2075.54	-1.570e+04	1.727e+04	3000.0	0(2),34(2)
7	109	14	SLV:ok	0.0	0.0	0.0	0.0	0.38	2085.09	-1.459e+04	1.725e+04	3000.0	0(2),34(2)
8	110	16	SLV:ok	0.0	0.0	0.0	0.0	0.50	3722.22	-2.423e+04	2.657e+04	3000.0	0(2),29(3)
9	111	18	SLV:ok	0.0	0.0	0.0	0.0	0.56	-2908.93	1.837e+04	3.883e+04	3000.0	0(2),33(2)
10	112	20	SLV:ok	0.0	0.0	0.0	0.0	0.44	-2352.48	1.795e+04	2.267e+04	3000.0	0(2),33(2)
11	113	22	SLV:ok	0.0	0.0	0.0	0.0	0.43	-3410.06	2.191e+04	1.858e+04	3000.0	0(2),30(3)
12	114	24	SLV:ok	0.0	0.0	0.0	0.0	0.42	-3321.26	2.137e+04	1.767e+04	3000.0	0(2),32(3)
13	115	26	SLV:ok	0.0	0.0	0.0	0.0	0.51	-3850.42	2.493e+04	2.669e+04	3000.0	0(2),30(3)
14	116	28	SLV:ok	0.0	0.0	0.0	0.0	0.45	-2355.40	1.871e+04	2.272e+04	3000.0	0(2),33(2)
15	117	30	SLV:ok	0.0	0.0	0.0	0.0	0.44	2378.53	-1.856e+04	2.082e+04	3000.0	0(2),34(2)
16	118	32	SLV:ok	0.0	0.0	0.0	0.0	0.53	3995.08	-2.574e+04	2.845e+04	3000.0	0(2),31(3)
17	119	34	SLV:ok	0.0	0.0	0.0	0.0	0.54	-4006.13	2.587e+04	2.991e+04	3000.0	0(2),32(3)
18	120	36	SLV:ok	0.03	-3219.45	2.202e+04	1.691e+04	0.43	-3219.11	2.224e+04	1.799e+04	3000.0	32(3),30(3)
19	121	38	SLV:ok	0.0	0.0	0.0	0.0	0.47	3464.11	-2.348e+04	2.269e+04	3000.0	0(2),29(3)
20	122	40	SLV:ok	0.0	0.0	0.0	0.0	0.61	-3361.70	2.568e+04	3.891e+04	3000.0	0(2),30(3)
21	123	42	SLV:ok	0.0	0.0	0.0	0.0	0.64	3387.35	-2.591e+04	4.210e+04	3000.0	0(2),29(3)
22	124	44	SLV:ok	0.0	0.0	0.0	0.0	0.42	-2116.31	1.900e+04	1.516e+04	3000.0	0(2),33(2)
23	125	46	SLV:ok	0.0	0.0	0.0	0.0	0.56	-4175.59	2.648e+04	3.215e+04	3000.0	0(2),30(3)
24	126	48	SLV:ok	0.0	0.0	0.0	0.0	0.43	3333.17	-2.147e+04	1.879e+04	3000.0	0(2),31(3)
25	127	50	SLV:ok	0.0	0.0	0.0	0.0	0.59	3891.85	-2.561e+04	3.639e+04	3000.0	0(2),29(3)
26	128	52	SLV:ok	0.0	0.0	0.0	0.0	0.49	3578.30	-2.281e+04	2.618e+04	3000.0	0(2),31(3)
27	129	54	SLV:ok	0.0	0.0	0.0	0.0	0.44	-2175.29	1.997e+04	1.647e+04	3000.0	0(2),33(2)
28	130	56	SLV:ok	0.0	0.0	0.0	0.0	0.55	-3632.10	2.501e+04	3.207e+04	3000.0	0(2),30(3)
29	131	58	SLV:ok	0.0	0.0	0.0	0.0	0.39	-2683.33	2.140e+04	2.132e+04	3500.0	0(2),30(3)
30	132	60	SLV:ok	0.0	0.0	0.0	0.0	0.50	3665.50	-2.463e+04	2.519e+04	3000.0	0(2),29(3)
31	133	62	SLV:ok	0.0	0.0	0.0	0.0	0.52	-3562.47	2.553e+04	2.713e+04	3000.0	0(2),30(3)
32	134	64	SLV:ok	0.05	3497.64	-2.366e+04	1.825e+04	0.39	3497.34	-2.366e+04	1.844e+04	3500.0	31(3),29(3)
33	135	66	SLV:ok	0.0	0.0	0.0	0.0	0.49	3802.95	-2.290e+04	2.743e+04	3000.0	0(2),29(3)
34	136	68	SLV:ok	0.0	0.0	0.0	0.0	0.50	-3867.42	2.310e+04	2.832e+04	3000.0	0(2),30(3)
35	137	70	SLV:ok	0.01	-3170.61	2.103e+04	1.577e+04	0.41	-3170.61	2.103e+04	1.577e+04	3000.0	30(3),30(3)
36	138	72	SLV:ok	0.01	4033.76	-2.740e+04	2.681e+04	0.36	3827.21	-2.700e+04	2.733e+04	4500.0	31(3),29(3)
37	139	74	SLV:ok	0.0	0.0	0.0	0.0	0.33	-3687.39	2.484e+04	2.413e+04	4500.0	0(2),30(3)
38	140	76	SLV:ok	0.04	2944.24	-1.883e+04	1.145e+04	0.38	-2944.31	1.883e+04	1.362e+04	3000.0	31(3),32(3)
39	141	78	SLV:ok	0.09	1908.90	-1.603e+04	4400.35	0.37	-1908.84	1.549e+04	1.808e+04	3500.0	34(2),33(2)
40	142	80	SLV:ok	0.12	-2233.64	2.495e+04	1.367e+04	0.44	-2233.64	2.495e+04	1.367e+04	3500.0	33(2),33(2)
41	143	82	SLV:ok	0.0	0.0	0.0	0.0	0.55	2998.27	-2.340e+04	3.302e+04	3000.0	0(2),29(3)
42	144	84	SLV:ok	0.0	0.0	0.0	0.0	0.35	2673.74	-2.006e+04	1.694e+04	3500.0	0(2),31(3)
43	145	86	SLV:ok	0.0	0.0	0.0	0.0	0.45	-2353.36	1.940e+04	2.058e+04	3000.0	0(2),33(2)
44	146	88	SLV:ok	0.0	0.0	0.0	0.0	0.43	2381.17	-1.768e+04	2.072e+04	3000.0	0(2),34(2)
103	205	92	SLV:ok	0.0	0.0	0.0	0.0	0.47	-2090.05	1.725e+04	1.457e+04	2475.0	0(2),32(3)
104	206	94	SLV:ok	0.07	1796.36	-1.596e+04	7579.88	0.43	-1796.37	1.596e+04	9270.46	2475.0	31(3),32(3)
105	207	96	SLV:ok	0.02	1901.49	-1.780e+04	1.122e+04	0.46	1901.49	-1.780e+04	1.122e+04	2475.0	31(3),31(3)
106	208	98	SLV:ok	0.0	0.0	0.0	0.0	0.45	-1817.29	1.601e+04	1.849e+04	2475.0	0(2),35(2)
107	209	100	SLV:ok	0.0	0.0	0.0	0.0	0.39	-1394.01	1.083e+04	1.417e+04	2250.0	0(2),35(2)
108	210	102	SLV:ok	0.0	0.0	0.0	0.0	0.37	-1258.65	1.133e+04	7402.39	2475.0	0(2),30(3)
109	211	104	SLV:ok	0.0	0.0	0.0	0.0	0.37	1236.21	-1.134e+04	7457.81	2475.0	0(2),29(3)
110	212	106	SLV:ok	0.02	-1899.56	1.778e+04	1.115e+04	0.46	-1899.56	1.778e+04	1.115e+04	2475.0	32(3),32(3)
111	213	108	SLV:ok	0.0	0.0	0.0	0.0	0.45	-1621.70	1.576e+04	1.858e+04	2475.0	0(2),35(2)
112	214	110	SLV:ok	0.0	0.0	0.0	0.0	0.34	-1229.04	1.080e+04	1.009e+04	2475.0	0(2),35(2)
113	215	112	SLV:ok	0.02	-1739.23	1.552e+04	8200.87	0.42	-1738.87	1.552e+04	8367.52	2475.0	32(3),30(3)
114	216	114	SLV:ok	0.02	1689.82	-1.510e+04	7761.52	0.42	-1689.83	1.510e+04	8111.14	2475.0	31(3),32(3)
115	217	116	SLV:ok	0.0	0.0	0.0	0.0	0.46	-1986.19	1.761e+04	1.171e+04	2475.0	0(2),32(3)
116	218	118	SLV:ok	0.0	0.0	0.0	0.0	0.34	-1231.07	1.081e+04	1.010e+04	2475.0	0(2),35(2)
117	219	120	SLV:ok	0.0	0.0	0.0	0.0	0.34	1243.37	-1.092e+04	9533.36	2475.0	0(2),36(2)
118	220	122	SLV:ok	0.0	0.0	0.0	0.0	0.48	2094.33	-1.838e+04	1.391e+04	2475.0	0(2),31(3)
119	221	124	SLV:ok	0.0	0.0	0.0	0.0	0.48	-2105.71	1.845e+04	1.433e+04	2475.0	0(2),32(3)
120	222	126	SLV:ok	0.08	-1744.60	1.694e+04	8615.63	0.45	1744.53	-1.671e+04	1.088e+04	2475.0	32(3),31(3)
121	223	128	SLV:ok	0.0	0.0	0.0	0.0	0.48	2062.48	-1.846e+04	1.400e+04	2475.0	0(2),31(3)
122	224	130	SLV:ok	0.0	0.0	0.0	0.0	0.56	-2002.64	1.901e+04	2.009e+04	2250.0	0(2),32(3)
123	225	132	SLV:ok	0.0	0.0	0.0	0.0	0.60	2176.46	-1.911e+04	2.423e+04	2250.0	0(2),31(3)
124	226	134	SLV:ok	0.0	0.0	0.0	0.0	0.36	-1322.04	1.037e+04	1.043e+04	2250.0	0(2),33(2)

125	227	136	SLV:ok	7.95e-03	2795.77	-2.132e+04	1.561e+04	0.53	-2795.86	2.132e+04	1.782e+04	2475.0	31(3),32(3)
126	228	138	SLV:ok	0.03	-1695.57	1.516e+04	7749.85	0.42	1695.56	-1.516e+04	8980.71	2475.0	32(3),31(3)
127	229	140	SLV:ok	0.0	0.0	0.0	0.0	0.54	2311.21	-1.927e+04	2.145e+04	2475.0	0(2),31(3)
128	230	142	SLV:ok	0.0	0.0	0.0	0.0	0.47	1942.36	-1.664e+04	1.643e+04	2475.0	0(2),31(3)
129	231	144	SLV:ok	0.0	0.0	0.0	0.0	0.33	1133.30	-1.074e+04	9287.81	2475.0	0(2),36(2)
130	232	146	SLV:ok	0.0	0.0	0.0	0.0	0.50	1497.43	-1.842e+04	1.514e+04	2475.0	0(2),31(3)
131	233	148	SLV:ok	0.0	0.0	0.0	0.0	0.39	-1769.99	1.458e+04	1.026e+04	2500.0	0(2),32(3)
132	234	150	SLV:ok	0.02	1960.33	-1.743e+04	1.061e+04	0.45	-1960.34	1.743e+04	1.085e+04	2475.0	31(3),32(3)
133	235	152	SLV:ok	0.0	0.0	0.0	0.0	0.48	-1469.55	1.765e+04	1.335e+04	2475.0	0(2),32(3)
134	236	154	SLV:ok	0.16	1774.95	-1.882e+04	9006.32	0.47	1774.95	-1.882e+04	9006.32	2475.0	31(3),31(3)
135	237	156	SLV:ok	0.06	1980.35	-1.898e+04	1.175e+04	0.48	1980.35	-1.898e+04	1.175e+04	2475.0	31(3),31(3)
136	238	158	SLV:ok	0.10	-2034.77	2.063e+04	1.291e+04	0.51	-2034.77	2.063e+04	1.291e+04	2475.0	32(3),32(3)
137	239	160	SLV:ok	0.17	-1617.85	1.758e+04	7231.23	0.44	-1617.85	1.758e+04	7231.23	2475.0	32(3),32(3)
138	240	162	SLV:ok	0.0	0.0	0.0	0.0	0.47	2188.86	-1.754e+04	1.378e+04	2475.0	0(2),31(3)
139	241	164	SLV:ok	0.03	-1896.18	1.695e+04	9705.29	0.44	1896.11	-1.695e+04	1.008e+04	2475.0	32(3),31(3)
140	242	166	SLV:ok	0.06	1510.73	-1.343e+04	5162.63	0.39	-1510.46	1.342e+04	6084.71	2475.0	31(3),30(3)
141	243	168	SLV:ok	8.80e-03	1003.25	-8924.03	3355.38	0.37	-1187.48	1.153e+04	5415.63	2475.0	36(2),30(3)
142	244	170	SLV:ok	0.06	1157.29	-1.250e+04	5740.13	0.35	-1157.41	1.281e+04	7088.74	2475.0	36(2),35(2)
143	245	172	SLV:ok	0.0	0.0	0.0	0.0	0.50	-2157.64	1.987e+04	1.479e+04	2475.0	0(2),32(3)
144	246	174	SLV:ok	0.0	0.0	0.0	0.0	0.37	1168.99	-1.153e+04	6772.79	2475.0	0(2),29(3)
145	247	176	SLV:ok	0.0	0.0	0.0	0.0	0.35	1225.92	-1.149e+04	1.029e+04	2475.0	0(2),36(2)
146	248	178	SLV:ok	0.0	0.0	0.0	0.0	0.34	1244.01	-1.093e+04	9507.96	2475.0	0(2),34(2)
205	331	182	SLV:ok	4.76e-03	1242.06	-1.132e+04	4590.81	0.37	-1295.08	1.125e+04	6363.66	2475.0	31(3),32(3)
206		184	SLV:ok	0.07	0.0	5319.98	0.0	0.32	0.0	5319.98	0.0	2475.0	32(3),32(3)
207		186	SLV:ok	0.09	0.0	-5939.87	0.0	0.32	0.0	-5939.87	0.0	2475.0	31(3),31(3)
208		188	SLV:ok	0.16	0.0	7667.84	0.0	0.29	0.0	7667.84	0.0	2475.0	35(2),35(2)
209	332	190	SLV:ok	0.0	0.0	0.0	0.0	0.31	-1208.70	7941.62	1.146e+04	2475.0	0(2),35(2)
210		192	SLV:ok	0.08	0.0	5619.94	0.0	0.32	0.0	5619.94	0.0	2475.0	32(3),32(3)
211		194	SLV:ok	0.08	0.0	-5596.15	0.0	0.32	0.0	-5596.15	0.0	2475.0	31(3),31(3)
212		196	SLV:ok	0.08	0.0	5905.63	0.0	0.32	0.0	5905.63	0.0	2475.0	32(3),32(3)
213		198	SLV:ok	0.14	0.0	7050.59	0.0	0.28	0.0	7050.59	0.0	2475.0	35(2),35(2)
214		200	SLV:ok	0.04	0.0	3640.99	0.0	0.26	0.0	3640.99	0.0	2475.0	35(2),35(2)
215		93	SLV:ok	0.06	0.0	5147.04	0.0	0.32	0.0	5147.04	0.0	2475.0	32(3),32(3)
216		97	SLV:ok	0.06	0.0	4997.60	0.0	0.32	0.0	4997.60	0.0	2475.0	32(3),32(3)
217		101	SLV:ok	0.08	0.0	5895.06	0.0	0.32	0.0	5895.06	0.0	2475.0	32(3),32(3)
218		105	SLV:ok	0.04	0.0	3647.13	0.0	0.26	0.0	3647.13	0.0	2475.0	35(2),35(2)
219		109	SLV:ok	0.04	0.0	3684.44	0.0	0.26	0.0	3684.44	0.0	2475.0	35(2),35(2)
220		113	SLV:ok	0.09	0.0	-6223.10	0.0	0.32	0.0	-6223.10	0.0	2475.0	31(3),31(3)
221		117	SLV:ok	0.09	0.0	6257.65	0.0	0.32	0.0	6257.65	0.0	2475.0	32(3),32(3)
222	333	121	SLV:ok	0.05	-1457.65	1.031e+04	2656.69	0.35	-1457.65	1.031e+04	2656.69	2475.0	32(3),32(3)
223	334	125	SLV:ok	0.0	0.0	0.0	0.0	0.37	2283.38	-1.239e+04	7246.39	2475.0	0(2),31(3)
224	328	129	SLV:ok	0.04	-969.35	1.044e+04	3732.61	0.33	-969.35	1.044e+04	3732.61	2500.0	32(3),32(3)
225	329	133	SLV:ok	0.0	0.0	0.0	0.0	0.35	1515.54	-1.196e+04	7537.03	2500.0	0(2),31(3)
226	335	137	SLV:ok	0.0	0.0	0.0	0.0	0.29	-982.18	7476.07	7502.41	2475.0	0(2),33(2)
227	336	141	SLV:ok	0.06	1177.29	-1.229e+04	4439.44	0.39	-1689.79	1.340e+04	6198.32	2475.0	31(3),32(3)
228		145	SLV:ok	0.06	0.0	5014.97	0.0	0.32	0.0	5014.97	0.0	2475.0	32(3),32(3)
229	337	149	SLV:ok	0.0	0.0	0.0	0.0	0.37	1691.01	-1.126e+04	8104.95	2475.0	0(2),31(3)
230	338	153	SLV:ok	0.0	0.0	0.0	0.0	0.36	1362.03	-9959.85	8265.85	2475.0	0(2),31(3)
231		157	SLV:ok	0.04	0.0	-3524.71	0.0	0.26	0.0	-3524.71	0.0	2475.0	36(2),36(2)
232		161	SLV:ok	0.07	0.0	-4999.88	0.0	0.29	0.0	-4999.88	0.0	2500.0	31(3),31(3)
233		165	SLV:ok	0.10	0.0	6434.45	0.0	0.33	0.0	6434.45	0.0	2475.0	32(3),32(3)
234		169	SLV:ok	0.08	0.0	-5816.93	0.0	0.32	0.0	-5816.93	0.0	2475.0	31(3),31(3)
235		173	SLV:ok	0.08	0.0	5483.73	0.0	0.29	0.0	5483.73	0.0	2500.0	32(3),32(3)
236		177	SLV:ok	0.09	0.0	-6243.87	0.0	0.32	0.0	-6243.87	0.0	2475.0	31(3),31(3)
237		183	SLV:ok	0.09	0.0	-5979.42	0.0	0.32	0.0	-5979.42	0.0	2475.0	29(3),29(3)
238		187	SLV:ok	0.09	0.0	6080.24	0.0	0.32	0.0	6080.24	0.0	2475.0	30(3),30(3)
239		191	SLV:ok	0.08	0.0	5568.27	0.0	0.32	0.0	5568.27	0.0	2475.0	32(3),32(3)
240		195	SLV:ok	0.09	0.0	-6883.24	0.0	0.27	0.0	-6883.24	0.0	3025.0	31(3),31(3)
241		199	SLV:ok	0.08	0.0	5622.51	0.0	0.32	0.0	5622.51	0.0	2475.0	32(3),32(3)
242		95	SLV:ok	0.05	0.0	4456.35	0.0	0.31	0.0	4456.35	0.0	2475.0	32(3),32(3)
243		103	SLV:ok	0.09	0.0	5946.75	0.0	0.32	0.0	5946.75	0.0	2475.0	32(3),32(3)
244		111	SLV:ok	0.07	0.0	5022.64	0.0	0.26	0.0	5022.64	0.0	2475.0	35(2),35(2)
245		119	SLV:ok	0.10	0.0	7302.54	0.0	0.27	0.0	7302.54	0.0	3025.0	32(3),32(3)
246		127	SLV:ok	0.06	0.0	-5011.89	0.0	0.32	0.0	-5011.89	0.0	2475.0	31(3),31(3)
247		135	SLV:ok	0.04	0.0	-3858.22	0.0	0.26	0.0	-3858.22	0.0	2475.0	36(2),36(2)
248		143	SLV:ok	0.04	0.0	-3687.10	0.0	0.26	0.0	-3687.10	0.0	2475.0	36(2),36(2)
317		175	SLV:ok	0.06	0.0	-5117.94	0.0	0.32	0.0	-5117.94	0.0	2475.0	31(3),31(3)
319	321	123	SLV:ok	0.0	0.0	0.0	0.0	0.40	1857.45	-1.742e+04	1.404e+04	3000.0	0(2),34(2)
321	323	139	SLV:ok	0.0	0.0	0.0	0.0	0.30	979.52	-8678.50	6145.27	2475.0	0(2),36(2)
323		131	SLV:ok	0.03	0.0	-2946.27	0.0	0.25	0.0	-2946.27	0.0	2475.0	34(2),34(2)
328		155	SLV:ok	0.07	0.0	5112.70	0.0	0.29	0.0	5112.70	0.0	2500.0	35(2),35(2)
329	330	185	SLV:ok	0.16	3905.79	5861.07	1432.29	0.33	3905.79	5861.07	1432.29	2500.0	35(2),35(2)
330		159	SLV:ok	0.06	0.0	4535.03	0.0	0.28	0.0	4535.03	0.0	2500.0	32(3),32(3)
331		171	SLV:ok	0.07	0.0	-4816.78	0.0	0.32	0.0	5040.17	0.0	2475.0	34(2),32(3)
333		167	SLV:ok	0.09	0.0	-6039.56	0.0	0.32	0.0	-6039.56	0.0	2475.0	31(3),31(3)
334	317	163	SLV:ok	0.02	1209.56	0.0	4665.99	0.32	-19.80	4730.41	3457.84	2475.0	36(2),32(3)

336	181	SLV:ok	0.08	0.0	5672.12	0.0	0.32	0.0	5672.12	0.0	2475.0	32(3),32(3)	
337	91	SLV:ok	0.14	0.0	7683.59	0.0	0.34	0.0	7683.59	0.0	2475.0	32(3),32(3)	
338	197	SLV:ok	0.13	0.0	-7311.45	0.0	0.33	0.0	-7311.45	0.0	2475.0	31(3),31(3)	
343	346	202	SLV:ok	0.07	2916.82	0.0	2917.42	0.33	2572.65	-1.931e+04	1.445e+04	3500.0	36(2),29(3)
346	349	206	SLV:ok	0.09	1210.54	-1.153e+04	3454.81	0.35	-1210.65	1.151e+04	6845.92	2500.0	36(2),35(2)
349		210	SLV:ok	0.09	0.0	-5947.85	0.0	0.32	0.0	-5947.85	0.0	2475.0	31(3),31(3)
352	354	203	SLV:ok	0.05	1857.33	-1.371e+04	4505.04	0.38	-1857.31	1.405e+04	1.642e+04	3000.0	34(2),33(2)
354	356	207	SLV:ok	0.02	979.47	-9447.56	3588.36	0.37	-1238.25	1.153e+04	5354.68	2475.0	36(2),30(3)
356		211	SLV:ok	0.05	0.0	4451.25	0.0	0.31	0.0	4451.25	0.0	2475.0	32(3),32(3)
358	359	209	SLV:ok	0.0	0.0	0.0	0.0	0.54	4250.82	-2.648e+04	2.860e+04	3000.0	0(2),31(3)
359	360	212	SLV:ok	0.07	-2795.82	2.132e+04	1.366e+04	0.51	2795.90	-2.132e+04	1.382e+04	2475.0	32(3),31(3)
360		204	SLV:ok	0.16	0.0	-8365.64	0.0	0.34	0.0	-8365.64	0.0	2475.0	31(3),31(3)

Pilas.l	ver. (+)	ver. (-)
	0.0	0.25
	0.17	0.64

< TABELLA VERIFICHE ANTE-OPERAM >

Elementi ante, senza rinforzo

Trave	SL cod	ver. (d)	ver. (f)	rot. c	Theta Y	Theta U	curv. Y /cm	curv. U /cm	Lv cm	V2 daN	ro V I	ro V J	Rif. cmb
91	SLV:NV	0.02	1.23	3.933e-04	5.528e-03	2.164e-02	3.919e-05	6.511e-04	198.3	-1.359e+04	0.0	0.0	30,30
		0.01		2.190e-04	4.926e-03	1.673e-02	3.919e-05	6.511e-04	109.2				30
	SLD:ok	0.08		4.513e-04	5.601e-03		3.960e-05		202.0				40
		0.04		2.198e-04	4.921e-03		3.915e-05		107.8				38
92	SLV:ok	0.01	0.99	-2.023e-04	5.018e-03	1.798e-02	3.968e-05	6.524e-04	127.51	0.96e+04	0.0	0.0	29,29
		0.01		2.014e-04	5.023e-03	1.828e-02	3.935e-05	6.515e-04	132.9				30
	SLD:ok	0.04		-1.982e-04	5.014e-03		3.971e-05		126.2				37
		0.04		2.009e-04	5.023e-03		3.931e-05		133.4				38
93	SLV:NV	0.01	1.02	-2.055e-04	5.020e-03	1.815e-02	3.949e-05	6.519e-04	130.5	-1.127e+04	0.0	0.0	29,30
		0.01		2.247e-04	5.035e-03	1.830e-02	3.950e-05	6.519e-04	133.1				30
	SLD:ok	0.04		-2.074e-04	5.036e-03		3.961e-05		131.8				39
		0.05		2.288e-04	5.051e-03		3.967e-05		133.9				40
94	SLV:NV	0.01	1.07	-2.172e-04	4.986e-03	1.774e-02	3.945e-05	6.518e-04	124.01	1.185e+04	0.0	0.0	29,29
		0.01		-2.633e-04	5.627e-03	2.202e-02	3.945e-05	6.518e-04	206.0				29
	SLD:ok	0.04		-2.179e-04	4.987e-03		3.960e-05		121.7				39
		0.05		-2.897e-04	5.664e-03		3.960e-05		208.3				39
95	SLV:ok	0.01	0.36	-2.701e-04	5.929e-03	2.330e-02	3.950e-05	6.519e-04	234.8	4022.3	0.0	0.0	29,29
		0.01		2.696e-04	5.926e-03	2.331e-02	3.945e-05	6.518e-04	235.0				30
	SLD:ok	0.05		-2.961e-04	6.012e-03		3.969e-05		240.6				39
		0.05		2.928e-04	5.999e-03		3.960e-05		240.3				40
96	SLV:NV	0.01	1.07	2.611e-04	5.624e-03	2.203e-02	3.938e-05	6.516e-04	206.3	-1.180e+04	0.0	0.0	30,30
		0.01		2.153e-04	4.981e-03	1.772e-02	3.938e-05	6.516e-04	123.7				30
	SLD:ok	0.05		2.842e-04	5.657e-03		3.952e-05		208.3				40
		0.04		2.159e-04	4.978e-03		3.942e-05		122.4				38
97	SLV:NV	0.01	1.03	-2.223e-04	5.025e-03	1.816e-02	3.954e-05	6.520e-04	130.71	1.139e+04	0.0	0.0	29,29
		0.01		2.105e-04	5.018e-03	1.817e-02	3.943e-05	6.517e-04	131.0				30
	SLD:ok	0.04		-2.255e-04	5.026e-03		3.955e-05		130.8				37
		0.04		2.118e-04	5.031e-03		3.954e-05		132.0				40
98	SLV:NV	0.01	1.02	-2.096e-04	5.040e-03	1.837e-02	3.949e-05	6.519e-04	134.3	-1.128e+04	0.0	0.0	29,30
		0.01		2.122e-04	5.010e-03	1.797e-02	3.956e-05	6.521e-04	127.6				30
	SLD:ok	0.04		-2.158e-04	5.079e-03		3.971e-05		138.3				39
		0.04		2.123e-04	5.010e-03		3.956e-05		127.5				38
193	SLV:ok	0.04	0.95	-6.197e-04	4.874e-03	1.485e-02	3.764e-05	6.478e-04	86.7	-1.049e+04	0.0	0.0	31,32
		0.03		4.108e-04	4.994e-03	1.368e-02	3.802e-05	6.490e-04	74.8				32
	SLD:ok	0.18		-8.665e-04	4.874e-03		3.760e-05		86.3				39
		0.08		4.180e-04	5.006e-03		3.799e-05		73.6				40
194	SLV:ok	0.03	0.88	-4.086e-04	4.884e-03	1.480e-02	3.776e-05	6.482e-04	86.0	-9760.8	0.0	0.0	31,32
		0.03		3.736e-04	4.907e-03	1.457e-02	3.789e-05	6.486e-04	83.4				32
	SLD:ok	0.09		-4.191e-04	4.892e-03		3.772e-05		84.5				39
		0.08		3.849e-04	4.916e-03		3.787e-05		82.1				40
195	SLV:ok	0.02	0.88	-3.615e-04	4.904e-03	1.461e-02	3.788e-05	6.486e-04	83.9	9722.9	0.0	0.0	31,31
		0.03		4.238e-04	4.887e-03	1.479e-02	3.779e-05	6.483e-04	85.8				32
	SLD:ok	0.08		-3.724e-04	4.912e-03		3.784e-05		82.4				39
		0.09		4.344e-04	4.897e-03		3.777e-05		84.0				40
196	SLV:ok	0.03	0.89	-3.938e-04	4.888e-03	1.486e-02	3.790e-05	6.486e-04	86.6	-9878.2	0.0	0.0	31,32
		0.02		2.429e-04	4.897e-03	1.459e-02	3.773e-05	6.482e-04	83.8				32
	SLD:ok	0.08		-4.067e-04	4.900e-03		3.785e-05		84.1				39
		0.06		2.730e-04	4.899e-03		3.771e-05		83.3				40
197	SLV:ok	0.01	0.33	-2.398e-04	5.639e-03	2.264e-02	3.784e-05	6.485e-04	222.7	-3650.7	0.0	0.0	31,32
		0.01		2.673e-04	5.653e-03	2.274e-02	3.772e-05	6.481e-04	225.4				32
	SLD:ok	0.05		-2.689e-04	5.551e-03		3.779e-05		214.2				39

		0.05		2.957e-04	5.576e-03			3.768e-05		217.9				40
198	SLV:ok	0.02	0.91	-2.615e-04	4.913e-03	1.442e-02	3.780e-05	6.484e-04		82.01.002e+04	0.0	0.0		31,31
		0.03		4.073e-04	4.893e-03	1.469e-02	3.779e-05	6.483e-04		84.8				32
	SLD:ok	0.06		-3.007e-04	4.915e-03			3.776e-05		81.5				39
		0.09		4.190e-04	4.906e-03			3.775e-05		82.6				40
199	SLV:ok	0.03	0.93	-4.602e-04	4.949e-03	1.403e-02	3.784e-05	6.485e-04		78.11.026e+04	0.0	0.0		31,31
		0.03		4.448e-04	4.913e-03	1.442e-02	3.780e-05	6.484e-04		82.0				32
	SLD:ok	0.10		-4.729e-04	4.967e-03			3.780e-05		76.2				39
		0.09		4.546e-04	4.921e-03			3.777e-05		80.8				40
200	SLV:ok	0.03	0.93	-4.881e-04	4.947e-03	1.413e-02	3.797e-05	6.489e-04		79.0-1.026e+04	0.0	0.0		31,32
		0.04		5.370e-04	4.930e-03	1.413e-02	3.767e-05	6.479e-04		79.2				32
	SLD:ok	0.10		-5.034e-04	4.961e-03			3.794e-05		77.4				39
		0.11		5.501e-04	4.945e-03			3.763e-05		77.4				40
295	SLV:ok	0.01	0.86	2.436e-04	5.738e-03	2.275e-02	3.868e-05	6.493e-04		224.4 -7875.3	0.0	0.0		32,32
		6.14e-03		8.938e-05	4.951e-03	1.455e-02	3.868e-05	6.493e-04		83.1				32
	SLD:ok	0.04		2.437e-04	5.740e-03			3.866e-05		224.8				40
		0.02		8.854e-05	4.952e-03			3.866e-05		82.7				40
296	SLV:ok	5.91e-03	0.70	-9.987e-05	4.893e-03	1.690e-02	3.857e-05	6.487e-04		112.4 6491.8	0.0	0.0		29,29
		4.48e-03		7.113e-05	4.894e-03	1.587e-02	3.870e-05	6.494e-04		98.3				30
	SLD:ok	0.02		-9.967e-05	4.892e-03			3.854e-05		112.2				37
		0.01		7.178e-05	4.884e-03			3.857e-05		101.0				40
297	SLV:ok	4.26e-03	0.69	-6.755e-05	4.893e-03	1.585e-02	3.868e-05	6.493e-04		98.0 -6372.6	0.0	0.0		29,30
		5.75e-03		9.731e-05	4.894e-03	1.692e-02	3.857e-05	6.487e-04		112.7				30
	SLD:ok	0.01		-6.750e-05	4.892e-03			3.866e-05		98.1				37
		0.02		9.725e-05	4.894e-03			3.857e-05		112.7				38
298	SLV:ok	6.15e-03	0.80	-9.577e-05	4.908e-03	1.558e-02	3.882e-05	6.500e-04		94.4 7404.6	0.0	0.0		31,31
		7.35e-03		-1.709e-04	5.868e-03	2.326e-02	3.882e-05	6.500e-04		235.6				31
	SLD:ok	0.02		-9.550e-05	4.909e-03			3.883e-05		94.2				39
		0.03		-1.720e-04	5.872e-03			3.883e-05		235.8				39
299	SLV:ok	7.13e-03	0.26	-1.635e-04	5.786e-03	2.294e-02	3.876e-05	6.497e-04		228.3 -2410.9	0.0	0.0		31,32
		7.63e-03		1.768e-04	5.816e-03	2.318e-02	3.828e-05	6.473e-04		235.8				32
	SLD:ok	0.03		-1.650e-04	5.789e-03			3.877e-05		228.5				39
		0.03		1.786e-04	5.819e-03			3.827e-05		236.4				40
300	SLV:ok	8.03e-03	0.85	1.831e-04	5.741e-03	2.280e-02	3.853e-05	6.485e-04		226.2 -7851.2	0.0	0.0		32,32
		7.45e-03		1.212e-04	4.881e-03	1.628e-02	3.853e-05	6.485e-04		103.8				32
	SLD:ok	0.03		1.843e-04	5.742e-03			3.851e-05		226.5				40
		0.02		1.209e-04	4.880e-03			3.851e-05		103.5				40
301	SLV:ok	7.79e-03	0.82	-1.334e-04	4.899e-03	1.712e-02	3.853e-05	6.486e-04		115.7 7514.9	0.0	0.0		31,31
		7.55e-03		1.333e-04	4.931e-03	1.766e-02	3.861e-05	6.489e-04		123.9				32
	SLD:ok	0.03		-1.331e-04	4.897e-03			3.855e-05		114.5				39
		0.03		1.331e-04	4.929e-03			3.859e-05		123.8				40
302	SLV:ok	7.12e-03	0.81	-1.322e-04	4.995e-03	1.857e-02	3.841e-05	6.480e-04		139.6 -7465.0	0.0	0.0		31,32
		7.46e-03		1.258e-04	4.901e-03	1.685e-02	3.871e-05	6.495e-04		111.4				32
	SLD:ok	0.03		-1.417e-04	5.024e-03			3.840e-05		144.5				39
		0.03		1.264e-04	4.901e-03			3.871e-05		111.7				40
361	SLV:NV	0.01	1.21	-2.222e-04	4.927e-03	1.694e-02	3.913e-05	6.509e-04		112.21.336e+04	0.0	0.0		29,29
		0.02		-3.903e-04	5.590e-03	2.196e-02	3.913e-05	6.509e-04		205.3				29
	SLD:ok	0.05		-2.224e-04	4.920e-03			3.906e-05		110.4				37
		0.08		-4.619e-04	5.676e-03			3.957e-05		209.9				39
362	SLV:ok	0.04	0.96	-4.958e-04	4.988e-03	1.370e-02	3.794e-05	6.488e-04		75.01.057e+04	0.0	0.0		31,31
		0.05		6.860e-04	4.933e-03	1.412e-02	3.769e-05	6.480e-04		79.1				32
	SLD:ok	0.10		-5.048e-04	5.001e-03			3.789e-05		73.7				39
		0.18		9.013e-04	4.935e-03			3.767e-05		78.6				40
363	SLV:ok	6.90e-03	0.90	-1.037e-04	4.927e-03	1.502e-02	3.877e-05	6.497e-04		88.0 8281.3	0.0	0.0		31,31
		0.01		-2.731e-04	5.800e-03	2.299e-02	3.877e-05	6.497e-04		229.5				31
	SLD:ok	0.02		-1.049e-04	4.908e-03			3.894e-05		97.9				37
		0.05		-2.744e-04	5.806e-03			3.873e-05		230.5				39

Trave ver. (d) ver. (f)
0.18 1.23

< TABELLA VERIFICHE POST-OPERAM >	
Elementi post rinforzo tipo: C8A.7.2 INCAMICIATURA IN ACCIAIO e assimilabili	
Elementi post rinforzo tipo: C8A.7.1 INCAMICIATURA IN C.A.	
Elementi non rinforzati	

Trave	SL cod	ver. (d)	ver. (f)	rot. c	Theta Y	Theta U	curv. Y /cm	curv. U /cm	Lv cm	V2 daN	ro V I	ro V J	Rif. cmb
45	SLV:ok	0.01	0.46	-2.292e-04	5.482e-03	2.122e-02	3.976e-05	6.526e-04	188.1	-5104.7	0.0	0.0	33,34
		8.33e-03		1.580e-04	5.106e-03	1.898e-02	3.950e-05	6.519e-04	144.8				34
	SLD:ok	0.04		-2.424e-04	5.487e-03			3.980e-05	188.4				41
		0.03		1.653e-04	5.102e-03			3.947e-05	144.6				42
46	SLV:ok	7.01e-03	0.67	1.594e-04	5.800e-03	2.274e-02	3.958e-05	6.521e-04	221.8	-7385.6	0.0	0.0	34,34

			8.71e-03		1.633e-04	5.085e-03	1.875e-02	3.958e-05	6.521e-04	140.7					34
	SLD:ok		0.03		1.657e-04	5.782e-03		3.956e-05		220.2					42
			0.03		1.705e-04	5.093e-03		3.956e-05		142.3					42
47	SLV:ok	8.51e-03	0.64	-1.619e-04	5.134e-03	1.903e-02	3.984e-05	6.529e-04	145.3	7112.8	0.0	0.0			33,33
		8.22e-03		1.542e-04	5.087e-03	1.875e-02	3.961e-05	6.522e-04	140.7						34
	SLD:ok	0.03		-1.694e-04	5.144e-03		3.984e-05		146.7						41
		0.03		1.611e-04	5.095e-03		3.961e-05		142.0						42
48	SLV:ok	8.87e-03	0.73	-1.594e-04	5.024e-03	1.798e-02	3.979e-05	6.527e-04	127.3	8074.8	0.0	0.0			33,33
		0.01		-2.544e-04	5.990e-03	2.346e-02	3.979e-05	6.527e-04	237.7						33
	SLD:ok	0.03		-1.667e-04	5.029e-03		3.977e-05		128.5						41
		0.04		-2.659e-04	5.976e-03		3.977e-05		236.5						41
49	SLV:ok	0.02	0.38	4.482e-04	7.352e-03	2.839e-02	3.928e-05	6.513e-04	360.7	-4239.7	0.0	0.0			30,30
		0.01		2.749e-04	5.848e-03	2.304e-02	3.928e-05	6.513e-04	229.3						30
	SLD:ok	0.07		5.240e-04	7.499e-03		3.967e-05		368.0						40
		0.05		2.806e-04	5.811e-03		3.967e-05		222.0						40
50	SLV:ok	0.01	0.76	-1.995e-04	5.116e-03	1.897e-02	3.968e-05	6.524e-04	144.4	-8452.6	0.0	0.0			29,30
		9.85e-03		1.775e-04	5.018e-03	1.802e-02	3.963e-05	6.523e-04	128.3						32
	SLD:ok	0.04		2.032e-04	5.365e-03		3.935e-05		179.2						38
		0.04		1.776e-04	5.024e-03		3.963e-05		129.5						40
51	SLV:ok	9.30e-03	0.70	-1.728e-04	5.065e-03	1.857e-02	3.958e-05	6.521e-04	137.5	7686.7	0.0	0.0			31,31
		9.16e-03		1.705e-04	5.062e-03	1.862e-02	3.945e-05	6.518e-04	138.6						30
	SLD:ok	0.03		-1.732e-04	5.071e-03		3.965e-05		137.6						39
		0.03		1.706e-04	5.062e-03		3.945e-05		138.4						38
52	SLV:ok	9.20e-03	0.70	-1.713e-04	5.066e-03	1.862e-02	3.950e-05	6.519e-04	138.6	-7717.6	0.0	0.0			29,32
		9.36e-03		1.737e-04	5.068e-03	1.856e-02	3.963e-05	6.523e-04	137.4						32
	SLD:ok	0.03		-1.711e-04	5.065e-03		3.947e-05		138.7						37
		0.03		1.730e-04	5.063e-03		3.956e-05		137.3						38
53	SLV:ok	9.42e-03	0.74	-1.707e-04	5.020e-03	1.811e-02	3.953e-05	6.520e-04	129.9	8130.1	0.0	0.0			29,29
		0.01		-2.181e-04	5.577e-03	2.176e-02	3.953e-05	6.520e-04	200.1						29
	SLD:ok	0.03		-1.709e-04	5.015e-03		3.952e-05		129.0						37
		0.04		-2.244e-04	5.583e-03		3.952e-05		201.0						37
54	SLV:ok	0.01	0.35	-2.424e-04	5.851e-03	2.299e-02	3.949e-05	6.519e-04	227.5	3851.4	0.0	0.0			29,29
		0.01		2.504e-04	5.902e-03	2.322e-02	3.942e-05	6.517e-04	233.0						30
	SLD:ok	0.04		-2.498e-04	5.855e-03		3.950e-05		227.8						37
		0.04		2.604e-04	5.914e-03		3.940e-05		234.4						38
55	SLV:ok	0.01	0.76	2.306e-04	5.565e-03	2.173e-02	3.947e-05	6.518e-04	199.6	-8358.2	0.0	0.0			30,30
		9.83e-03		1.783e-04	5.018e-03	1.814e-02	3.947e-05	6.518e-04	130.4						30
	SLD:ok	0.04		2.400e-04	5.576e-03		3.945e-05		200.8						38
		0.04		1.786e-04	5.011e-03		3.945e-05		129.2						38
56	SLV:ok	9.73e-03	0.72	-1.800e-04	5.059e-03	1.851e-02	3.958e-05	6.521e-04	136.4	7978.4	0.0	0.0			29,29
		9.75e-03		1.821e-04	5.067e-03	1.866e-02	3.944e-05	6.518e-04	139.4						30
	SLD:ok	0.04		-1.787e-04	5.060e-03		3.962e-05		136.1						37
		0.04		1.819e-04	5.067e-03		3.941e-05		139.7						38
57	SLV:ok	9.76e-03	0.72	-1.837e-04	5.085e-03	1.882e-02	3.946e-05	6.518e-04	142.1	-7964.1	0.0	0.0			29,32
		9.70e-03		1.795e-04	5.057e-03	1.850e-02	3.955e-05	6.521e-04	136.4						32
	SLD:ok	0.04		-1.840e-04	5.084e-03		3.946e-05		141.8						37
		0.04		1.801e-04	5.061e-03		3.961e-05		136.5						40
58	SLV:ok	9.99e-03	0.77	-1.808e-04	5.026e-03	1.811e-02	3.965e-05	6.523e-04	129.6	8476.2	0.0	0.0			31,29
		0.01		1.988e-04	5.117e-03	1.899e-02	3.967e-05	6.524e-04	144.7						30
	SLD:ok	0.04		-1.809e-04	5.035e-03		3.966e-05		131.2						39
		0.04		1.936e-04	5.109e-03		3.969e-05		143.2						38
59	SLV:ok	0.01	0.38	-2.758e-04	5.849e-03	2.304e-02	3.929e-05	6.513e-04	229.2	4253.0	0.0	0.0			29,29
		0.02		-4.510e-04	7.355e-03	2.840e-02	3.929e-05	6.513e-04	360.8						29
	SLD:ok	0.05		-2.831e-04	5.798e-03		3.969e-05		220.6						39
		0.07		-5.441e-04	7.518e-03		3.969e-05		369.4						39
60	SLV:ok	7.03e-03	0.79	-1.236e-04	4.916e-03	1.758e-02	3.840e-05	6.471e-04	123.4	8721.9	0.0	0.0			33,33
		9.27e-03		-2.162e-04	5.861e-03	2.331e-02	3.840e-05	6.471e-04	239.1						33
	SLD:ok	0.03		-1.301e-04	4.920e-03		3.838e-05		124.7						41
		0.04		-2.271e-04	5.846e-03		3.838e-05		237.8						41
61	SLV:ok	6.75e-03	0.68	-1.273e-04	5.032e-03	1.885e-02	3.848e-05	6.474e-04	144.9	-7544.9	0.0	0.0			33,34
		6.52e-03		1.208e-04	4.979e-03	1.852e-02	3.818e-05	6.464e-04	139.6						34
	SLD:ok	0.03		-1.338e-04	5.042e-03		3.847e-05		146.5						41
		0.03		1.269e-04	4.989e-03		3.819e-05		141.1						42
62	SLV:ok	5.05e-03	0.72	-7.410e-05	4.935e-03	1.466e-02	3.857e-05	6.478e-04	84.5	-7913.0	0.0	0.0			33,34
		6.10e-03		9.350e-05	4.864e-03	1.532e-02	3.794e-05	6.455e-04	92.6						34
	SLD:ok	0.02		-7.629e-05	4.944e-03		3.858e-05		83.4						41
		0.02		9.851e-05	4.862e-03		3.794e-05		93.1						42
63	SLV:ok	0.01	0.55	-3.299e-04	5.737e-03	2.259e-02	3.920e-05	6.511e-04	219.3	6029.0	0.0	0.0			29,29
		0.02		-4.658e-04	7.462e-03	2.877e-02	3.920e-05	6.511e-04	370.7						29
	SLD:ok	0.06		-3.621e-04	5.767e-03		3.965e-05		218.0						39
		0.08		-5.703e-04	7.544e-03		3.965e-05		372.0						39
64	SLV:ok	0.01	0.85	-2.568e-04	5.178e-03	1.965e-02	3.923e-05	6.512e-04	157.7	9396.1	0.0	0.0			29,29
		0.01		2.534e-04	5.254e-03	1.995e-02	3.972e-05	6.525e-04	162.6						30
	SLD:ok	0.05		-2.540e-04	5.163e-03		3.924e-05		155.6						37
		0.05		2.657e-04	5.278e-03		3.967e-05		166.0						40
65	SLV:ok	5.15e-03	0.82	1.305e-04	6.493e-03	2.535e-02	3.977e-05	6.527e-04	282.7	-9017.2	0.0	0.0			36,30

		0.02		3.360e-04	5.582e-03	2.174e-02	3.967e-05	6.524e-04	199.4				30
	SLD:ok	0.02		1.303e-04	6.452e-03		3.987e-05		278.1				42
		0.06		3.545e-04	5.635e-03		3.967e-05		204.7				40
67	SLV:ok	0.01	0.59	2.396e-04	5.723e-03	2.238e-02	3.969e-05	6.524e-04	213.3	-6472.6	0.0	0.0	30,32
		0.02		3.561e-04	5.733e-03	2.245e-02	3.959e-05	6.522e-04	215.2				32
	SLD:ok	0.04		2.372e-04	5.619e-03		3.966e-05		203.2				40
		0.07		3.952e-04	5.807e-03		3.966e-05		221.8				40
68	SLV:ok	0.01	0.38	-2.592e-04	5.789e-03	2.275e-02	3.941e-05	6.517e-04	222.4	4195.0	0.0	0.0	29,29
		0.01		2.267e-04	5.703e-03	2.236e-02	3.945e-05	6.518e-04	213.6				30
	SLD:ok	0.05		-2.716e-04	5.817e-03		3.941e-05		225.0				37
		0.04		-2.403e-04	6.030e-03		3.941e-05		245.0				37
69	SLV:ok	0.01	0.49	-2.221e-04	5.448e-03	2.111e-02	3.958e-05	6.521e-04	186.2	5412.7	0.0	0.0	29,29
		0.01		2.281e-04	5.506e-03	2.149e-02	3.933e-05	6.515e-04	194.7				30
	SLD:ok	0.04		-2.261e-04	5.448e-03		3.966e-05		185.4				39
		0.04		-2.707e-04	6.274e-03		3.966e-05		264.6				39
71	SLV:ok	0.01	0.89	-2.613e-04	5.261e-03	2.002e-02	3.965e-05	6.523e-04	164.1	-9877.2	0.0	0.0	31,30
		0.02		3.618e-04	5.465e-03	2.124e-02	3.945e-05	6.518e-04	189.2				30
	SLD:ok	0.05		-2.583e-04	5.262e-03		3.973e-05		163.4				37
		0.07		4.195e-04	5.598e-03		3.969e-05		200.8				40
72	SLV:ok	0.01	0.83	-2.693e-04	5.277e-03	2.013e-02	3.964e-05	6.523e-04	166.2	9218.1	0.0	0.0	31,31
		0.01		2.420e-04	5.198e-03	1.963e-02	3.960e-05	6.522e-04	156.6				32
	SLD:ok	0.06		-3.005e-04	5.346e-03		3.966e-05		174.2				39
		0.05		2.374e-04	5.153e-03		3.924e-05		154.3				38
73	SLV:ok	0.02	0.69	4.901e-04	7.686e-03	2.948e-02	3.920e-05	6.511e-04	389.2	-7653.0	0.0	0.0	30,30
		0.02		3.395e-04	5.553e-03	2.176e-02	3.920e-05	6.511e-04	200.8				30
	SLD:ok	0.08		5.825e-04	7.764e-03		3.964e-05		390.0				40
		0.06		3.619e-04	5.585e-03		3.964e-05		200.0				40
74	SLV:ok	0.02	0.68	4.921e-04	7.761e-03	2.969e-02	3.928e-05	6.513e-04	394.3	7560.3	0.0	0.0	30,29
		0.02		-4.639e-04	7.704e-03	2.947e-02	3.942e-05	6.517e-04	388.0				29
	SLD:ok	0.07		5.760e-04	7.887e-03		3.970e-05		399.2				40
		0.07		-5.575e-04	7.841e-03		3.971e-05		395.4				39
75	SLV:ok	0.01	1.00	1.743e-04	4.936e-03	1.544e-02	3.925e-05	6.512e-04	92.4	-1.101e+04	0.0	0.0	34,34
		9.91e-03		1.389e-04	5.026e-03	1.402e-02	3.925e-05	6.512e-04	77.4				34
	SLD:ok	0.04		1.825e-04	4.935e-03		3.923e-05		92.7				42
		0.03		1.442e-04	5.027e-03		3.923e-05		77.2				42
76	SLV:ok	0.01	0.55	3.671e-04	6.251e-03	2.453e-02	3.957e-05	6.521e-04	263.4	-6087.3	0.0	0.0	32,32
		9.38e-03		1.799e-04	5.108e-03	1.919e-02	3.913e-05	6.509e-04	149.2				30
	SLD:ok	0.07		-4.004e-04	5.944e-03		3.966e-05		234.7				39
		0.04		1.805e-04	5.096e-03		3.912e-05		147.4				38
77	SLV:ok	7.67e-03	0.44	-1.552e-04	5.297e-03	2.024e-02	3.967e-05	6.524e-04	168.3	-4862.4	0.0	0.0	31,30
		0.01		2.271e-04	5.612e-03	2.202e-02	3.925e-05	6.512e-04	206.4				30
	SLD:ok	0.03		-1.504e-04	5.295e-03		3.975e-05		167.2				37
		0.04		2.331e-04	5.702e-03		3.963e-05		211.8				40
78	SLV:ok	0.01	0.51	-3.279e-04	6.046e-03	2.375e-02	3.956e-05	6.521e-04	245.1	-5641.3	0.0	0.0	31,32
		0.02		3.839e-04	6.221e-03	2.438e-02	3.968e-05	6.524e-04	259.6				32
	SLD:ok	0.06		-3.337e-04	6.060e-03		3.960e-05		245.9				39
		0.06		4.068e-04	6.266e-03		3.968e-05		263.6				40
79	SLV:ok	8.98e-03	0.89	-1.388e-04	4.977e-03	1.545e-02	3.996e-05	6.532e-04	92.0	-9864.2	0.0	0.0	33,34
		0.01		1.571e-04	4.942e-03	1.539e-02	3.931e-05	6.514e-04	91.8				34
	SLD:ok	0.03		-1.431e-04	4.984e-03		4.001e-05		90.5				41
		0.03		1.667e-04	4.937e-03		3.925e-05		92.1				42
81	SLV:ok	0.01	0.53	-2.638e-04	5.360e-03	2.072e-02	3.935e-05	6.515e-04	178.6	5848.5	0.0	0.0	33,33
		7.65e-03		1.506e-04	5.219e-03	1.968e-02	3.982e-05	6.528e-04	157.2				34
	SLD:ok	0.05		-2.824e-04	5.361e-03		3.930e-05		179.2				41
		0.03		1.561e-04	5.246e-03		4.002e-05		158.7				42
82	SLV:ok	7.54e-03	0.55	-1.285e-04	4.960e-03	1.705e-02	3.961e-05	6.522e-04	113.3	6071.3	0.0	0.0	33,33
		0.01		-2.233e-04	5.258e-03	2.002e-02	3.961e-05	6.522e-04	164.2				33
	SLD:ok	0.03		-1.339e-04	4.952e-03		3.955e-05		111.8				41
		0.05		-2.426e-04	5.265e-03		3.955e-05		165.6				41
83	SLV:ok	7.80e-03	0.57	-1.332e-04	4.962e-03	1.707e-02	3.963e-05	6.523e-04	113.5	6255.8	0.0	0.0	33,33
		0.01		-2.306e-04	5.258e-03	2.001e-02	3.963e-05	6.523e-04	163.9				33
	SLD:ok	0.03		-1.384e-04	4.955e-03		3.959e-05		111.8				41
		0.05		-2.517e-04	5.268e-03		3.959e-05		165.6				41
84	SLV:ok	0.01	0.54	-2.662e-04	5.363e-03	2.070e-02	3.945e-05	6.518e-04	178.0	5926.3	0.0	0.0	33,33
		8.09e-03		1.590e-04	5.205e-03	1.964e-02	3.968e-05	6.524e-04	156.8				34
	SLD:ok	0.05		-2.845e-04	5.366e-03		3.948e-05		178.1				41
		0.03		1.657e-04	5.230e-03		3.980e-05		158.8				42
86	SLV:ok	0.01	0.88	-1.559e-04	5.009e-03	1.552e-02	4.057e-05	6.550e-04	92.3	9708.2	0.0	0.0	33,33
		8.94e-03		1.420e-04	4.894e-03	1.589e-02	3.871e-05	6.498e-04	98.4				34
	SLD:ok	0.03		-1.604e-04	5.014e-03		4.061e-05		91.3				41
		0.03		1.499e-04	4.892e-03		3.867e-05		98.2				42
87	SLV:ok	8.33e-03	0.78	2.322e-04	7.183e-03	2.788e-02	3.916e-05	6.510e-04	347.9	-8590.1	0.0	0.0	34,34
		0.01		2.763e-04	5.332e-03	2.064e-02	3.916e-05	6.510e-04	177.2				34
	SLD:ok	0.03		2.431e-04	7.144e-03		3.912e-05		345.2				42
		0.05		2.889e-04	5.352e-03		3.912e-05		179.9				42
88	SLV:ok	0.01	0.84	-2.951e-04	5.362e-03	2.047e-02	4.005e-05	6.535e-04	172.3	9265.5	0.0	0.0	33,33

		0.01	-3.797e-04	7.796e-03	2.955e-02	4.005e-05	6.535e-04	387.6				33	
	SLD:ok	0.06	-3.082e-04	5.387e-03		4.011e-05		174.5				41	
		0.05	2.787e-04	5.368e-03		3.953e-05		177.9				42	
89	SLV:ok	8.81e-03	0.77	-1.676e-04	5.149e-03	1.902e-02	4.012e-05	6.537e-04	144.6	-8517.4	0.0	0.0	33,34
		0.01		2.737e-04	5.356e-03	2.068e-02	3.940e-05	6.516e-04	177.7				34
	SLD:ok	0.03		-1.793e-04	5.178e-03		4.020e-05		148.0				41
		0.05		2.908e-04	5.384e-03		3.933e-05		181.5				42
90	SLV:ok	0.01	0.84	-2.920e-04	5.349e-03	2.043e-02	3.996e-05	6.532e-04	171.6	9239.8	0.0	0.0	33,33
		0.01		-3.775e-04	7.791e-03	2.956e-02	3.996e-05	6.532e-04	388.2				33
	SLD:ok	0.06		-3.081e-04	5.378e-03		4.002e-05		174.4				41
		0.05		2.818e-04	5.380e-03		3.963e-05		178.3				42
91	SLV:ok	0.02	0.63	3.933e-04	5.528e-03	2.164e-02	3.919e-05	6.511e-04	198.3	-1.359e+04	0.0	0.0	30,30
		0.01		2.190e-04	4.926e-03	1.673e-02	3.919e-05	6.511e-04	109.2				30
	SLD:ok	0.08		4.513e-04	5.601e-03		3.960e-05		202.0				40
		0.04		2.198e-04	4.921e-03		3.915e-05		107.8				38
92	SLV:ok	0.01	0.51	-2.023e-04	5.018e-03	1.798e-02	3.968e-05	6.524e-04	127.5	1.096e+04	0.0	0.0	29,29
		0.01		2.014e-04	5.023e-03	1.828e-02	3.935e-05	6.515e-04	132.9				30
	SLD:ok	0.04		-1.982e-04	5.014e-03		3.971e-05		126.2				37
		0.04		2.009e-04	5.023e-03		3.931e-05		133.4				38
93	SLV:ok	0.01	0.53	-2.055e-04	5.020e-03	1.815e-02	3.949e-05	6.519e-04	130.5	-1.127e+04	0.0	0.0	29,30
		0.01		2.247e-04	5.035e-03	1.830e-02	3.950e-05	6.519e-04	133.1				30
	SLD:ok	0.04		-2.074e-04	5.036e-03		3.961e-05		131.8				39
		0.05		2.288e-04	5.051e-03		3.967e-05		133.9				40
94	SLV:ok	0.01	0.55	-2.172e-04	4.986e-03	1.774e-02	3.945e-05	6.518e-04	124.0	1.185e+04	0.0	0.0	29,29
		0.01		-2.633e-04	5.627e-03	2.202e-02	3.945e-05	6.518e-04	206.0				29
	SLD:ok	0.04		-2.179e-04	4.987e-03		3.960e-05		121.7				39
		0.05		-2.897e-04	5.664e-03		3.960e-05		208.3				39
95	SLV:ok	0.01	0.19	-2.701e-04	5.929e-03	2.330e-02	3.950e-05	6.519e-04	234.8	4022.3	0.0	0.0	29,29
		0.01		2.696e-04	5.926e-03	2.331e-02	3.945e-05	6.518e-04	235.0				30
	SLD:ok	0.05		-2.961e-04	6.012e-03		3.969e-05		240.6				39
		0.05		2.928e-04	5.999e-03		3.960e-05		240.3				40
96	SLV:ok	0.01	0.55	2.611e-04	5.624e-03	2.203e-02	3.938e-05	6.516e-04	206.3	-1.180e+04	0.0	0.0	30,30
		0.01		2.153e-04	4.981e-03	1.772e-02	3.938e-05	6.516e-04	123.7				30
	SLD:ok	0.05		2.842e-04	5.657e-03		3.952e-05		208.3				40
		0.04		2.159e-04	4.978e-03		3.942e-05		122.4				38
97	SLV:ok	0.01	0.53	-2.223e-04	5.025e-03	1.816e-02	3.954e-05	6.520e-04	130.7	1.139e+04	0.0	0.0	29,29
		0.01		2.105e-04	5.018e-03	1.817e-02	3.943e-05	6.517e-04	131.0				30
	SLD:ok	0.04		-2.255e-04	5.026e-03		3.955e-05		130.8				37
		0.04		2.118e-04	5.031e-03		3.954e-05		132.0				40
98	SLV:ok	0.01	0.53	-2.096e-04	5.040e-03	1.837e-02	3.949e-05	6.519e-04	134.3	-1.128e+04	0.0	0.0	29,30
		0.01		2.122e-04	5.010e-03	1.797e-02	3.956e-05	6.521e-04	127.6				30
	SLD:ok	0.04		-2.158e-04	5.079e-03		3.971e-05		138.3				39
		0.04		2.123e-04	5.010e-03		3.956e-05		127.5				38
99	SLV:ok	0.02	0.88	-3.374e-04	5.449e-03	2.109e-02	3.964e-05	6.523e-04	185.7	9673.5	0.0	0.0	31,29
		0.01		2.564e-04	5.259e-03	2.000e-02	3.968e-05	6.524e-04	163.6				30
	SLD:ok	0.07		-3.909e-04	5.559e-03		3.967e-05		197.1				39
		0.05		2.594e-04	5.252e-03		3.967e-05		162.9				38
100	SLV:ok	0.02	0.84	-3.431e-04	5.559e-03	2.162e-02	3.971e-05	6.525e-04	196.6	9250.3	0.0	0.0	31,31
		5.99e-03		-1.448e-04	6.166e-03	2.417e-02	3.970e-05	6.525e-04	254.6				29
	SLD:ok	0.06		-3.448e-04	5.557e-03		3.972e-05		196.3				39
		0.02		-1.469e-04	6.159e-03		3.972e-05		253.7				39
101	SLV:ok	0.02	0.83	5.375e-04	7.284e-03	2.797e-02	3.993e-05	6.531e-04	347.4	-9157.5	0.0	0.0	34,34
		0.02		3.298e-04	5.400e-03	2.073e-02	3.993e-05	6.531e-04	177.7				34
	SLD:ok	0.08		5.812e-04	7.282e-03		4.015e-05		344.8				42
		0.07		3.543e-04	5.443e-03		4.015e-05		180.4				42
102	SLV:ok	0.02	0.82	5.299e-04	7.277e-03	2.797e-02	3.985e-05	6.529e-04	347.7	-9106.3	0.0	0.0	34,34
		0.02		3.264e-04	5.392e-03	2.071e-02	3.985e-05	6.529e-04	177.4				34
	SLD:ok	0.08		5.734e-04	7.270e-03		4.000e-05		345.5				42
		0.06		3.488e-04	5.424e-03		4.000e-05		179.7				42
147	SLV:ok	8.31e-03	0.37	1.783e-04	5.381e-03	2.145e-02	3.773e-05	6.481e-04	196.7	-4071.5	0.0	0.0	34,36
		6.16e-03		1.140e-04	4.941e-03	1.852e-02	3.771e-05	6.481e-04	138.8				36
	SLD:ok	0.03		1.787e-04	5.376e-03		3.772e-05		196.2				42
		0.02		1.145e-04	4.943e-03		3.772e-05		138.8				42
148	SLV:ok	5.60e-03	0.58	1.314e-04	5.828e-03	2.348e-02	3.773e-05	6.482e-04	242.7	-6457.8	0.0	0.0	36,34
		7.05e-03		1.225e-04	4.860e-03	1.737e-02	3.773e-05	6.482e-04	119.8				36
	SLD:ok	0.02		1.330e-04	5.848e-03		3.775e-05		244.4				42
		0.03		1.320e-04	4.856e-03		3.775e-05		118.1				42
149	SLV:ok	6.85e-03	0.54	-1.280e-04	4.963e-03	1.868e-02	3.779e-05	6.483e-04	141.5	-5997.3	0.0	0.0	35,34
		5.74e-03		1.026e-04	4.892e-03	1.786e-02	3.779e-05	6.483e-04	127.6				34
	SLD:ok	0.03		-1.333e-04	4.951e-03		3.779e-05		139.4				41
		0.02		1.055e-04	4.876e-03		3.778e-05		123.7				42
150	SLV:ok	8.18e-03	0.71	-1.284e-04	4.843e-03	1.569e-02	3.775e-05	6.482e-04	96.4	7815.2	0.0	0.0	35,35
		0.01		-3.398e-04	6.102e-03	2.457e-02	3.775e-05	6.482e-04	268.6				35
	SLD:ok	0.03		-1.307e-04	4.845e-03		3.777e-05		96.1				41
		0.06		-3.430e-04	6.107e-03		3.777e-05		268.9				41
151	SLV:ok	0.03	0.35	-6.103e-04	5.970e-03	2.405e-02	3.778e-05	6.483e-04	255.9	-3878.2	0.0	0.0	31,32

		0.01		2.205e-04	5.478e-03	2.188e-02	3.789e-05	6.486e-04	205.6				32
	SLD:ok	0.15		-8.702e-04	5.922e-03		3.774e-05		251.6				39
		0.04		2.364e-04	5.459e-03		3.785e-05		204.0				40
152	SLV:ok	0.01	0.64	-1.885e-04	4.897e-03	1.801e-02	3.770e-05	6.481e-04	130.0	-7119.8	0.0	0.0	31,30
		0.01		1.741e-04	4.862e-03	1.713e-02	3.795e-05	6.488e-04	115.8				32
	SLD:ok	0.04		-2.089e-04	4.890e-03		3.766e-05		129.1				39
		0.04		1.825e-04	4.855e-03		3.793e-05		112.9				40
153	SLV:ok	9.15e-03	0.60	-1.617e-04	4.876e-03	1.767e-02	3.773e-05	6.481e-04	124.5	6581.9	0.0	0.0	31,29
		8.30e-03		1.455e-04	4.875e-03	1.753e-02	3.786e-05	6.485e-04	122.1				32
	SLD:ok	0.04		-1.702e-04	4.862e-03		3.769e-05		121.2				39
		0.03		1.536e-04	4.869e-03		3.784e-05		120.4				40
154	SLV:ok	8.33e-03	0.59	-1.469e-04	4.874e-03	1.763e-02	3.774e-05	6.482e-04	123.9	-6514.5	0.0	0.0	31,30
		8.57e-03		1.512e-04	4.875e-03	1.763e-02	3.775e-05	6.482e-04	123.9				32
	SLD:ok	0.03		-1.562e-04	4.864e-03		3.770e-05		121.8				39
		0.03		1.582e-04	4.863e-03		3.773e-05		120.7				40
155	SLV:ok	8.60e-03	0.61	-1.473e-04	4.874e-03	1.713e-02	3.769e-05	6.480e-04	116.1	6775.8	0.0	0.0	31,31
		8.84e-03		1.566e-04	4.876e-03	1.771e-02	3.769e-05	6.480e-04	125.2				32
	SLD:ok	0.03		-1.561e-04	4.839e-03		3.765e-05		113.7				39
		0.04		1.713e-04	4.876e-03		3.766e-05		125.7				40
156	SLV:ok	8.95e-03	0.32	-2.005e-04	5.574e-03	2.240e-02	3.770e-05	6.481e-04	217.6	3515.5	0.0	0.0	31,31
		9.47e-03		2.188e-04	5.727e-03	2.311e-02	3.755e-05	6.472e-04	234.6				32
	SLD:ok	0.04		-2.112e-04	5.565e-03		3.765e-05		217.1				39
		0.04		2.285e-04	5.714e-03		3.750e-05		233.8				40
157	SLV:ok	0.01	0.64	-2.071e-04	4.872e-03	1.757e-02	3.777e-05	6.483e-04	122.8	-7080.2	0.0	0.0	31,32
		0.01		1.702e-04	4.834e-03	1.689e-02	3.759e-05	6.475e-04	112.8				32
	SLD:ok	0.05		-2.263e-04	4.870e-03		3.774e-05		122.7				39
		0.04		1.795e-04	4.828e-03		3.756e-05		110.5				40
158	SLV:ok	9.87e-03	0.62	-1.697e-04	4.857e-03	1.720e-02	3.780e-05	6.484e-04	117.1	6844.1	0.0	0.0	31,31
		0.01		1.832e-04	4.860e-03	1.745e-02	3.767e-05	6.479e-04	121.1				32
	SLD:ok	0.04		-1.795e-04	4.848e-03		3.778e-05		114.0				39
		0.04		1.935e-04	4.851e-03		3.764e-05		118.9				40
159	SLV:ok	0.01	0.62	-1.865e-04	4.887e-03	1.771e-02	3.787e-05	6.486e-04	125.0	-6863.8	0.0	0.0	31,30
		0.01		1.927e-04	4.846e-03	1.715e-02	3.765e-05	6.478e-04	116.6				32
	SLD:ok	0.04		-1.978e-04	4.877e-03		3.785e-05		122.6				39
		0.04		2.015e-04	4.838e-03		3.762e-05		113.9				40
160	SLV:ok	0.01	0.64	-1.895e-04	4.866e-03	1.719e-02	3.796e-05	6.488e-04	116.7	7123.8	0.0	0.0	31,29
		0.01		1.979e-04	4.886e-03	1.791e-02	3.764e-05	6.477e-04	128.6				32
	SLD:ok	0.04		-2.001e-04	4.857e-03		3.794e-05		113.4				39
		0.04		2.163e-04	4.880e-03		3.760e-05		127.6				40
161	SLV:ok	0.01	0.35	-2.192e-04	5.480e-03	2.189e-02	3.790e-05	6.486e-04	205.8	3879.6	0.0	0.0	31,31
		0.03		6.262e-04	5.962e-03	2.402e-02	3.774e-05	6.482e-04	255.4				32
	SLD:ok	0.04		-2.366e-04	5.461e-03		3.785e-05		204.1				39
		0.14		8.504e-04	5.920e-03		3.772e-05		251.7				40
162	SLV:ok	7.97e-03	0.71	-1.252e-04	4.843e-03	1.571e-02	3.776e-05	6.482e-04	96.5	7800.3	0.0	0.0	35,35
		0.01		-3.340e-04	6.075e-03	2.446e-02	3.776e-05	6.482e-04	266.0				35
	SLD:ok	0.03		-1.282e-04	4.845e-03		3.776e-05		96.0				43
		0.06		-3.363e-04	6.078e-03		3.778e-05		266.0				41
163	SLV:ok	6.23e-03	0.54	-1.159e-04	4.957e-03	1.861e-02	3.781e-05	6.484e-04	140.2	-5975.9	0.0	0.0	35,36
		5.71e-03		1.020e-04	4.890e-03	1.787e-02	3.775e-05	6.482e-04	127.7				34
	SLD:ok	0.02		-1.161e-04	4.954e-03		3.781e-05		139.8				43
		0.02		1.004e-04	4.880e-03		3.775e-05		125.3				42
164	SLV:ok	3.52e-03	0.43	-5.700e-05	4.842e-03	1.620e-02	3.787e-05	6.486e-04	102.7	-4795.1	0.0	0.0	33,36
		5.37e-03		8.703e-05	4.830e-03	1.619e-02	3.765e-05	6.478e-04	102.9				36
	SLD:ok	0.01		-5.693e-05	4.842e-03		3.786e-05		102.5				41
		0.02		8.732e-05	4.830e-03		3.765e-05		103.0				44
165	SLV:ok	0.03	0.47	-5.293e-04	5.083e-03	1.961e-02	3.793e-05	6.487e-04	158.4	5186.1	0.0	0.0	31,31
		0.04		7.269e-04	5.193e-03	2.041e-02	3.774e-05	6.482e-04	174.6				32
	SLD:ok	0.12		-6.186e-04	5.009e-03		3.785e-05		148.4				39
		0.18		9.510e-04	5.174e-03		3.774e-05		172.4				40
166	SLV:ok	0.04	0.75	-6.013e-04	4.845e-03	1.600e-02	3.788e-05	6.486e-04	100.2	8235.2	0.0	0.0	31,31
		0.03		5.023e-04	4.839e-03	1.618e-02	3.781e-05	6.484e-04	102.5				32
	SLD:ok	0.13		-6.219e-04	4.846e-03		3.782e-05		97.2				39
		0.11		5.259e-04	4.839e-03		3.781e-05		102.3				40
167	SLV:ok	0.01	0.73	3.221e-04	6.667e-03	2.668e-02	3.755e-05	6.472e-04	322.4	-8109.9	0.0	0.0	35,35
		0.07		1.194e-03	4.824e-03	1.616e-02	3.755e-05	6.472e-04	102.6				35
...													
363	SLD:ok	0.05	0.46	-2.744e-04	5.806e-03	2.299e-02	3.873e-05	6.497e-04	230.5	8281.3	0.0	0.0	39
Trave	ver. (d)	0.81	ver. (f)	1.00									

VERIFICHE ELEMENTI TRAVE C.A.

LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE C.A.

In tabella vengono riportati per ogni elemento il numero dello stesso ed il codice di verifica.

Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite vengono riportati il rapporto x/d , le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

In particolare i simboli utilizzati con il metodo delle tensioni ammissibili assumono il seguente significato:

M P X Y	Numero della pilastrata e posizione in pianta
M T Z P P	Numero della travata, quota media pilastrata iniziale e finale (nodo in assenza di pilastrata)
Pilas. o Trave	numero identificativo dell'elemento
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m); nella terza riga viene riportato il valore delle snellezze in direzione 2-2 e 3-3
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Quota	Ascissa del punto di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Armat. long.	Numero e diametro dei ferri di armatura longitudinale: ferri di vertice + ferri di lato (vedi seguente figura)
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup	Area di armatura longitudinale posta all'estradosso della trave
Sc max	Massima tensione di compressione del calcestruzzo
Sc med	Massima tensione media di compressione del calcestruzzo
Sf max	Tensione massima nell'acciaio
staffe	Vengono riportati i dati del tratto di staffatura in cui cade la sezione di verifica; in particolare: numero dei bracci, diametro, passo, lunghezza tratto
Tau max	Tensione massima tangenziale nel cls
Rif. comb	Combinazioni in cui si generano i seguenti valori di tensione: Sc max, Sc med, Sf max, Tau max
AfV	area dell'armatura atta ad assorbire le azioni di taglio
AfT	area dell'armatura atta ad assorbire le azioni di torsione
Scorr. P	Scorrimento dei piegati
Af long.	Area del ferro longitudinale aggiuntivo per assorbire la torsione

Verifica delle fondazioni

Il D.M.14/02/2008 - par: 7.2.5 prevede:

"Per le strutture progettate sia per CD "A" sia per CD "B" il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azioni in fondazione le resistenze degli elementi strutturali soprastanti [...] si richiede tuttavia che tali azioni risultino non maggiori di quelle trasferite dagli elementi soprastanti, amplificate con un γ_{Rd} pari a 1,1 in CD "B" e 1,3 in CD "A" e comunque non maggiori di quelle derivanti da una analisi elastica della struttura in elevazione eseguita con un fattore di struttura q pari a 1..."

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO_SAP (per travi e platee) o da PRO_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma del fattore: $\gamma_{rd} = 1.1$ in CDB $\gamma_{rd} = 1.3$ in CDA per pali, plinti, travi e platee.

Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore: $\gamma_{rd} = 1.2$ in CDB $\gamma_{rd} = 1.35$ in CDA.

N.B.: se il fattore di struttura q è =1 la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore: $\gamma_{rd} = 1.1$ in CDB $\gamma_{rd} = 1.3$ in CDA per pali, plinti, travi e platee.

N.B.: se il fattore di struttura q è =1 le verifiche geotecniche vengono effettuate senza nessun incremento.

Mentre i simboli utilizzati con il metodo degli stati limite assumono il seguente significato:

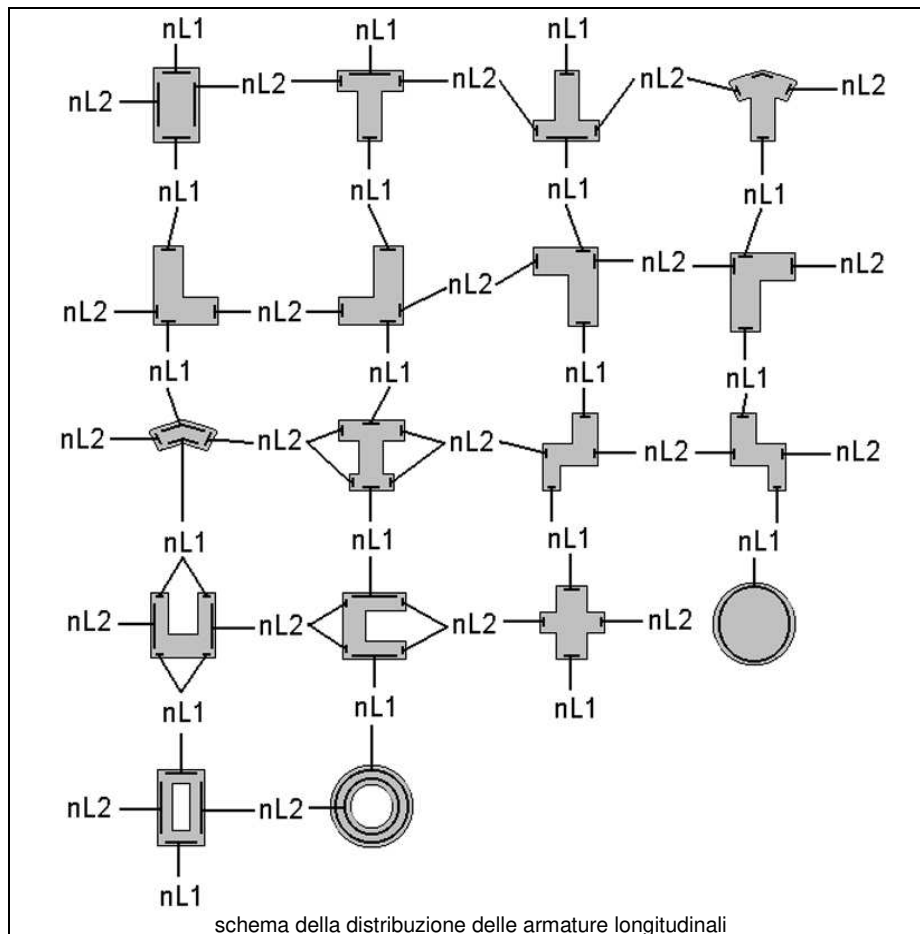
r. snell.	Rapporto λ su λ^* : valore superiore a 1 per elementi snelli, caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Verifica(verif.)	rapporto Sd/Su con sollecitazioni ultime proporzionali o a sforzo normale costante: valore minore o uguale a 1 per verifica positiva
ver.sis	rapporto Nd/Nu con Nu calcolato come al punto 7.4.4.2.2.1; valore minore o uguale a 1 per verifica positiva
ver.V/T	rapporto Sd/Su con sollecitazioni taglianti e torcenti proporzionali valore minore o uguale a 1 per verifica positiva
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)

Per gli elementi progettati secondo il criterio della gerarchia delle resistenze (pilastri e travi) si riporta una ulteriore tabella di seguito descritta:

M negativo i	Valore del momento resistente negativo (positivo) all'estremità iniziale i (finale f) della trave
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f (positivo i e negativo f)
V totale	Massimo valore assoluto ottenuto per combinazione del taglio isostatico e dei tagli concomitanti (p.to 7.4.4.1.1.)
Verif. V	Rapporto tra il taglio massimo e Vr1 (p.to 7.4.4.1.2.2);
Sovr. 2-2 i	Sovreresistenza del pilastro (come da formula 7.4.4). Rapporto tra i momenti resistenti delle travi e dei pilastri. Il valore del fattore rispettivamente per il momento 2-2 (3-3) alla base i ed alla sommità f del pilastro deve essere maggiore del γ_{Rd} adottato
M 2-2 i	Valore del momento resistente rispettivamente per 2-2 (3-3) alla base i ed alla sommità f del pilastro (massimo momento in presenza dello sforzo normale di calcolo)
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

Per i nodi trave-pilastro viene riportata la seguente tabella relativa al calcolo delle armature di confinamento e alla verifica di resistenza del nodo (richiesta solo per strutture in classe di duttilità alta); le caselle vuote indicano parametri non riportati in quanto non necessari.

Stato	Esito della verifica (come da formula 7.4.8) per resistenza a compressione del nodo (solo CDA)
I 7.4.29	Passo delle staffe di confinamento come richiesto dalla formula 7.4.29
Bj2(3)	Dimensione del nodo per il taglio in direzione 2 (3)
Hjc2(2)	Distanza tra le giaciture di armatura del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio Vjbd e il taglio resistente come da formula 7.4.8 (solo CDA)
I 7.4.10	Passo delle staffe valutato in funzione della formula 7.4.10 (solo CDA)



Con riferimento al **Documento di Affidabilità** "Test di validazione del software di calcolo PRO_SAP e dei moduli aggiuntivi PRO_SAP Modulo Geotecnico, PRO_CAD nodi acciaio e PRO_MST" - versione Maggio 2011, disponibile per il download sul sito www.2si.it, si segnalano i seguenti esempi applicativi:

Test N°	Titolo
24	TENSIONI E ROTAZIONI RISPETTO ALLA CORDA DI ELEMENTI TRAVE
27	FRECCIA DI ELEMENTI TRAVE
41	GERARCHIA DELLE RESISTENZE PER TRAVI IN C.A.
42	GERARCHIA DELLE RESISTENZE PER PILASTRI IN C.A.
43	VERIFICA ALLE TA DI STRUTTURE IN C.A.
44	VERIFICA AGLI SLU DI STRUTTURE IN C.A.
46	VERIFICA A PUNZONAMENTO ALLO SLU DI TRAVI IN C.A.
47	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 9/1/96
48	PROGETTAZIONE A TAGLIO DI STRUTTURE IN C.A. SECONDO IL D.M. 14/1/2008
49	VERIFICA ALLO SLE (TENSIONI E FESSURAZIONE) DI STRUTTURE IN C.A.
50	VERIFICA ALLO SLE (DEFORMAZIONE) DI STRUTTURE IN C.A.
52	SOVRARESISTENZE
53	DETTAGLI COSTRUTTIVI C.A.: LIMITI D'ARMATURA PILASTRI E NODI TRAVE-PILASTRO
68	VALUTAZIONE EFFETTO P-δ SU PILASTRATA
69	VALUTAZIONE EFFETTO P-δ SU TELAIO 3D
120	PROGETTO E VERIFICA DI TRAVI PREM

< TABELLA VERIFICHE POST-OPERAM >

Elementi post rinforzo tipo: C8A.7.2 INCAMICIATURA IN ACCIAIO e assimilabili

Elementi post rinforzo tipo: C8A.7.1 INCAMICIATURA IN C.A.

Elementi non rinforzati

Pilas.	Note	Stato	Quota cm	%Af	M_P= 1 X=5930.2 Y=1272.8		V N/M	V N sis	Staffe V V/T clsV V/T acc	Rif. cmb	
					r. snell.	Armat. long.					
343	s=4,m=1 [b=1.0;1.0]	ok,ok	0.0 360.0	0.23 0.23	0.50 0.50	4d16 0+0 d16	1.33 0.76	0.322+2d8/20 L=360 0.302+2d8/20 L=360	0.57 0.57	0.47 42,49,34,34 0.47 38,49,34,34	
346	s=8,m=1 [b=1.0;1.0]	ok,ok	360.0 720.0	0.25 0.25	0.29 0.29	4d14 0+0 d16 4d14 0+0 d16	0.89 0.95	0.232+2d6/25 L=360 0.212+2d6/25 L=360	0.42 0.43	0.75 44,51,36,36 0.75 44,51,36,36	
349	s=5,m=1 [b=1.0;1.0]	ok,ok	720.0 1080.0	0.13 0.13	0.24 0.24	4d10 0+0 d16 4d10 0+0 d16	0.75 0.83	0.094+2d6/25 L=360 0.064+2d6/25 L=360	0.23 0.23	0.36 40,51,34,32 0.36 32,51,34,32	
				M_P= 2 X=6520.2 Y=1272.8							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V V/T clsV V/T acc	Rif. cmb	
352	s=7,m=1 [b=1.0;1.0]	ok,ok	0.0 360.0	0.27 0.27	0.61 0.61	4d16 0+0 d16 4d16 0+0 d16	0.86 0.62	0.322+2d8/20 L=360 0.292+2d8/20 L=360	0.50 0.51	0.43 42,49,34,34 0.43 37,49,34,34	
354	s=5,m=1 [b=1.0;1.0]	ok,ok	360.0 720.0	0.25 0.25	0.67 0.67	4d14 0+0 d16 4d14 0+0 d16	0.66 0.64	0.214+2d6/25 L=360 0.184+2d6/25 L=360	0.40 0.40	0.72 39,51,31,32 0.72 42,51,31,32	
356	s=5,m=1 [b=1.0;1.0]	ok,ok	720.0 1080.0	0.13 0.13	0.33 0.33	4d10 0+0 d16 4d10 0+0 d16	0.65 0.72	0.084+2d6/25 L=360 0.054+2d6/25 L=360	0.21 0.21	0.34 39,49,33,32 0.34 39,49,33,32	
				M_P= 3 X=2320.2 Y=1273.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V V/T clsV V/T acc	Rif. cmb	
42	s=4,m=1 [b=1.0;1.0]	ok,ok	0.0 360.0	0.23 0.23	0.45 0.45	4d16 0+0 d16 4d16 0+0 d16	0.78 0.62	0.272+2d8/20 L=360 0.242+2d8/20 L=360	0.48 0.49	0.43 42,49,36,34 0.43 38,49,36,34	
144	s=5,m=1 [b=1.0;1.0]	ok,ok	360.0 720.0	0.25 0.25	0.36 0.36	4d14 0+0 d16 4d14 0+0 d16	0.61 0.62	0.224+2d6/25 L=360 0.194+2d6/25 L=360	0.39 0.40	0.73 42,51,32,31 0.73 42,51,32,31	
246	s=5,m=1 [b=1.0;1.0]	ok,ok	720.0 1080.0	0.13 0.13	0.25 0.25	4d10 0+0 d16 4d10 0+0 d16	0.64 0.88	0.094+2d6/25 L=360 0.064+2d6/25 L=360	0.24 0.24	0.36 40,47,36,30 0.36 11,47,36,30	
				M_P= 4 X=2910.2 Y=1273.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V V/T clsV V/T acc	Rif. cmb	
39	s=4,m=1 [b=1.0;1.0]	ok,ok	0.0 360.0	0.23 0.23	0.37 0.37	4d16 0+0 d16 4d16 0+0 d16	1.02 0.69	0.322+2d8/20 L=360 0.292+2d8/20 L=360	0.56 0.57	0.46 42,49,34,34 0.46 42,49,34,34	
141	s=5,m=1 [b=1.0;1.0]	ok,ok	360.0 720.0	0.25 0.25	0.37 0.37	4d14 0+0 d16 4d14 0+0 d16	0.64 0.67	0.234+2d6/25 L=360 0.204+2d6/25 L=360	0.40 0.41	0.75 44,51,31,30 0.75 44,51,31,30	
243	s=5,m=1 [b=1.0;1.0]	ok,ok	720.0 1080.0	0.13 0.13	0.18 0.18	4d10 0+0 d16 4d10 0+0 d16	0.72 1.02	0.094+2d6/25 L=360 0.064+2d6/25 L=360	0.24 0.24	0.36 4,51,34,30 0.36 11,51,34,30	
				M_P= 5 X=2910.2 Y=1443.8							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V V/T clsV V/T acc	Rif. cmb	

40	s=4,m=1	ok,ok	0.0	0.23	0.48	4d16 0+0 d16	0.77	0.252+2d8/20 L=360	0.45	0.42	33,45,33,34
	[b=1.0;1.0]		360.0	0.23	0.48	4d16 0+0 d16	0.72	0.222+2d8/20 L=360	0.45	0.42	41,45,33,34
142	s=5,m=1	ok,ok	360.0	0.25	0.33	4d14 0+0 d16	0.66	0.224+2d6/25 L=360	0.39	0.74	32,45,31,31
	[b=1.0;1.0]		720.0	0.25	0.33	4d14 0+0 d16	0.60	0.194+2d6/25 L=360	0.40	0.74	42,45,31,31
244	s=5,m=1	ok,ok	720.0	0.13	0.20	4d10 0+0 d16	0.65	0.104+2d6/25 L=360	0.23	0.37	39,47,31,30
	[b=1.0;1.0]		1080.0	0.13	0.20	4d10 0+0 d16	0.70	0.074+2d6/25 L=360	0.24	0.37	39,47,31,30
M_P= 6 X=3322.7 Y=1443.8											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
38	s=7,m=1	ok,ok	0.0	0.27	0.59	4d16 0+0 d16	0.58	0.232+2d8/20 L=360	0.40	0.38	39,48,34,36
	[b=1.0;1.0]		360.0	0.27	0.59	4d16 0+0 d16	0.60	0.202+2d8/20 L=360	0.40	0.38	39,48,34,36
140	s=5,m=1	ok,ok	360.0	0.25	0.77	4d14 0+0 d16	0.62	0.174+2d6/25 L=360	0.36	0.68	31,48,31,30
	[b=1.0;1.0]		720.0	0.25	0.77	4d14 0+0 d16	0.64	0.144+2d6/25 L=360	0.36	0.68	31,48,31,30
242	s=5,m=1	ok,ok	720.0	0.13	0.32	4d10 0+0 d16	0.64	0.084+2d6/25 L=360	0.19	0.34	39,51,29,29
	[b=1.0;1.0]		1080.0	0.13	0.32	4d10 0+0 d16	0.70	0.054+2d6/25 L=360	0.19	0.34	39,51,29,29
M_P= 7 X=3735.2 Y=1443.8											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
35	s=7,m=1	ok,ok	0.0	0.27	0.40	4d16 0+0 d16	1.16	0.462+2d8/20 L=360	0.55	0.48	42,49,34,36
	[b=1.0;1.0]		360.0	0.27	0.40	4d16 0+0 d16	0.69	0.432+2d8/20 L=360	0.55	0.48	42,49,36,36
137	s=5,m=1	ok,ok	360.0	0.25	0.35	4d14 0+0 d16	0.75	0.314+2d6/25 L=360	0.44	0.83	44,51,31,31
	[b=1.0;1.0]		720.0	0.25	0.35	4d14 0+0 d16	0.76	0.284+2d6/25 L=360	0.44	0.83	42,51,31,31
239	s=5,m=1	ok,ok	720.0	0.13	0.21	4d10 0+0 d16	0.68	0.124+2d6/25 L=360	0.25	0.40	36,51,32,32
	[b=1.0;1.0]		1080.0	0.13	0.21	4d10 0+0 d16	0.78	0.094+2d6/25 L=360	0.25	0.40	44,51,32,32
M_P= 8 X=4185.2 Y=1443.8											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
34	s=7,m=1	ok,ok	0.0	0.27	0.83	4d16 0+0 d16	0.65	0.492+2d8/20 L=360	0.47	0.48	41,49,30,34
	[b=1.0;1.0]		360.0	0.27	0.83	4d16 0+0 d16	0.79	0.462+2d8/20 L=360	0.47	0.48	40,49,30,34
136	s=5,m=1	ok,ok	360.0	0.25	1.00	4d14 0+0 d16	0.86	0.364+2d6/25 L=360	0.52	0.88	40,51,32,31
	[b=1.0;1.0]		720.0	0.25	1.00	4d14 0+0 d16	0.87	0.334+2d6/25 L=360	0.53	0.88	38,51,32,31
238	s=5,m=1	ok,ok	720.0	0.13	0.59	4d10 0+0 d16	1.40	0.164+2d6/25 L=360	0.31	0.45	3,48,29,29
	[b=1.0;1.0]		1080.0	0.13	0.59	4d10 0+0 d16	1.72	0.134+2d6/25 L=360	0.31	0.45	11,48,29,29
M_P= 9 X=4655.2 Y=1443.8											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
33	s=7,m=1	ok,ok	0.0	0.27	0.88	4d16 0+0 d16	0.65	0.472+2d8/20 L=360	0.47	0.48	41,47,31,32
	[b=1.0;1.0]		360.0	0.27	0.88	4d16 0+0 d16	0.78	0.442+2d8/20 L=360	0.47	0.48	39,47,31,32
135	s=5,m=1	ok,ok	360.0	0.25	1.10	4d14 0+0 d16	0.85	0.354+2d6/25 L=360	0.52	0.87	39,47,31,32
	[b=1.0;1.0]		720.0	0.25	1.10	4d14 0+0 d16	0.87	0.324+2d6/25 L=360	0.53	0.87	37,47,31,32
237	s=5,m=1	ok,ok	720.0	0.13	0.72	4d10 0+0 d16	1.41	0.154+2d6/25 L=360	0.30	0.44	3,51,32,31
	[b=1.0;1.0]		1080.0	0.13	0.72	4d10 0+0 d16	1.76	0.134+2d6/25 L=360	0.31	0.44	11,51,32,31
M_P= 10 X=5080.2 Y=1443.8											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
32	s=4,m=1	ok,ok	0.0	0.23	0.44	4d16 0+0 d16	1.16	0.462+2d8/20 L=360	0.60	0.52	42,49,34,34
	[b=1.0;1.0]		360.0	0.23	0.44	4d16 0+0 d16	0.61	0.442+2d8/20 L=360	0.61	0.52	39,49,34,34
134	s=5,m=1	ok,ok	360.0	0.25	0.37	4d14 0+0 d16	0.73	0.374+2d6/25 L=360	0.46	0.88	44,51,31,32
	[b=1.0;1.0]		720.0	0.25	0.37	4d14 0+0 d16	0.77	0.344+2d6/25 L=360	0.47	0.88	42,51,31,32
236	s=5,m=1	ok,ok	720.0	0.13	0.23	4d10 0+0 d16	0.69	0.154+2d6/25 L=360	0.27	0.44	44,51,31,31
	[b=1.0;1.0]		1080.0	0.13	0.23	4d10 0+0 d16	0.77	0.124+2d6/25 L=360	0.28	0.44	42,51,31,31
M_P= 11 X=5930.2 Y=1443.8											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
29	s=4,m=1	ok,ok	0.0	0.23	0.92	4d16 0+0 d16	0.70	0.342+2d8/20 L=360	0.48	0.47	33,47,33,34
	[b=1.0;1.0]		360.0	0.23	0.92	4d16 0+0 d16	0.62	0.312+2d8/20 L=360	0.49	0.47	41,47,33,34
131	s=8,m=1	ok,ok	360.0	0.25	0.36	4d14 0+0 d16	0.57	0.302+2d6/25 L=360	0.39	0.82	40,47,32,29
	[b=1.0;1.0]		720.0	0.25	0.36	4d14 0+0 d16	0.59	0.272+2d6/25 L=360	0.39	0.82	40,47,32,29
233	s=5,m=1	ok,ok	720.0	0.13	0.24	4d10 0+0 d16	0.61	0.144+2d6/25 L=360	0.26	0.43	40,47,32,32
	[b=1.0;1.0]		1080.0	0.13	0.24	4d10 0+0 d16	0.65	0.114+2d6/25 L=360	0.27	0.43	40,47,32,32
M_P= 12 X=6520.2 Y=1443.8											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
319	s=7,m=1	ok,ok	0.0	0.27	0.43	4d16 0+0 d16	0.60	0.272+2d8/20 L=360	0.45	0.41	41,48,33,34
	[b=1.0;1.0]		360.0	0.27	0.43	4d16 0+0 d16	0.63	0.252+2d8/20 L=360	0.46	0.41	41,48,33,34
321	s=5,m=1	ok,ok	360.0	0.25	0.73	4d14 0+0 d16	0.60	0.204+2d6/25 L=360	0.38	0.71	39,48,31,32
	[b=1.0;1.0]		720.0	0.25	0.73	4d14 0+0 d16	0.55	0.174+2d6/25 L=360	0.39	0.71	30,48,31,32
323	s=5,m=1	ok,ok	720.0	0.13	0.20	4d10 0+0 d16	0.61	0.084+2d6/25 L=360	0.23	0.35	39,48,33,32
	[b=1.0;1.0]		1080.0	0.13	0.20	4d10 0+0 d16	0.79	0.064+2d6/25 L=360	0.23	0.35	11,48,33,32
M_P= 13 X=2320.2 Y=1608.9											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
43	s=7,m=1	ok,ok	0.0	0.27	0.43	4d16 0+0 d16	0.62	0.402+2d8/20 L=360	0.46	0.46	41,47,33,34
	[b=1.0;1.0]		360.0	0.27	0.43	4d16 0+0 d16	0.60	0.372+2d8/20 L=360	0.47	0.46	38,47,33,34
145	s=5,m=1	ok,ok	360.0	0.25	0.49	4d14 0+0 d16	0.59	0.304+2d6/25 L=360	0.42	0.82	39,47,30,29
	[b=1.0;1.0]		720.0	0.25	0.49	4d14 0+0 d16	0.56	0.274+2d6/25 L=360	0.43	0.82	35,47,32,29
247	s=5,m=1	ok,ok	720.0	0.13	0.25	4d10 0+0 d16	0.59	0.134+2d6/25 L=360	0.25	0.42	41,50,36,30
	[b=1.0;1.0]		1080.0	0.13	0.25	4d10 0+0 d16	0.70	0.104+2d6/25 L=360	0.26	0.42	11,50,36,30
M_P= 14 X=2910.2 Y=1608.9											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
41	s=7,m=1	ok,ok	0.0	0.27	0.66	4d16 0+0 d16	0.65	0.652+2d8/20 L=360	0.49	0.52	41,50,34,34
	[b=1.0;1.0]		360.0	0.27	0.66	4d16 0+0 d16	0.62	0.622+2d8/20 L=360	0.49	0.52	30,50,34,34
143	s=5,m=1	ok,ok	360.0	0.25	0.42	4d14 0+0 d16	0.66	0.484+2d6/25 L=360	0.49	0.96	38,52,30,31
	[b=1.0;1.0]		720.0	0.25	0.42	4d14 0+0 d16	0.68	0.454+2d6/25 L=360	0.50	0.96	38,52,30,31

245	s=6,m=1	ok,ok	720.0	0.10	0.23	4d10 0+0 d16	0.72	0.172+2d6/25 L=360	0.30	0.52	39,52,30,34	
	[b=1.0;1.0]		1080.0	0.10	0.23	4d10 0+0 d16	0.79	0.142+2d6/25 L=360	0.31	0.52	30,52,30,34	
			M_P= 15 X=3322.7 Y=1608.9									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
37s=10,m=1	ok,ok		0.0	0.18	0.65	4d16 0+0 d16	0.75	0.282+2d8/20 L=360	0.49	0.50	42,50,35,36	
	[b=1.0;1.0]		360.0	0.18	0.65	4d16 0+0 d16	0.59	0.262+2d8/20 L=360	0.50	0.50	40,50,35,36	
139	s=5,m=1	ok,ok	360.0	0.25	0.80	4d14 0+0 d16	0.62	0.324+2d6/25 L=360	0.41	0.84	39,50,31,30	
	[b=1.0;1.0]		720.0	0.25	0.80	4d14 0+0 d16	0.64	0.304+2d6/25 L=360	0.42	0.84	39,50,31,30	
241	s=5,m=1	ok,ok	720.0	0.13	0.70	4d10 0+0 d16	0.64	0.144+2d6/25 L=360	0.23	0.43	40,50,32,29	
	[b=1.0;1.0]		1080.0	0.13	0.70	4d10 0+0 d16	0.69	0.124+2d6/25 L=360	0.24	0.43	40,50,32,29	
			M_P= 16 X=3735.2 Y=1608.9									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
36s=10,m=1	ok,ok		0.0	0.18	0.51	4d16 0+0 d16	1.04	0.512+2d8/20 L=360	0.66	0.62	41,50,33,30	
	[b=1.0;1.0]		360.0	0.18	0.51	4d16 0+0 d16	0.64	0.482+2d8/20 L=360	0.67	0.62	31,50,33,30	
138	s=5,m=1	ok,ok	360.0	0.25	0.52	4d14 0+0 d16	0.64	0.554+2d6/25 L=360	0.48	0.99	39,52,31,31	
	[b=1.0;1.0]		720.0	0.25	0.52	4d14 0+0 d16	0.66	0.524+2d6/25 L=360	0.48	0.99	39,52,31,31	
240	s=6,m=1	ok,ok	720.0	0.10	0.33	4d10 0+0 d16	0.71	0.202+2d6/25 L=360	0.31	0.56	35,52,35,35	
	[b=1.0;1.0]		1080.0	0.10	0.33	4d10 0+0 d16	0.83	0.172+2d6/25 L=360	0.31	0.56	43,52,35,35	
			M_P= 17 X=5080.2 Y=1608.9									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
31	s=7,m=1	ok,ok	0.0	0.27	0.53	4d16 0+0 d16	0.69	0.732+2d8/20 L=360	0.53	0.52	41,50,33,34	
	[b=1.0;1.0]		360.0	0.27	0.53	4d16 0+0 d16	0.62	0.702+2d8/20 L=360	0.54	0.52	40,50,33,34	
133	s=5,m=1	ok,ok	360.0	0.25	0.50	4d14 0+0 d16	0.64	0.544+2d6/25 L=360	0.48	0.99	40,52,32,32	
	[b=1.0;1.0]		720.0	0.25	0.50	4d14 0+0 d16	0.66	0.514+2d6/25 L=360	0.49	0.99	40,52,32,32	
235	s=8,m=1	ok,ok	720.0	0.13	0.44	4d10 0+0 d16	0.88	0.232+2d6/25 L=360	0.31	0.55	35,52,33,34	
	[b=1.0;1.0]		1080.0	0.13	0.44	4d10 0+0 d16	0.98	0.212+2d6/25 L=360	0.32	0.55	43,52,33,34	
			M_P= 18 X=5517.7 Y=1608.9									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
30	s=7,m=1	ok,ok	0.0	0.27	0.94	4d16 0+0 d16	0.59	0.422+2d8/20 L=360	0.44	0.47	38,50,34,34	
	[b=1.0;1.0]		360.0	0.27	0.94	4d16 0+0 d16	0.60	0.402+2d8/20 L=360	0.44	0.47	30,50,33,34	
132	s=5,m=1	ok,ok	360.0	0.25	1.03	4d14 0+0 d16	0.63	0.334+2d6/25 L=360	0.41	0.85	37,50,32,32	
	[b=1.0;1.0]		720.0	0.25	1.03	4d14 0+0 d16	0.64	0.304+2d6/25 L=360	0.42	0.85	32,50,32,32	
234	s=5,m=1	ok,ok	720.0	0.13	0.51	4d10 0+0 d16	0.64	0.154+2d6/25 L=360	0.24	0.44	39,50,30,30	
	[b=1.0;1.0]		1080.0	0.13	0.51	4d10 0+0 d16	0.68	0.124+2d6/25 L=360	0.24	0.44	39,50,30,30	
			M_P= 19 X=5930.2 Y=1608.9									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
28	s=7,m=1	ok,ok	0.0	0.27	0.51	4d16 0+0 d16	0.65	0.652+2d8/20 L=360	0.49	0.52	41,50,33,34	
	[b=1.0;1.0]		360.0	0.27	0.51	4d16 0+0 d16	0.62	0.622+2d8/20 L=360	0.49	0.52	40,50,33,34	
130	s=5,m=1	ok,ok	360.0	0.25	0.48	4d14 0+0 d16	0.65	0.474+2d6/25 L=360	0.48	0.95	40,52,32,32	
	[b=1.0;1.0]		720.0	0.25	0.48	4d14 0+0 d16	0.67	0.454+2d6/25 L=360	0.49	0.95	40,52,32,32	
232	s=8,m=1	ok,ok	720.0	0.13	0.43	4d10 0+0 d16	0.82	0.202+2d6/25 L=360	0.31	0.51	35,52,32,34	
	[b=1.0;1.0]		1080.0	0.13	0.43	4d10 0+0 d16	0.87	0.172+2d6/25 L=360	0.31	0.51	35,52,32,34	
			M_P= 20 X=6520.2 Y=1608.9									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
27	s=7,m=1	ok,ok	0.0	0.27	0.40	4d16 0+0 d16	0.69	0.382+2d8/20 L=360	0.48	0.45	41,50,33,34	
	[b=1.0;1.0]		360.0	0.27	0.40	4d16 0+0 d16	0.65	0.352+2d8/20 L=360	0.49	0.45	41,50,33,34	
129	s=5,m=1	ok,ok	360.0	0.25	0.33	4d14 0+0 d16	0.62	0.274+2d6/25 L=360	0.42	0.79	39,52,31,30	
	[b=1.0;1.0]		720.0	0.25	0.33	4d14 0+0 d16	0.55	0.244+2d6/25 L=360	0.43	0.79	38,52,31,30	
231	s=5,m=1	ok,ok	720.0	0.13	0.52	4d10 0+0 d16	0.61	0.124+2d6/25 L=360	0.25	0.40	39,52,29,29	
	[b=1.0;1.0]		1080.0	0.13	0.52	4d10 0+0 d16	0.68	0.094+2d6/25 L=360	0.25	0.40	39,52,29,29	
			M_P= 21 X=2320.2 Y=1971.4									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
44	s=7,m=1	ok,ok	0.0	0.27	0.47	4d16 0+0 d16	0.59	0.342+2d8/20 L=360	0.41	0.43	42,49,35,36	
	[b=1.0;1.0]		360.0	0.27	0.47	4d16 0+0 d16	0.47	0.312+2d8/20 L=360	0.42	0.43	37,49,35,36	
146	s=5,m=1	ok,ok	360.0	0.25	0.53	4d14 0+0 d16	0.52	0.264+2d6/25 L=360	0.40	0.78	41,47,29,31	
	[b=1.0;1.0]		720.0	0.25	0.53	4d14 0+0 d16	0.53	0.234+2d6/25 L=360	0.40	0.78	41,47,29,31	
248	s=5,m=1	ok,ok	720.0	0.13	0.56	4d10 0+0 d16	0.53	0.124+2d6/25 L=360	0.23	0.40	43,50,29,30	
	[b=1.0;1.0]		1080.0	0.13	0.56	4d10 0+0 d16	0.56	0.094+2d6/25 L=360	0.24	0.40	43,50,29,30	
			M_P= 22 X=6520.2 Y=1973.9									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
15	s=7,m=1	ok,ok	0.0	0.27	0.46	4d16 0+0 d16	0.59	0.342+2d8/20 L=360	0.42	0.44	42,50,33,34	
	[b=1.0;1.0]		360.0	0.27	0.46	4d16 0+0 d16	0.49	0.312+2d8/20 L=360	0.42	0.44	42,50,33,34	
117	s=5,m=1	ok,ok	360.0	0.25	0.44	4d14 0+0 d16	0.52	0.264+2d6/25 L=360	0.40	0.78	33,50,30,32	
	[b=1.0;1.0]		720.0	0.25	0.44	4d14 0+0 d16	0.53	0.234+2d6/25 L=360	0.41	0.78	33,50,30,32	
219	s=5,m=1	ok,ok	720.0	0.13	0.47	4d10 0+0 d16	0.53	0.124+2d6/25 L=360	0.23	0.40	43,50,31,31	
	[b=1.0;1.0]		1080.0	0.13	0.47	4d10 0+0 d16	0.57	0.094+2d6/25 L=360	0.23	0.40	43,50,31,31	
			M_P= 23 X=2910.2 Y=2134.1									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
9	s=7,m=1	ok,ok	0.0	0.27	1.07	4d16 0+0 d16	0.62	0.752+2d8/20 L=360	0.50	0.52	30,47,34,34	
	[b=1.0;1.0]		360.0	0.27	1.07	4d16 0+0 d16	0.62	0.722+2d8/20 L=360	0.50	0.52	30,47,34,34	
111	s=5,m=1	ok,ok	360.0	0.25	1.62	4d14 0+0 d16	0.64	0.564+2d6/25 L=360	0.47	1.00	40,47,31,31	
	[b=1.0;1.0]		720.0	0.25	1.62	4d14 0+0 d16	0.53	0.534+2d6/25 L=360	0.47	1.00	42,47,31,31	
213	s=5,m=1	ok,ok	720.0	0.13	0.89	4d10 0+0 d16	0.54	0.244+2d6/25 L=360	0.29	0.55	40,47,30,29	
	[b=1.0;1.0]		1080.0	0.13	0.89	4d10 0+0 d16	0.68	0.214+2d6/25 L=360	0.29	0.55	32,47,30,29	
			M_P= 24 X=3217.7 Y=2134.1									
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb

17	s=7,m=1	ok,ok	0.0	0.27	0.95	4d16 0+0 d16	0.61	0.502+2d8/20 L=360	0.46	0.49	39,48,34,34
	[b=1.0;1.0]		360.0	0.27	0.95	4d16 0+0 d16	0.62	0.472+2d8/20 L=360	0.46	0.49	39,48,34,34
119	s=5,m=1	ok,ok	360.0	0.25	0.93	4d14 0+0 d16	0.64	0.384+2d6/25 L=360	0.42	0.89	39,48,31,31
	[b=1.0;1.0]		720.0	0.25	0.93	4d14 0+0 d16	0.65	0.354+2d6/25 L=360	0.43	0.89	39,48,31,31
221	s=5,m=1	ok,ok	720.0	0.13	0.74	4d10 0+0 d16	0.63	0.184+2d6/25 L=360	0.25	0.48	31,48,29,29
	[b=1.0;1.0]		1080.0	0.13	0.74	4d10 0+0 d16	0.67	0.154+2d6/25 L=360	0.25	0.48	31,48,29,29
M_P= 25 X=3537.7 Y=2134.1											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
13	s=7,m=1	ok,ok	0.0	0.27	1.01	4d16 0+0 d16	0.59	0.442+2d8/20 L=360	0.44	0.47	40,52,36,36
	[b=1.0;1.0]		360.0	0.27	1.01	4d16 0+0 d16	0.59	0.412+2d8/20 L=360	0.44	0.47	40,52,36,36
115	s=5,m=1	ok,ok	360.0	0.25	1.16	4d14 0+0 d16	0.62	0.344+2d6/25 L=360	0.41	0.85	39,52,31,31
	[b=1.0;1.0]		720.0	0.25	1.16	4d14 0+0 d16	0.63	0.314+2d6/25 L=360	0.41	0.85	39,52,31,31
217	s=5,m=1	ok,ok	720.0	0.13	0.72	4d10 0+0 d16	0.62	0.154+2d6/25 L=360	0.23	0.44	39,52,29,32
	[b=1.0;1.0]		1080.0	0.13	0.72	4d10 0+0 d16	0.66	0.124+2d6/25 L=360	0.24	0.44	39,52,29,32
M_P= 26 X=3855.2 Y=2134.1											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
16	s=7,m=1	ok,ok	0.0	0.27	1.01	4d16 0+0 d16	0.59	0.482+2d8/20 L=360	0.45	0.48	40,51,34,31
	[b=1.0;1.0]		360.0	0.27	1.01	4d16 0+0 d16	0.60	0.452+2d8/20 L=360	0.45	0.48	40,51,34,31
118	s=5,m=1	ok,ok	360.0	0.25	0.76	4d14 0+0 d16	0.63	0.374+2d6/25 L=360	0.42	0.88	40,51,32,31
	[b=1.0;1.0]		720.0	0.25	0.76	4d14 0+0 d16	0.64	0.344+2d6/25 L=360	0.43	0.88	40,51,32,31
220	s=5,m=1	ok,ok	720.0	0.13	0.49	4d10 0+0 d16	0.62	0.184+2d6/25 L=360	0.26	0.48	40,47,32,32
	[b=1.0;1.0]		1080.0	0.13	0.49	4d10 0+0 d16	0.66	0.154+2d6/25 L=360	0.26	0.48	40,47,32,32
M_P= 27 X=4185.2 Y=2134.1											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
20	s=7,m=1	ok,ok	0.0	0.27	0.56	4d16 0+0 d16	0.68	0.682+2d8/20 L=360	0.49	0.52	42,51,35,30
	[b=1.0;1.0]		360.0	0.27	0.56	4d16 0+0 d16	0.69	0.662+2d8/20 L=360	0.49	0.52	40,51,35,30
122	s=11,m=1	ok,ok	360.0	0.27	0.68	4d14 0+0 d16	0.71	0.612+2d6/25 L=360	0.53	0.96	40,51,32,35
	[b=1.0;1.0]		720.0	0.27	0.68	4d14 0+0 d16	0.72	0.582+2d6/25 L=360	0.53	0.96	40,51,32,35
224	s=8,m=1	ok,ok	720.0	0.13	0.45	4d10 0+0 d16	0.92	0.302+2d6/25 L=360	0.38	0.63	3,51,32,32
	[b=1.0;1.0]		1080.0	0.13	0.45	4d10 0+0 d16	0.97	0.272+2d6/25 L=360	0.39	0.63	4,51,32,32
328	s=8,m=1	ok,ok	1080.0	0.13	0.46	4d10 0+0 d16	0.68	0.072+2d6/25 L=337	0.32	0.44	42,51,35,35
	[b=1.0;1.0]		1417.0	0.13	0.46	4d10 0+0 d16	0.64	0.042+2d6/25 L=337	0.32	0.44	44,51,35,35
M_P= 28 X=4655.2 Y=2134.1											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
21	s=7,m=1	ok,ok	0.0	0.27	0.56	4d16 0+0 d16	0.68	0.712+2d8/20 L=360	0.49	0.52	42,49,36,29
	[b=1.0;1.0]		360.0	0.27	0.56	4d16 0+0 d16	0.69	0.682+2d8/20 L=360	0.49	0.52	39,49,36,29
123	s=11,m=1	ok,ok	360.0	0.27	0.66	4d14 0+0 d16	0.70	0.642+2d6/25 L=360	0.53	0.97	39,49,31,36
	[b=1.0;1.0]		720.0	0.27	0.66	4d14 0+0 d16	0.71	0.612+2d6/25 L=360	0.53	0.97	39,49,31,36
225	s=8,m=1	ok,ok	720.0	0.13	1.00	4d10 0+0 d16	0.87	0.322+2d6/25 L=360	0.39	0.66	3,49,32,35
	[b=1.0;1.0]		1080.0	0.13	1.00	4d10 0+0 d16	0.94	0.302+2d6/25 L=360	0.40	0.66	4,49,32,35
329	s=8,m=1	ok,ok	1080.0	0.13	0.45	4d10 0+0 d16	0.69	0.102+2d6/25 L=290	0.41	0.58	42,51,35,35
	[b=1.0;1.0]		1370.0	0.13	0.45	4d10 0+0 d16	0.83	0.072+2d6/25 L=290	0.41	0.58	9,51,35,35
330	s=8,m=1	ok,ok	1370.0	0.13	0.05	4d10 0+0 d16	0.60	0.03 2+2d6/25 L=47	4.15	28.96	34,48,31,32
	[b=1.0;1.0]		1417.0	0.13	0.05	4d10 0+0 d16	0.58	0.03 2+2d6/25 L=47	4.16	28.96	40,48,31,32
M_P= 29 X=4985.2 Y=2134.1											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
25	s=7,m=1	ok,ok	0.0	0.27	1.08	4d16 0+0 d16	0.58	0.552+2d8/20 L=360	0.48	0.50	38,47,33,33
	[b=1.0;1.0]		360.0	0.27	1.08	4d16 0+0 d16	0.58	0.522+2d8/20 L=360	0.48	0.50	30,47,33,33
127	s=5,m=1	ok,ok	360.0	0.25	1.68	4d14 0+0 d16	0.60	0.464+2d6/25 L=360	0.44	0.95	30,47,31,32
	[b=1.0;1.0]		720.0	0.25	1.68	4d14 0+0 d16	0.61	0.444+2d6/25 L=360	0.44	0.95	38,47,31,32
229	s=5,m=1	ok,ok	720.0	0.13	1.01	4d10 0+0 d16	0.56	0.274+2d6/25 L=360	0.32	0.59	40,47,31,31
	[b=1.0;1.0]		1080.0	0.13	1.01	4d10 0+0 d16	0.59	0.244+2d6/25 L=360	0.32	0.59	38,47,31,31
337	s=5,m=1	ok,ok	1080.0	0.13	0.30	4d10 0+0 d16	0.60	0.104+2d6/25 L=290	0.40	0.51	42,47,36,31
	[b=1.0;1.0]		1370.0	0.13	0.30	4d10 0+0 d16	1.60	0.084+2d6/25 L=290	0.41	0.51	9,47,36,31
M_P= 30 X=5302.7 Y=2134.1											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
23	s=7,m=1	ok,ok	0.0	0.27	0.98	4d16 0+0 d16	0.58	0.492+2d8/20 L=360	0.52	0.52	39,52,35,35
	[b=1.0;1.0]		360.0	0.27	0.98	4d16 0+0 d16	0.60	0.462+2d8/20 L=360	0.52	0.52	39,52,35,35
125	s=5,m=1	ok,ok	360.0	0.25	1.12	4d14 0+0 d16	0.66	0.414+2d6/25 L=360	0.42	0.91	37,52,32,32
	[b=1.0;1.0]		720.0	0.25	1.12	4d14 0+0 d16	0.67	0.384+2d6/25 L=360	0.43	0.91	37,52,31,32
227	s=5,m=1	ok,ok	720.0	0.13	0.70	4d10 0+0 d16	0.76	0.224+2d6/25 L=360	0.29	0.54	39,48,31,31
	[b=1.0;1.0]		1080.0	0.13	0.70	4d10 0+0 d16	0.80	0.204+2d6/25 L=360	0.29	0.54	39,48,31,31
336	s=5,m=1	ok,ok	1080.0	0.13	0.19	4d10 0+0 d16	0.70	0.084+2d6/25 L=290	0.31	0.45	42,48,31,31
	[b=1.0;1.0]		1370.0	0.13	0.19	4d10 0+0 d16	1.09	0.064+2d6/25 L=290	0.31	0.45	9,48,31,31
M_P= 31 X=5612.7 Y=2134.1											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
358	s=7,m=1	ok,ok	0.0	0.27	0.85	4d16 0+0 d16	0.59	0.482+2d8/20 L=360	0.46	0.49	40,47,34,34
	[b=1.0;1.0]		360.0	0.27	0.85	4d16 0+0 d16	0.60	0.452+2d8/20 L=360	0.46	0.49	40,47,34,34
359	s=5,m=1	ok,ok	360.0	0.25	0.75	4d14 0+0 d16	0.66	0.374+2d6/25 L=360	0.42	0.88	29,52,32,32
	[b=1.0;1.0]		720.0	0.25	0.75	4d14 0+0 d16	0.68	0.344+2d6/25 L=360	0.42	0.88	37,52,32,32
360	s=5,m=1	ok,ok	720.0	0.13	0.55	4d10 0+0 d16	0.81	0.174+2d6/25 L=360	0.25	0.47	32,47,30,30
	[b=1.0;1.0]		1080.0	0.13	0.55	4d10 0+0 d16	0.87	0.154+2d6/25 L=360	0.25	0.47	37,47,30,30
M_P= 32 X=5930.2 Y=2134.1											
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V/T clsV	V/T acc Rif. cmb
4	s=7,m=1	ok,ok	0.0	0.27	0.98	4d16 0+0 d16	0.56	0.762+2d8/20 L=360	0.57	0.55	40,48,35,35
	[b=1.0;1.0]		360.0	0.27	0.98	4d16 0+0 d16	0.57	0.732+2d8/20 L=360	0.57	0.55	37,48,35,35

106	s=5,m=1	ok,ok	360.0	0.25	0.73	4d14 0+0 d16	0.63	0.574+2d6/25 L=360	0.47	1.00	39,48,32,32	
	[b=1.0;1.0]		720.0	0.25	0.73	4d14 0+0 d16	0.52	0.544+2d6/25 L=360	0.47	1.00	33,48,32,32	
208	s=5,m=1	ok,ok	720.0	0.13	0.85	4d10 0+0 d16	0.58	0.244+2d6/25 L=360	0.30	0.55	42,48,34,30	
	[b=1.0;1.0]		1080.0	0.13	0.85	4d10 0+0 d16	0.77	0.224+2d6/25 L=360	0.30	0.55	31,48,34,30	
			M_P= 33		X=2320.2 Y=2328.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
10	s=7,m=1	ok,ok	0.0	0.27	0.47	4d16 0+0 d16	0.59	0.362+2d8/20 L=360	0.43	0.44	42,49,34,34	
	[b=1.0;1.0]		360.0	0.27	0.47	4d16 0+0 d16	0.46	0.332+2d8/20 L=360	0.43	0.44	37,49,34,34	
112	s=5,m=1	ok,ok	360.0	0.25	0.44	4d14 0+0 d16	0.52	0.294+2d6/25 L=360	0.41	0.81	42,51,32,30	
	[b=1.0;1.0]		720.0	0.25	0.44	4d14 0+0 d16	0.53	0.264+2d6/25 L=360	0.42	0.81	42,51,32,30	
214	s=5,m=1	ok,ok	720.0	0.13	0.55	4d10 0+0 d16	0.52	0.134+2d6/25 L=360	0.23	0.41	44,51,32,29	
	[b=1.0;1.0]		1080.0	0.13	0.55	4d10 0+0 d16	0.55	0.104+2d6/25 L=360	0.23	0.41	44,51,32,29	
			M_P= 34		X=6520.2 Y=2331.4							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
14	s=7,m=1	ok,ok	0.0	0.27	0.60	4d16 0+0 d16	0.60	0.372+2d8/20 L=360	0.44	0.45	42,49,34,34	
	[b=1.0;1.0]		360.0	0.27	0.60	4d16 0+0 d16	0.50	0.342+2d8/20 L=360	0.44	0.45	42,49,34,34	
116	s=5,m=1	ok,ok	360.0	0.25	0.49	4d14 0+0 d16	0.52	0.294+2d6/25 L=360	0.41	0.81	42,49,31,29	
	[b=1.0;1.0]		720.0	0.25	0.49	4d14 0+0 d16	0.53	0.264+2d6/25 L=360	0.42	0.81	42,49,31,29	
218	s=5,m=1	ok,ok	720.0	0.13	0.57	4d10 0+0 d16	0.52	0.134+2d6/25 L=360	0.23	0.41	44,51,31,30	
	[b=1.0;1.0]		1080.0	0.13	0.57	4d10 0+0 d16	0.56	0.104+2d6/25 L=360	0.24	0.41	44,51,31,30	
			M_P= 35		X=4185.2 Y=2416.5							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
22	s=7,m=1	ok,ok	0.0	0.27	0.40	4d16 0+0 d16	0.68	0.202+2d8/20 L=360	0.38	0.36	42,49,34,34	
	[b=1.0;1.0]		360.0	0.27	0.40	4d16 0+0 d16	0.71	0.182+2d8/20 L=360	0.39	0.36	42,49,34,34	
124	s=11,m=1	ok,ok	360.0	0.27	0.95	4d14 0+0 d16	0.54	0.212+2d6/25 L=360	0.38	0.70	34,46,32,31	
	[b=1.0;1.0]		720.0	0.27	0.95	4d14 0+0 d16	0.56	0.192+2d6/25 L=360	0.38	0.70	34,46,32,31	
226	s=5,m=1	ok,ok	720.0	0.13	0.37	4d10 0+0 d16	0.57	0.144+2d6/25 L=360	0.29	0.47	42,47,31,31	
	[b=1.0;1.0]		1080.0	0.13	0.37	4d10 0+0 d16	0.68	0.114+2d6/25 L=360	0.29	0.47	40,47,31,31	
335	s=5,m=1	ok,ok	1080.0	0.13	0.50	4d10 0+0 d16	0.54	0.104+2d6/25 L=331	0.36	0.52	42,47,31,31	
	[b=1.0;1.0]		1410.6	0.13	0.50	4d10 0+0 d16	0.58	0.074+2d6/25 L=331	0.37	0.52	35,47,31,31	
			M_P= 36		X=4655.2 Y=2416.5							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
5	s=7,m=1	ok,ok	0.0	0.27	0.55	4d16 0+0 d16	0.72	0.242+2d8/20 L=360	0.41	0.39	42,51,34,34	
	[b=1.0;1.0]		360.0	0.27	0.55	4d16 0+0 d16	0.75	0.212+2d8/20 L=360	0.41	0.39	42,51,34,34	
107	s=11,m=1	ok,ok	360.0	0.27	0.56	4d14 0+0 d16	0.58	0.262+2d6/25 L=360	0.40	0.75	36,51,31,31	
	[b=1.0;1.0]		720.0	0.27	0.56	4d14 0+0 d16	0.60	0.232+2d6/25 L=360	0.40	0.75	36,51,31,31	
209	s=5,m=1	ok,ok	720.0	0.13	0.41	4d10 0+0 d16	0.64	0.184+2d6/25 L=360	0.31	0.52	42,51,31,31	
	[b=1.0;1.0]		1080.0	0.13	0.41	4d10 0+0 d16	0.70	0.154+2d6/25 L=360	0.31	0.52	42,51,31,31	
332	s=5,m=1	ok,ok	1080.0	0.13	0.57	4d10 0+0 d16	0.63	0.144+2d6/25 L=331	0.39	0.59	42,51,31,31	
	[b=1.0;1.0]		1410.6	0.13	0.57	4d10 0+0 d16	0.68	0.124+2d6/25 L=331	0.39	0.59	42,51,31,31	
			M_P= 37		X=2320.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
7	s=7,m=1	ok,ok	0.0	0.27	0.37	4d16 0+0 d16	0.61	0.302+2d8/20 L=360	0.45	0.42	40,50,35,34	
	[b=1.0;1.0]		360.0	0.27	0.37	4d16 0+0 d16	0.62	0.272+2d8/20 L=360	0.45	0.42	38,50,35,34	
109	s=5,m=1	ok,ok	360.0	0.25	0.28	4d14 0+0 d16	0.67	0.224+2d6/25 L=360	0.42	0.74	40,52,32,30	
	[b=1.0;1.0]		720.0	0.25	0.28	4d14 0+0 d16	0.60	0.194+2d6/25 L=360	0.43	0.74	37,52,32,30	
211	s=5,m=1	ok,ok	720.0	0.13	0.21	4d10 0+0 d16	0.69	0.094+2d6/25 L=360	0.25	0.36	40,45,32,30	
	[b=1.0;1.0]		1080.0	0.13	0.21	4d10 0+0 d16	0.76	0.074+2d6/25 L=360	0.25	0.36	40,45,32,30	
			M_P= 38		X=2910.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
8	s=7,m=1	ok,ok	0.0	0.27	0.77	4d16 0+0 d16	0.60	0.452+2d8/20 L=360	0.46	0.48	30,45,33,34	
	[b=1.0;1.0]		360.0	0.27	0.77	4d16 0+0 d16	0.64	0.422+2d8/20 L=360	0.46	0.48	30,45,33,34	
110	s=5,m=1	ok,ok	360.0	0.25	0.40	4d14 0+0 d16	0.70	0.334+2d6/25 L=360	0.48	0.85	38,45,30,31	
	[b=1.0;1.0]		720.0	0.25	0.40	4d14 0+0 d16	0.73	0.314+2d6/25 L=360	0.49	0.85	38,45,30,31	
212	s=5,m=1	ok,ok	720.0	0.13	0.72	4d10 0+0 d16	0.83	0.144+2d6/25 L=360	0.30	0.43	4,45,30,30	
	[b=1.0;1.0]		1080.0	0.13	0.72	4d10 0+0 d16	1.01	0.124+2d6/25 L=360	0.30	0.43	11,45,30,30	
			M_P= 39		X=3217.7 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
11	s=7,m=1	ok,ok	0.0	0.27	0.84	4d16 0+0 d16	0.58	0.312+2d8/20 L=360	0.42	0.42	39,46,34,34	
	[b=1.0;1.0]		360.0	0.27	0.84	4d16 0+0 d16	0.59	0.282+2d8/20 L=360	0.43	0.42	39,46,34,34	
113	s=5,m=1	ok,ok	360.0	0.25	0.53	4d14 0+0 d16	0.63	0.234+2d6/25 L=360	0.38	0.75	39,46,31,31	
	[b=1.0;1.0]		720.0	0.25	0.53	4d14 0+0 d16	0.65	0.214+2d6/25 L=360	0.39	0.75	39,46,31,31	
215	s=5,m=1	ok,ok	720.0	0.13	0.42	4d10 0+0 d16	0.63	0.114+2d6/25 L=360	0.21	0.38	40,52,29,32	
	[b=1.0;1.0]		1080.0	0.13	0.42	4d10 0+0 d16	0.68	0.084+2d6/25 L=360	0.22	0.38	40,52,29,32	
			M_P= 40		X=3537.7 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
12	s=7,m=1	ok,ok	0.0	0.27	0.74	4d16 0+0 d16	0.57	0.292+2d8/20 L=360	0.40	0.41	37,51,34,36	
	[b=1.0;1.0]		360.0	0.27	0.74	4d16 0+0 d16	0.58	0.262+2d8/20 L=360	0.41	0.41	37,51,34,36	
114	s=5,m=1	ok,ok	360.0	0.25	0.87	4d14 0+0 d16	0.62	0.224+2d6/25 L=360	0.38	0.74	29,48,31,31	
	[b=1.0;1.0]		720.0	0.25	0.87	4d14 0+0 d16	0.63	0.194+2d6/25 L=360	0.38	0.74	29,48,31,31	
216	s=5,m=1	ok,ok	720.0	0.13	0.52	4d10 0+0 d16	0.62	0.104+2d6/25 L=360	0.20	0.37	39,51,29,29	
	[b=1.0;1.0]		1080.0	0.13	0.52	4d10 0+0 d16	0.67	0.074+2d6/25 L=360	0.21	0.37	39,51,29,29	
			M_P= 41		X=3855.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe V	V/T clsV	V/T acc	Rif. cmb
24	s=7,m=1	ok,ok	0.0	0.27	0.83	4d16 0+0 d16	0.57	0.302+2d8/20 L=360	0.41	0.42	40,47,33,34	
	[b=1.0;1.0]		360.0	0.27	0.83	4d16 0+0 d16	0.58	0.282+2d8/20 L=360	0.42	0.42	40,47,33,34	

126	s=5,m=1	ok,ok	360.0	0.25	0.88	4d14 0+0 d16	0.62	0.244+2d6/25 L=360	0.38	0.75	40,52,32,31	
	[b=1.0;1.0]		720.0	0.25	0.88	4d14 0+0 d16	0.63	0.214+2d6/25 L=360	0.39	0.75	40,52,32,31	
228	s=5,m=1	ok,ok	720.0	0.13	0.64	4d10 0+0 d16	0.62	0.114+2d6/25 L=360	0.22	0.39	32,47,32,32	
	[b=1.0;1.0]		1080.0	0.13	0.64	4d10 0+0 d16	0.67	0.094+2d6/25 L=360	0.22	0.39	32,47,32,32	
			M_P= 42		X=4185.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T	clsV V/T	acc Rif. cmb
18	s=7,m=1	ok,ok	0.0	0.27	0.41	4d16 0+0 d16	0.74	0.392+2d8/20 L=360	0.49	0.45	41,52,35,34	
	[b=1.0;1.0]		360.0	0.27	0.41	4d16 0+0 d16	0.57	0.362+2d8/20 L=360	0.49	0.45	29,52,35,34	
120	s=5,m=1	ok,ok	360.0	0.25	0.39	4d14 0+0 d16	0.60	0.314+2d6/25 L=360	0.43	0.84	40,52,32,30	
	[b=1.0;1.0]		720.0	0.25	0.39	4d14 0+0 d16	0.62	0.294+2d6/25 L=360	0.44	0.84	40,52,32,30	
222	s=5,m=1	ok,ok	720.0	0.13	0.28	4d10 0+0 d16	0.62	0.184+2d6/25 L=360	0.28	0.49	40,52,32,32	
	[b=1.0;1.0]		1080.0	0.13	0.28	4d10 0+0 d16	0.67	0.154+2d6/25 L=360	0.28	0.49	40,52,32,32	
333	s=5,m=1	ok,ok	1080.0	0.13	0.30	4d10 0+0 d16	0.72	0.074+2d6/25 L=213	0.45	0.66	40,52,32,32	
	[b=1.0;1.0]		1293.0	0.13	0.30	4d10 0+0 d16	0.61	0.054+2d6/25 L=213	0.46	0.66	43,52,32,32	
			M_P= 43		X=4655.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T	clsV V/T	acc Rif. cmb
19	s=7,m=1	ok,ok	0.0	0.27	0.79	4d16 0+0 d16	0.72	0.442+2d8/20 L=360	0.50	0.47	41,50,35,36	
	[b=1.0;1.0]		360.0	0.27	0.79	4d16 0+0 d16	0.58	0.412+2d8/20 L=360	0.51	0.47	38,50,35,36	
121	s=5,m=1	ok,ok	360.0	0.25	0.62	4d14 0+0 d16	0.61	0.374+2d6/25 L=360	0.44	0.88	38,52,30,30	
	[b=1.0;1.0]		720.0	0.25	0.62	4d14 0+0 d16	0.62	0.344+2d6/25 L=360	0.45	0.88	30,52,30,30	
223	s=5,m=1	ok,ok	720.0	0.13	0.66	4d10 0+0 d16	0.62	0.234+2d6/25 L=360	0.30	0.55	35,52,32,32	
	[b=1.0;1.0]		1080.0	0.13	0.66	4d10 0+0 d16	0.68	0.214+2d6/25 L=360	0.30	0.55	43,52,32,32	
334	s=5,m=1	ok,ok	1080.0	0.13	0.36	4d10 0+0 d16	0.67	0.124+2d6/25 L=213	0.53	0.79	39,52,32,32	
	[b=1.0;1.0]		1293.0	0.13	0.36	4d10 0+0 d16	0.69	0.104+2d6/25 L=213	0.53	0.79	43,52,32,32	
317	s=5,m=1	ok,ok	1293.0	0.13	0.17	4d10 0+0 d16	0.49	0.064+2d6/25 L=147	0.59	0.91	40,47,31,31	
	[b=1.0;1.0]		1440.0	0.13	0.17	4d10 0+0 d16	1.14	0.054+2d6/25 L=147	0.59	0.91	11,47,31,31	
			M_P= 44		X=4985.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T	clsV V/T	acc Rif. cmb
26	s=7,m=1	ok,ok	0.0	0.27	0.96	4d16 0+0 d16	0.55	0.382+2d8/20 L=360	0.43	0.45	37,52,35,35	
	[b=1.0;1.0]		360.0	0.27	0.96	4d16 0+0 d16	0.56	0.352+2d8/20 L=360	0.43	0.45	37,52,35,35	
128	s=5,m=1	ok,ok	360.0	0.25	0.55	4d14 0+0 d16	0.58	0.334+2d6/25 L=360	0.41	0.85	30,52,32,32	
	[b=1.0;1.0]		720.0	0.25	0.55	4d14 0+0 d16	0.59	0.314+2d6/25 L=360	0.42	0.85	30,52,32,32	
230	s=5,m=1	ok,ok	720.0	0.13	0.48	4d10 0+0 d16	0.53	0.214+2d6/25 L=360	0.28	0.53	30,52,31,31	
	[b=1.0;1.0]		1080.0	0.13	0.48	4d10 0+0 d16	0.55	0.184+2d6/25 L=360	0.29	0.53	30,52,31,31	
338	s=5,m=1	ok,ok	1080.0	0.13	0.65	4d10 0+0 d16	0.57	0.114+2d6/25 L=360	0.32	0.41	42,52,36,31	
	[b=1.0;1.0]		1440.0	0.13	0.65	4d10 0+0 d16	1.57	0.084+2d6/25 L=360	0.32	0.41	11,52,36,31	
			M_P= 45		X=5302.7 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T	clsV V/T	acc Rif. cmb
1	s=7,m=1	ok,ok	0.0	0.27	1.09	4d16 0+0 d16	0.58	0.352+2d8/20 L=360	0.43	0.44	39,48,34,34	
	[b=1.0;1.0]		360.0	0.27	1.09	4d16 0+0 d16	0.59	0.322+2d8/20 L=360	0.43	0.44	39,48,34,34	
103	s=5,m=1	ok,ok	360.0	0.25	0.50	4d14 0+0 d16	0.63	0.304+2d6/25 L=360	0.41	0.82	39,48,31,32	
	[b=1.0;1.0]		720.0	0.25	0.50	4d14 0+0 d16	0.64	0.274+2d6/25 L=360	0.41	0.82	39,48,31,32	
205	s=5,m=1	ok,ok	720.0	0.13	0.59	4d10 0+0 d16	0.64	0.184+2d6/25 L=360	0.27	0.49	39,48,31,31	
	[b=1.0;1.0]		1080.0	0.13	0.59	4d10 0+0 d16	0.69	0.164+2d6/25 L=360	0.28	0.49	39,48,31,31	
331	s=5,m=1	ok,ok	1080.0	0.13	0.46	4d10 0+0 d16	0.73	0.084+2d6/25 L=360	0.26	0.36	39,48,36,31	
	[b=1.0;1.0]		1440.0	0.13	0.46	4d10 0+0 d16	1.16	0.054+2d6/25 L=360	0.27	0.36	11,48,36,31	
			M_P= 46		X=5620.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T	clsV V/T	acc Rif. cmb
2	s=7,m=1	ok,ok	0.0	0.27	0.85	4d16 0+0 d16	0.59	0.302+2d8/20 L=360	0.42	0.42	39,50,34,34	
	[b=1.0;1.0]		360.0	0.27	0.85	4d16 0+0 d16	0.60	0.272+2d8/20 L=360	0.43	0.42	39,50,34,34	
104	s=5,m=1	ok,ok	360.0	0.25	0.43	4d14 0+0 d16	0.65	0.244+2d6/25 L=360	0.38	0.75	31,48,31,32	
	[b=1.0;1.0]		720.0	0.25	0.43	4d14 0+0 d16	0.67	0.214+2d6/25 L=360	0.39	0.75	31,48,31,32	
206	s=5,m=1	ok,ok	720.0	0.13	0.49	4d10 0+0 d16	0.67	0.124+2d6/25 L=360	0.22	0.39	39,48,29,29	
	[b=1.0;1.0]		1080.0	0.13	0.49	4d10 0+0 d16	0.72	0.094+2d6/25 L=360	0.22	0.39	39,48,29,29	
			M_P= 47		X=5930.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T	clsV V/T	acc Rif. cmb
3	s=7,m=1	ok,ok	0.0	0.27	0.76	4d16 0+0 d16	0.60	0.442+2d8/20 L=360	0.45	0.47	29,46,33,34	
	[b=1.0;1.0]		360.0	0.27	0.76	4d16 0+0 d16	0.64	0.422+2d8/20 L=360	0.46	0.47	29,46,33,34	
105	s=5,m=1	ok,ok	360.0	0.25	0.40	4d14 0+0 d16	0.70	0.334+2d6/25 L=360	0.48	0.85	37,46,29,32	
	[b=1.0;1.0]		720.0	0.25	0.40	4d14 0+0 d16	0.73	0.314+2d6/25 L=360	0.49	0.85	37,46,29,32	
207	s=5,m=1	ok,ok	720.0	0.13	0.31	4d10 0+0 d16	0.83	0.144+2d6/25 L=360	0.29	0.43	4,46,32,32	
	[b=1.0;1.0]		1080.0	0.13	0.31	4d10 0+0 d16	1.01	0.114+2d6/25 L=360	0.30	0.43	11,46,32,32	
			M_P= 48		X=6520.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T	clsV V/T	acc Rif. cmb
6	s=7,m=1	ok,ok	0.0	0.27	0.46	4d16 0+0 d16	0.61	0.312+2d8/20 L=360	0.45	0.42	39,50,33,34	
	[b=1.0;1.0]		360.0	0.27	0.46	4d16 0+0 d16	0.62	0.282+2d8/20 L=360	0.46	0.42	37,50,33,34	
108	s=5,m=1	ok,ok	360.0	0.25	0.28	4d14 0+0 d16	0.67	0.224+2d6/25 L=360	0.42	0.74	39,50,31,29	
	[b=1.0;1.0]		720.0	0.25	0.28	4d14 0+0 d16	0.60	0.194+2d6/25 L=360	0.43	0.74	41,50,31,29	
210	s=5,m=1	ok,ok	720.0	0.13	0.20	4d10 0+0 d16	0.69	0.094+2d6/25 L=360	0.25	0.36	39,46,31,30	
	[b=1.0;1.0]		1080.0	0.13	0.20	4d10 0+0 d16	0.75	0.074+2d6/25 L=360	0.25	0.36	39,46,31,30	
			M_P= 49		X=7185.2 Y=2693.9							
Pilas.	Note	Stato	Quota	%Af	r. snell.	Armat. long.	V N/M	V N sis	Staffe	V V/T	clsV V/T	acc Rif. cmb
				0.27	1.68		1.76	0.76		4.16	28.96	

Pilas.	sovr. Xi	sovr. Xf	sovr. Yi	sovr. Yf	M 2-2 i daN cm	M 2-2 f daN cm	M 3-3 i daN cm	M 3-3 f daN cm	Luce per V cm	V M2-2 daN	V M3-3 daN
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1	0.0	0.0	0.0	0.0	1.321e+06	1.284e+06	1.608e+06	1.563e+06	325.00	8940.84	1.088e+04
2	0.0	0.0	0.0	0.0	1.252e+06	1.211e+06	1.525e+06	1.475e+06	325.00	8476.74	1.033e+04
3	0.0	0.0	0.0	0.0	1.426e+06	1.397e+06	1.734e+06	1.699e+06	325.00	9651.95	1.174e+04
4	0.0	0.0	0.0	0.0	1.573e+06	1.574e+06	1.912e+06	1.911e+06	325.00	1.065e+04	1.294e+04
5	0.0	0.0	0.0	0.0	1.158e+06	1.111e+06	1.412e+06	1.356e+06	325.00	7840.10	9561.51
6	0.0	0.0	0.0	0.0	1.262e+06	1.221e+06	1.537e+06	1.488e+06	325.00	8540.99	1.040e+04
7	0.0	0.0	0.0	0.0	1.253e+06	1.211e+06	1.526e+06	1.476e+06	325.00	8481.90	1.033e+04
8	0.0	0.0	0.0	0.0	1.427e+06	1.398e+06	1.735e+06	1.700e+06	325.00	9656.58	1.174e+04
9	0.0	0.0	0.0	0.0	1.572e+06	1.574e+06	1.912e+06	1.911e+06	325.00	1.065e+04	1.294e+04
10	0.0	0.0	0.0	0.0	1.334e+06	1.298e+06	1.624e+06	1.580e+06	325.00	9030.91	1.099e+04
11	0.0	0.0	0.0	0.0	1.260e+06	1.219e+06	1.535e+06	1.486e+06	325.00	8530.41	1.039e+04
12	0.0	0.0	0.0	0.0	1.232e+06	1.190e+06	1.502e+06	1.450e+06	325.00	8342.89	1.016e+04
13	0.0	0.0	0.0	0.0	1.418e+06	1.389e+06	1.724e+06	1.689e+06	325.00	9598.38	1.167e+04
14	0.0	0.0	0.0	0.0	1.346e+06	1.310e+06	1.637e+06	1.595e+06	325.00	9108.82	1.108e+04
15	0.0	0.0	0.0	0.0	1.309e+06	1.271e+06	1.594e+06	1.548e+06	325.00	8863.34	1.079e+04
16	0.0	0.0	0.0	0.0	1.455e+06	1.429e+06	1.768e+06	1.737e+06	325.00	9847.93	1.197e+04
17	0.0	0.0	0.0	0.0	1.474e+06	1.451e+06	1.792e+06	1.763e+06	325.00	9980.59	1.213e+04
18	0.0	0.0	0.0	0.0	1.367e+06	1.334e+06	1.664e+06	1.623e+06	325.00	9256.07	1.126e+04
19	0.0	0.0	0.0	0.0	1.418e+06	1.388e+06	1.724e+06	1.689e+06	325.00	9597.03	1.167e+04
20	0.0	0.0	0.0	0.0	1.568e+06	1.560e+06	1.904e+06	1.895e+06	325.00	1.061e+04	1.289e+04
21	0.0	0.0	0.0	0.0	1.572e+06	1.567e+06	1.909e+06	1.903e+06	325.00	1.064e+04	1.292e+04
22	0.0	0.0	0.0	0.0	1.096e+06	1.043e+06	1.338e+06	1.278e+06	325.00	7420.73	9058.39
23	0.0	0.0	0.0	0.0	1.466e+06	1.442e+06	1.782e+06	1.753e+06	325.00	9925.33	1.206e+04
24	0.0	0.0	0.0	0.0	1.257e+06	1.215e+06	1.531e+06	1.481e+06	325.00	8506.73	1.036e+04
25	0.0	0.0	0.0	0.0	1.512e+06	1.493e+06	1.838e+06	1.815e+06	325.00	1.024e+04	1.244e+04
26	0.0	0.0	0.0	0.0	1.359e+06	1.325e+06	1.654e+06	1.613e+06	325.00	9201.21	1.119e+04
27	0.0	0.0	0.0	0.0	1.356e+06	1.322e+06	1.650e+06	1.609e+06	325.00	9182.09	1.117e+04
28	0.0	0.0	0.0	0.0	1.559e+06	1.549e+06	1.893e+06	1.881e+06	325.00	1.055e+04	1.282e+04
29	0.0	0.0	0.0	0.0	1.411e+06	1.367e+06	2.021e+06	1.959e+06	325.00	9553.06	1.368e+04
30	0.0	0.0	0.0	0.0	1.404e+06	1.374e+06	1.708e+06	1.671e+06	325.00	9506.15	1.156e+04
31	0.0	0.0	0.0	0.0	1.574e+06	1.571e+06	1.911e+06	1.908e+06	325.00	1.065e+04	1.294e+04
32	0.0	0.0	0.0	0.0	1.573e+06	1.541e+06	2.247e+06	2.203e+06	325.00	1.065e+04	1.521e+04
33	0.0	0.0	0.0	0.0	1.451e+06	1.425e+06	1.764e+06	1.732e+06	325.00	9821.83	1.194e+04
34	0.0	0.0	0.0	0.0	1.464e+06	1.439e+06	1.779e+06	1.749e+06	325.00	9908.52	1.204e+04
35	0.0	0.0	0.0	0.0	1.441e+06	1.413e+06	1.751e+06	1.719e+06	325.00	9751.31	1.185e+04
36	0.0	0.0	0.0	0.0	1.885e+06	1.850e+06	3.483e+06	3.421e+06	325.00	1.276e+04	2.358e+04
37	0.0	0.0	0.0	0.0	1.504e+06	1.439e+06	2.798e+06	2.681e+06	325.00	1.018e+04	1.894e+04
38	0.0	0.0	0.0	0.0	1.137e+06	1.088e+06	1.387e+06	1.329e+06	325.00	7698.12	9391.13
39	0.0	0.0	0.0	0.0	1.372e+06	1.325e+06	1.966e+06	1.900e+06	325.00	9288.32	1.331e+04
40	0.0	0.0	0.0	0.0	1.259e+06	1.205e+06	1.807e+06	1.732e+06	325.00	8519.35	1.223e+04
41	0.0	0.0	0.0	0.0	1.560e+06	1.550e+06	1.894e+06	1.882e+06	325.00	1.056e+04	1.282e+04
42	0.0	0.0	0.0	0.0	1.290e+06	1.238e+06	1.851e+06	1.778e+06	325.00	8730.95	1.253e+04
43	0.0	0.0	0.0	0.0	1.375e+06	1.342e+06	1.673e+06	1.634e+06	325.00	9310.38	1.133e+04
44	0.0	0.0	0.0	0.0	1.301e+06	1.263e+06	1.584e+06	1.538e+06	325.00	8809.87	1.073e+04
103	0.0	0.0	0.0	0.0	1.109e+06	1.072e+06	8.932e+05	8.623e+05	290.00	8415.60	6775.82
104	0.0	0.0	0.0	0.0	1.017e+06	9.739e+05	8.176e+05	7.824e+05	290.00	7715.15	6202.72
105	0.0	0.0	0.0	0.0	1.151e+06	1.116e+06	9.269e+05	8.982e+05	290.00	8728.27	7031.64
106	0.0	0.0	0.0	0.0	1.354e+06	1.339e+06	1.094e+06	1.081e+06	290.00	1.027e+04	8296.79
107	0.0	0.0	0.0	0.0	9.115e+05	8.775e+05	8.124e+05	7.818e+05	290.00	6914.49	6162.72
108	0.0	0.0	0.0	0.0	9.890e+05	9.444e+05	7.948e+05	7.569e+05	290.00	7503.04	6029.18
109	0.0	0.0	0.0	0.0	9.904e+05	9.459e+05	7.959e+05	7.581e+05	290.00	7513.38	6037.64
110	0.0	0.0	0.0	0.0	1.151e+06	1.116e+06	9.269e+05	8.982e+05	290.00	8728.40	7031.75
111	0.0	0.0	0.0	0.0	1.349e+06	1.333e+06	1.089e+06	1.076e+06	290.00	1.023e+04	8263.92
112	0.0	0.0	0.0	0.0	1.088e+06	1.049e+06	8.758e+05	8.439e+05	290.00	8254.48	6643.99
113	0.0	0.0	0.0	0.0	1.014e+06	9.710e+05	8.154e+05	7.799e+05	290.00	7694.44	6185.78
114	0.0	0.0	0.0	0.0	9.968e+05	9.526e+05	8.011e+05	7.639e+05	290.00	7561.92	6077.35
115	0.0	0.0	0.0	0.0	1.155e+06	1.120e+06	9.304e+05	9.020e+05	290.00	8761.16	7058.55
116	0.0	0.0	0.0	0.0	1.089e+06	1.050e+06	8.762e+05	8.443e+05	290.00	8258.26	6647.08
117	0.0	0.0	0.0	0.0	1.055e+06	1.014e+06	8.490e+05	8.155e+05	290.00	8006.20	6440.85
118	0.0	0.0	0.0	0.0	1.195e+06	1.163e+06	9.632e+05	9.371e+05	290.00	9064.88	7307.05
119	0.0	0.0	0.0	0.0	1.199e+06	1.167e+06	9.664e+05	9.405e+05	290.00	9094.07	7330.93
120	0.0	0.0	0.0	0.0	1.125e+06	1.088e+06	9.061e+05	8.761e+05	290.00	8535.50	6873.92
121	0.0	0.0	0.0	0.0	1.190e+06	1.158e+06	9.593e+05	9.329e+05	290.00	9028.67	7277.42
122	0.0	0.0	0.0	0.0	1.176e+06	1.165e+06	1.050e+06	1.041e+06	290.00	8919.38	7967.12
123	0.0	0.0	0.0	0.0	1.184e+06	1.176e+06	1.058e+06	1.051e+06	290.00	8985.46	8026.59
124	0.0	0.0	0.0	0.0	8.528e+05	8.155e+05	7.596e+05	7.246e+05	290.00	6469.53	5762.25
125	0.0	0.0	0.0	0.0	1.229e+06	1.200e+06	9.910e+05	9.670e+05	290.00	9322.35	7517.71
126	0.0	0.0	0.0	0.0	1.019e+06	9.761e+05	8.194e+05	7.842e+05	290.00	7731.17	6215.83
127	0.0	0.0	0.0	0.0	1.283e+06	1.259e+06	1.035e+06	1.016e+06	290.00	9735.20	7855.49
128	0.0	0.0	0.0	0.0	1.151e+06	1.116e+06	9.272e+05	8.985e+05	290.00	8730.79	7033.70
129	0.0	0.0	0.0	0.0	1.070e+06	1.030e+06	8.607e+05	8.279e+05	290.00	8114.79	6529.70
130	0.0	0.0	0.0	0.0	1.291e+06	1.267e+06	1.042e+06	1.022e+06	290.00	9791.66	7901.69
131	0.0	0.0	0.0	0.0	9.997e+05	9.647e+05	9.997e+05	9.647e+05	290.00	7584.24	7584.24
132	0.0	0.0	0.0	0.0	1.147e+06	1.112e+06	9.240e+05	8.952e+05	290.00	8701.52	7009.76
133	0.0	0.0	0.0	0.0	1.338e+06	1.320e+06	1.081e+06	1.066e+06	290.00	1.015e+04	8197.73
134	0.0	0.0	0.0	0.0	1.189e+06	1.157e+06	9.582e+05	9.318e+05	290.00	9018.95	7269.47

135	0.0	0.0	0.0	0.0	1.170e+06	1.137e+06	9.432e+05	9.156e+05	290.00	8879.15	7155.08
136	0.0	0.0	0.0	0.0	1.182e+06	1.149e+06	9.525e+05	9.257e+05	290.00	8965.95	7226.10
137	0.0	0.0	0.0	0.0	1.121e+06	1.084e+06	9.027e+05	8.725e+05	290.00	8504.18	6848.29
138	0.0	0.0	0.0	0.0	1.343e+06	1.326e+06	1.084e+06	1.070e+06	290.00	1.019e+04	8226.77
139	0.0	0.0	0.0	0.0	1.137e+06	1.101e+06	9.160e+05	8.866e+05	290.00	8627.01	6948.79
140	0.0	0.0	0.0	0.0	9.147e+05	8.644e+05	7.317e+05	6.914e+05	290.00	6939.44	5550.63
141	0.0	0.0	0.0	0.0	1.010e+06	9.666e+05	8.119e+05	7.760e+05	290.00	7662.47	6159.62
142	0.0	0.0	0.0	0.0	9.932e+05	9.488e+05	7.982e+05	7.607e+05	290.00	7534.93	6055.27
143	0.0	0.0	0.0	0.0	1.296e+06	1.273e+06	1.046e+06	1.027e+06	290.00	9833.27	7935.73
144	0.0	0.0	0.0	0.0	9.918e+05	9.473e+05	7.970e+05	7.594e+05	290.00	7523.80	6046.17
145	0.0	0.0	0.0	0.0	1.102e+06	1.063e+06	8.869e+05	8.556e+05	290.00	8357.27	6728.09
146	0.0	0.0	0.0	0.0	1.054e+06	1.013e+06	8.476e+05	8.140e+05	290.00	7992.89	6429.96
205	0.0	0.0	0.0	0.0	6.515e+05	6.039e+05	5.256e+05	4.859e+05	290.00	4942.39	3987.13
206	0.0	0.0	0.0	0.0	5.335e+05	4.810e+05	4.294e+05	3.873e+05	290.00	4047.05	3257.41
207	0.0	0.0	0.0	0.0	5.809e+05	5.295e+05	4.675e+05	4.262e+05	290.00	4407.02	3546.20
208	0.0	0.0	0.0	0.0	7.472e+05	7.048e+05	6.044e+05	5.698e+05	290.00	5668.52	4585.31
209	0.0	0.0	0.0	0.0	6.431e+05	5.948e+05	5.185e+05	4.786e+05	290.00	4878.69	3933.37
210	0.0	0.0	0.0	0.0	4.895e+05	4.362e+05	3.942e+05	3.515e+05	290.00	3713.53	2990.15
211	0.0	0.0	0.0	0.0	4.908e+05	4.376e+05	3.952e+05	3.526e+05	290.00	3723.50	2998.15
212	0.0	0.0	0.0	0.0	5.834e+05	5.320e+05	4.694e+05	4.282e+05	290.00	4425.68	3561.17
213	0.0	0.0	0.0	0.0	7.425e+05	6.999e+05	6.006e+05	5.657e+05	290.00	5632.81	4556.10
214	0.0	0.0	0.0	0.0	5.525e+05	5.004e+05	4.446e+05	4.029e+05	290.00	4191.27	3373.06
215	0.0	0.0	0.0	0.0	5.152e+05	4.624e+05	4.147e+05	3.724e+05	290.00	3908.48	3146.35
216	0.0	0.0	0.0	0.0	5.070e+05	4.540e+05	4.082e+05	3.657e+05	290.00	3846.05	3096.32
217	0.0	0.0	0.0	0.0	5.989e+05	5.480e+05	4.819e+05	4.410e+05	290.00	4543.59	3655.91
218	0.0	0.0	0.0	0.0	5.528e+05	5.007e+05	4.449e+05	4.031e+05	290.00	4193.49	3374.86
219	0.0	0.0	0.0	0.0	5.396e+05	4.872e+05	4.343e+05	3.923e+05	290.00	4093.70	3294.81
220	0.0	0.0	0.0	0.0	6.378e+05	5.891e+05	5.140e+05	4.740e+05	290.00	4838.47	3899.56
221	0.0	0.0	0.0	0.0	6.466e+05	5.986e+05	5.215e+05	4.816e+05	290.00	4905.35	3955.87
222	0.0	0.0	0.0	0.0	6.442e+05	5.960e+05	5.194e+05	4.795e+05	290.00	4887.08	3940.46
223	0.0	0.0	0.0	0.0	7.323e+05	6.891e+05	5.922e+05	5.569e+05	290.00	5555.28	4492.67
224	0.0	0.0	0.0	0.0	7.486e+05	7.137e+05	7.486e+05	7.137e+05	290.00	5678.95	5678.95
225	0.0	0.0	0.0	0.0	7.791e+05	7.462e+05	7.791e+05	7.462e+05	290.00	5910.59	5910.59
226	0.0	0.0	0.0	0.0	5.767e+05	5.252e+05	4.641e+05	4.227e+05	290.00	4375.02	3520.52
227	0.0	0.0	0.0	0.0	7.165e+05	6.725e+05	5.793e+05	5.433e+05	290.00	5435.59	4394.74
228	0.0	0.0	0.0	0.0	5.267e+05	4.741e+05	4.240e+05	3.818e+05	290.00	3995.69	3216.24
229	0.0	0.0	0.0	0.0	7.834e+05	7.431e+05	6.341e+05	6.011e+05	290.00	5943.31	4810.15
230	0.0	0.0	0.0	0.0	6.975e+05	6.524e+05	5.637e+05	5.263e+05	290.00	5291.10	4276.52
231	0.0	0.0	0.0	0.0	5.339e+05	4.814e+05	4.297e+05	3.876e+05	290.00	4050.11	3259.86
232	0.0	0.0	0.0	0.0	6.199e+05	5.777e+05	6.199e+05	5.777e+05	290.00	4702.53	4702.53
233	0.0	0.0	0.0	0.0	5.769e+05	5.253e+05	4.642e+05	4.229e+05	290.00	4376.20	3521.48
234	0.0	0.0	0.0	0.0	5.908e+05	5.396e+05	4.754e+05	4.343e+05	290.00	4481.73	3606.21
235	0.0	0.0	0.0	0.0	6.646e+05	6.249e+05	6.646e+05	6.249e+05	290.00	5042.03	5042.03
236	0.0	0.0	0.0	0.0	5.888e+05	5.376e+05	4.738e+05	4.327e+05	290.00	4466.86	3594.26
237	0.0	0.0	0.0	0.0	6.029e+05	5.521e+05	4.851e+05	4.443e+05	290.00	4574.01	3680.32
238	0.0	0.0	0.0	0.0	6.164e+05	5.661e+05	4.961e+05	4.556e+05	290.00	4676.00	3763.54
239	0.0	0.0	0.0	0.0	5.437e+05	4.914e+05	4.376e+05	3.957e+05	290.00	4124.65	3319.65
240	0.0	0.0	0.0	0.0	7.618e+05	7.054e+05	7.618e+05	7.054e+05	290.00	5778.84	5778.84
241	0.0	0.0	0.0	0.0	5.821e+05	5.307e+05	4.684e+05	4.272e+05	290.00	4416.08	3553.47
242	0.0	0.0	0.0	0.0	4.591e+05	4.054e+05	3.698e+05	3.268e+05	290.00	3482.55	2805.25
243	0.0	0.0	0.0	0.0	4.783e+05	4.248e+05	3.852e+05	3.424e+05	290.00	3628.42	2922.02
244	0.0	0.0	0.0	0.0	4.952e+05	4.420e+05	3.987e+05	3.561e+05	290.00	3756.65	3024.69
245	0.0	0.0	0.0	0.0	6.981e+05	6.376e+05	6.981e+05	6.376e+05	290.00	5295.97	5295.97
246	0.0	0.0	0.0	0.0	4.888e+05	4.355e+05	3.936e+05	3.509e+05	290.00	3708.28	2985.97
247	0.0	0.0	0.0	0.0	5.571e+05	5.051e+05	4.483e+05	4.067e+05	290.00	4226.35	3401.20
248	0.0	0.0	0.0	0.0	5.390e+05	4.866e+05	4.338e+05	3.918e+05	290.00	4089.01	3291.05
317	0.0	0.0	0.0	0.0	4.275e+05	4.054e+05	3.445e+05	3.269e+05	107.00	8788.70	7082.86
319	0.0	0.0	0.0	0.0	1.213e+06	1.169e+06	1.478e+06	1.425e+06	325.00	8210.82	1.001e+04
321	0.0	0.0	0.0	0.0	9.634e+05	9.174e+05	7.733e+05	7.339e+05	290.00	7308.46	5866.21
323	0.0	0.0	0.0	0.0	4.724e+05	4.188e+05	3.804e+05	3.376e+05	290.00	3583.56	2886.11
328	0.0	0.0	0.0	0.0	4.027e+05	3.568e+05	4.027e+05	3.568e+05	282.00	3141.51	3141.51
329	0.0	0.0	0.0	0.0	4.473e+05	4.084e+05	4.473e+05	4.084e+05	235.00	4187.34	4187.34
330	0.0	0.0	0.0	0.0	3.413e+05	3.349e+05	3.413e+05	3.349e+05	7.00	1.073e+05	1.073e+05
331	0.0	0.0	0.0	0.0	4.648e+05	4.111e+05	3.743e+05	3.314e+05	305.00	3352.40	2700.19
332	0.0	0.0	0.0	0.0	5.840e+05	5.368e+05	4.699e+05	4.321e+05	277.16	4635.22	3729.78
333	0.0	0.0	0.0	0.0	4.366e+05	4.047e+05	3.518e+05	3.263e+05	158.00	6079.44	4898.70
334	0.0	0.0	0.0	0.0	5.349e+05	5.040e+05	4.305e+05	4.058e+05	158.00	7448.05	5994.79
335	0.0	0.0	0.0	0.0	4.981e+05	4.493e+05	4.010e+05	3.620e+05	277.16	3953.83	3183.38
336	0.0	0.0	0.0	0.0	4.608e+05	4.176e+05	3.712e+05	3.366e+05	235.00	4313.96	3474.86
337	0.0	0.0	0.0	0.0	5.061e+05	4.635e+05	4.075e+05	3.733e+05	235.00	4738.24	3814.64
338	0.0	0.0	0.0	0.0	5.167e+05	4.639e+05	4.160e+05	3.737e+05	305.00	3727.25	3000.42
343	0.0	0.0	0.0	0.0	1.387e+06	1.341e+06	1.987e+06	1.923e+06	325.00	9390.46	1.345e+04
346	0.0	0.0	0.0	0.0	9.180e+05	8.782e+05	9.180e+05	8.782e+05	290.00	6963.76	6963.76
349	0.0	0.0	0.0	0.0	4.763e+05	4.228e+05	3.836e+05	3.408e+05	290.00	3613.13	2909.78
352	0.0	0.0	0.0	0.0	1.277e+06	1.237e+06	1.555e+06	1.507e+06	325.00	8642.95	1.052e+04
354	0.0	0.0	0.0	0.0	9.730e+05	9.276e+05	7.817e+05	7.425e+05	290.00	7381.63	5929.84

356	0.0	0.0	0.0	0.0	4.611e+05	4.074e+05	3.714e+05	3.284e+05	290.00	3497.64	2817.32
358	0.0	0.0	0.0	0.0	1.457e+06	1.432e+06	1.771e+06	1.741e+06	325.00	9865.24	1.199e+04
359	0.0	0.0	0.0	0.0	1.192e+06	1.160e+06	9.611e+05	9.348e+05	290.00	9045.01	7290.79
360	0.0	0.0	0.0	0.0	6.358e+05	5.869e+05	5.123e+05	4.722e+05	290.00	4822.97	3886.51

Pilas.

M 2-2 i M 2-2 f M 3-3 i M 3-3 f
1.885e+06 1.850e+06 3.483e+06 3.421e+06

V M2-2 V M3-3
1.073e+05 1.073e+05

< TABELLA VERIFICHE POST-OPERAM >

Elementi post rinforzo tipo: C8A.7.2 INCAMICIATURA IN ACCIAIO e assimilabili

Elementi post rinforzo tipo: C8A.7.1 INCAMICIATURA IN C.A.

Elementi non rinforzati

Pilas.I	Pilas.S	NodoSL	cod ver. (+)	V + daN	V + af s daN	N + daN	ver. (-)	V - daN	V - af s daN	N - daN	Area G cm2	Rif. cmb
1	103	2 SLV:ok	0.0	0.0	0.0	0.0	0.47	-3632.22	2.300e+04	2.396e+04	3000.0	0(2),32(3)
2	104	4 SLV:ok	0.02	3496.71	-2.241e+04	1.723e+04	0.44	-3496.72	2.241e+04	1.873e+04	3000.0	31(3),32(3)
3	105	6 SLV:ok	0.0	0.0	0.0	0.0	0.50	-3730.76	2.425e+04	2.657e+04	3000.0	0(2),30(3)
4	106	8 SLV:ok	0.0	0.0	0.0	0.0	0.56	-2831.44	1.843e+04	3.884e+04	3000.0	0(2),33(2)
5	107	10 SLV:ok	0.04	2198.21	-1.969e+04	1.158e+04	0.44	-2198.12	1.956e+04	1.743e+04	3000.0	34(2),33(2)
6	108	12 SLV:ok	0.0	0.0	0.0	0.0	0.39	2075.54	-1.570e+04	1.727e+04	3000.0	0(2),34(2)
7	109	14 SLV:ok	0.0	0.0	0.0	0.0	0.38	2085.09	-1.459e+04	1.725e+04	3000.0	0(2),34(2)
8	110	16 SLV:ok	0.0	0.0	0.0	0.0	0.50	3722.22	-2.423e+04	2.657e+04	3000.0	0(2),29(3)
9	111	18 SLV:ok	0.0	0.0	0.0	0.0	0.56	-2908.93	1.837e+04	3.883e+04	3000.0	0(2),33(2)
10	112	20 SLV:ok	0.0	0.0	0.0	0.0	0.44	-2352.48	1.795e+04	2.267e+04	3000.0	0(2),33(2)
11	113	22 SLV:ok	0.0	0.0	0.0	0.0	0.43	-3410.06	2.191e+04	1.858e+04	3000.0	0(2),30(3)
12	114	24 SLV:ok	0.0	0.0	0.0	0.0	0.42	-3321.26	2.137e+04	1.767e+04	3000.0	0(2),32(3)
13	115	26 SLV:ok	0.0	0.0	0.0	0.0	0.51	-3850.42	2.493e+04	2.669e+04	3000.0	0(2),30(3)
14	116	28 SLV:ok	0.0	0.0	0.0	0.0	0.45	-2355.40	1.871e+04	2.272e+04	3000.0	0(2),33(2)
15	117	30 SLV:ok	0.0	0.0	0.0	0.0	0.44	2378.53	-1.856e+04	2.082e+04	3000.0	0(2),34(2)
16	118	32 SLV:ok	0.0	0.0	0.0	0.0	0.53	3995.08	-2.574e+04	2.845e+04	3000.0	0(2),31(3)
17	119	34 SLV:ok	0.0	0.0	0.0	0.0	0.54	-4006.13	2.587e+04	2.991e+04	3000.0	0(2),32(3)
18	120	36 SLV:ok	0.03	-3219.45	2.202e+04	1.691e+04	0.43	-3219.11	2.224e+04	1.799e+04	3000.0	32(3),30(3)
19	121	38 SLV:ok	0.0	0.0	0.0	0.0	0.47	3464.11	-2.348e+04	2.269e+04	3000.0	0(2),29(3)
20	122	40 SLV:ok	0.0	0.0	0.0	0.0	0.61	-3361.70	2.568e+04	3.891e+04	3000.0	0(2),30(3)
21	123	42 SLV:ok	0.0	0.0	0.0	0.0	0.64	3387.35	-2.591e+04	4.210e+04	3000.0	0(2),29(3)
22	124	44 SLV:ok	0.0	0.0	0.0	0.0	0.42	-2116.31	1.900e+04	1.516e+04	3000.0	0(2),33(2)
23	125	46 SLV:ok	0.0	0.0	0.0	0.0	0.56	-4175.59	2.648e+04	3.215e+04	3000.0	0(2),30(3)
24	126	48 SLV:ok	0.0	0.0	0.0	0.0	0.43	3333.17	-2.147e+04	1.879e+04	3000.0	0(2),31(3)
25	127	50 SLV:ok	0.0	0.0	0.0	0.0	0.59	3891.85	-2.561e+04	3.639e+04	3000.0	0(2),29(3)
26	128	52 SLV:ok	0.0	0.0	0.0	0.0	0.49	3578.30	-2.281e+04	2.618e+04	3000.0	0(2),31(3)
27	129	54 SLV:ok	0.0	0.0	0.0	0.0	0.44	-2175.29	1.997e+04	1.647e+04	3000.0	0(2),33(2)
28	130	56 SLV:ok	0.0	0.0	0.0	0.0	0.55	-3632.10	2.501e+04	3.207e+04	3000.0	0(2),30(3)
29	131	58 SLV:ok	0.0	0.0	0.0	0.0	0.39	-2683.33	2.140e+04	2.132e+04	3500.0	0(2),30(3)
30	132	60 SLV:ok	0.0	0.0	0.0	0.0	0.50	3665.50	-2.463e+04	2.519e+04	3000.0	0(2),29(3)
31	133	62 SLV:ok	0.0	0.0	0.0	0.0	0.52	-3562.47	2.553e+04	2.713e+04	3000.0	0(2),30(3)
32	134	64 SLV:ok	0.05	3497.64	-2.366e+04	1.825e+04	0.39	3497.34	-2.366e+04	1.844e+04	3500.0	31(3),29(3)
33	135	66 SLV:ok	0.0	0.0	0.0	0.0	0.49	3802.95	-2.290e+04	2.743e+04	3000.0	0(2),29(3)
34	136	68 SLV:ok	0.0	0.0	0.0	0.0	0.50	-3867.42	2.310e+04	2.832e+04	3000.0	0(2),30(3)
35	137	70 SLV:ok	0.01	-3170.61	2.103e+04	1.577e+04	0.41	-3170.61	2.103e+04	1.577e+04	3000.0	30(3),30(3)
36	138	72 SLV:ok	0.01	4033.76	-2.740e+04	2.681e+04	0.36	3827.21	-2.700e+04	2.733e+04	4500.0	31(3),29(3)
37	139	74 SLV:ok	0.0	0.0	0.0	0.0	0.33	-3687.39	2.484e+04	2.413e+04	4500.0	0(2),30(3)
38	140	76 SLV:ok	0.04	2944.24	-1.883e+04	1.145e+04	0.38	-2944.31	1.883e+04	1.362e+04	3000.0	31(3),32(3)
39	141	78 SLV:ok	0.09	1908.90	-1.603e+04	4400.35	0.37	-1908.84	1.549e+04	1.808e+04	3500.0	34(2),33(2)
40	142	80 SLV:ok	0.12	-2233.64	2.495e+04	1.367e+04	0.44	-2233.64	2.495e+04	1.367e+04	3500.0	33(2),33(2)
41	143	82 SLV:ok	0.0	0.0	0.0	0.0	0.55	2998.27	-2.340e+04	3.302e+04	3000.0	0(2),29(3)
42	144	84 SLV:ok	0.0	0.0	0.0	0.0	0.35	2673.74	-2.006e+04	1.694e+04	3500.0	0(2),31(3)
43	145	86 SLV:ok	0.0	0.0	0.0	0.0	0.45	-2353.36	1.940e+04	2.058e+04	3000.0	0(2),33(2)
44	146	88 SLV:ok	0.0	0.0	0.0	0.0	0.43	2381.17	-1.768e+04	2.072e+04	3000.0	0(2),34(2)
103	205	92 SLV:ok	0.0	0.0	0.0	0.0	0.47	-2090.05	1.725e+04	1.457e+04	2475.0	0(2),32(3)
104	206	94 SLV:ok	0.07	1796.36	-1.596e+04	7579.88	0.43	-1796.37	1.596e+04	9270.46	2475.0	31(3),32(3)
105	207	96 SLV:ok	0.02	1901.49	-1.780e+04	1.122e+04	0.46	1901.49	-1.780e+04	1.122e+04	2475.0	31(3),31(3)
106	208	98 SLV:ok	0.0	0.0	0.0	0.0	0.45	-1817.29	1.601e+04	1.849e+04	2475.0	0(2),35(2)
107	209	100 SLV:ok	0.0	0.0	0.0	0.0	0.39	-1394.01	1.083e+04	1.417e+04	2250.0	0(2),35(2)
108	210	102 SLV:ok	0.0	0.0	0.0	0.0	0.37	-1258.65	1.133e+04	7402.39	2475.0	0(2),30(3)
109	211	104 SLV:ok	0.0	0.0	0.0	0.0	0.37	1236.21	-1.134e+04	7457.81	2475.0	0(2),29(3)
110	212	106 SLV:ok	0.02	-1899.56	1.778e+04	1.115e+04	0.46	-1899.56	1.778e+04	1.115e+04	2475.0	32(3),32(3)
111	213	108 SLV:ok	0.0	0.0	0.0	0.0	0.45	-1621.70	1.576e+04	1.858e+04	2475.0	0(2),35(2)
112	214	110 SLV:ok	0.0	0.0	0.0	0.0	0.34	-1229.04	1.080e+04	1.009e+04	2475.0	0(2),35(2)
113	215	112 SLV:ok	0.02	-1739.23	1.552e+04	8200.87	0.42	-1738.87	1.552e+04	8367.52	2475.0	32(3),30(3)
114	216	114 SLV:ok	0.02	1689.82	-1.510e+04	7761.52	0.42	-1689.83	1.510e+04	8111.14	2475.0	31(3),32(3)
115	217	116 SLV:ok	0.0	0.0	0.0	0.0	0.46	-1986.19	1.761e+04	1.171e+04	2475.0	0(2),32(3)
116	218	118 SLV:ok	0.0	0.0	0.0	0.0	0.34	-1231.07	1.081e+04	1.010e+04	2475.0	0(2),35(2)

117	219	120 SLV:ok	0.0	0.0	0.0	0.0	0.34	1243.37	-1.092e+04	9533.36	2475.0	0(2),36(2)
118	220	122 SLV:ok	0.0	0.0	0.0	0.0	0.48	2094.33	-1.838e+04	1.391e+04	2475.0	0(2),31(3)
119	221	124 SLV:ok	0.0	0.0	0.0	0.0	0.48	-2105.71	1.845e+04	1.433e+04	2475.0	0(2),32(3)
120	222	126 SLV:ok	0.08	-1744.60	1.694e+04	8615.63	0.45	1744.53	-1.671e+04	1.088e+04	2475.0	32(3),31(3)
121	223	128 SLV:ok	0.0	0.0	0.0	0.0	0.48	2062.48	-1.846e+04	1.400e+04	2475.0	0(2),31(3)
122	224	130 SLV:ok	0.0	0.0	0.0	0.0	0.56	-2002.64	1.901e+04	2.009e+04	2250.0	0(2),32(3)
123	225	132 SLV:ok	0.0	0.0	0.0	0.0	0.60	2176.46	-1.911e+04	2.423e+04	2250.0	0(2),31(3)
124	226	134 SLV:ok	0.0	0.0	0.0	0.0	0.36	-1322.04	1.037e+04	1.043e+04	2250.0	0(2),33(2)
125	227	136 SLV:ok	7.95e-03	2795.77	-2.132e+04	1.561e+04	0.53	-2795.86	2.132e+04	1.782e+04	2475.0	31(3),32(3)
126	228	138 SLV:ok	0.03	-1695.57	1.516e+04	7749.85	0.42	1695.56	-1.516e+04	8980.71	2475.0	32(3),31(3)
127	229	140 SLV:ok	0.0	0.0	0.0	0.0	0.54	2311.21	-1.927e+04	2.145e+04	2475.0	0(2),31(3)
128	230	142 SLV:ok	0.0	0.0	0.0	0.0	0.47	1942.36	-1.664e+04	1.643e+04	2475.0	0(2),31(3)
129	231	144 SLV:ok	0.0	0.0	0.0	0.0	0.33	1133.30	-1.074e+04	9287.81	2475.0	0(2),36(2)
130	232	146 SLV:ok	0.0	0.0	0.0	0.0	0.50	1497.43	-1.842e+04	1.514e+04	2475.0	0(2),31(3)
131	233	148 SLV:ok	0.0	0.0	0.0	0.0	0.39	-1769.99	1.458e+04	1.026e+04	2500.0	0(2),32(3)
132	234	150 SLV:ok	0.02	1960.33	-1.743e+04	1.061e+04	0.45	-1960.34	1.743e+04	1.085e+04	2475.0	31(3),32(3)
133	235	152 SLV:ok	0.0	0.0	0.0	0.0	0.48	-1469.55	1.765e+04	1.335e+04	2475.0	0(2),32(3)
134	236	154 SLV:ok	0.16	1774.95	-1.882e+04	9006.32	0.47	1774.95	-1.882e+04	9006.32	2475.0	31(3),31(3)
135	237	156 SLV:ok	0.06	1980.35	-1.898e+04	1.175e+04	0.48	1980.35	-1.898e+04	1.175e+04	2475.0	31(3),31(3)
136	238	158 SLV:ok	0.10	-2034.77	2.063e+04	1.291e+04	0.51	-2034.77	2.063e+04	1.291e+04	2475.0	32(3),32(3)
137	239	160 SLV:ok	0.17	-1617.85	1.758e+04	7231.23	0.44	-1617.85	1.758e+04	7231.23	2475.0	32(3),32(3)
138	240	162 SLV:ok	0.0	0.0	0.0	0.0	0.47	2188.86	-1.754e+04	1.378e+04	2475.0	0(2),31(3)
139	241	164 SLV:ok	0.03	-1896.18	1.695e+04	9705.29	0.44	1896.11	-1.695e+04	1.008e+04	2475.0	32(3),31(3)
140	242	166 SLV:ok	0.06	1510.73	-1.343e+04	5162.63	0.39	-1510.46	1.342e+04	6084.71	2475.0	31(3),30(3)
141	243	168 SLV:ok	8.80e-03	1003.25	-8924.03	3355.38	0.37	-1187.48	1.153e+04	5415.63	2475.0	36(2),30(3)
142	244	170 SLV:ok	0.06	1157.29	-1.250e+04	5740.13	0.35	-1157.41	1.281e+04	7088.74	2475.0	36(2),35(2)
143	245	172 SLV:ok	0.0	0.0	0.0	0.0	0.50	-2157.64	1.987e+04	1.479e+04	2475.0	0(2),32(3)
144	246	174 SLV:ok	0.0	0.0	0.0	0.0	0.37	1168.99	-1.153e+04	6772.79	2475.0	0(2),29(3)
145	247	176 SLV:ok	0.0	0.0	0.0	0.0	0.35	1225.92	-1.149e+04	1.029e+04	2475.0	0(2),36(2)
146	248	178 SLV:ok	0.0	0.0	0.0	0.0	0.34	1244.01	-1.093e+04	9507.96	2475.0	0(2),34(2)
205	331	182 SLV:ok	4.76e-03	1242.06	-1.132e+04	4590.81	0.37	-1295.08	1.125e+04	6363.66	2475.0	31(3),32(3)
206		184 SLV:ok	0.07	0.0	5319.98	0.0	0.32	0.0	5319.98	0.0	2475.0	32(3),32(3)
207		186 SLV:ok	0.09	0.0	-5939.87	0.0	0.32	0.0	-5939.87	0.0	2475.0	31(3),31(3)
208		188 SLV:ok	0.16	0.0	7667.84	0.0	0.29	0.0	7667.84	0.0	2475.0	35(2),35(2)
209	332	190 SLV:ok	0.0	0.0	0.0	0.0	0.31	-1208.70	7941.62	1.146e+04	2475.0	0(2),35(2)
210		192 SLV:ok	0.08	0.0	5619.94	0.0	0.32	0.0	5619.94	0.0	2475.0	32(3),32(3)
211		194 SLV:ok	0.08	0.0	-5596.15	0.0	0.32	0.0	-5596.15	0.0	2475.0	31(3),31(3)
212		196 SLV:ok	0.08	0.0	5905.63	0.0	0.32	0.0	5905.63	0.0	2475.0	32(3),32(3)
213		198 SLV:ok	0.14	0.0	7050.59	0.0	0.28	0.0	7050.59	0.0	2475.0	35(2),35(2)
214		200 SLV:ok	0.04	0.0	3640.99	0.0	0.26	0.0	3640.99	0.0	2475.0	35(2),35(2)
215		93 SLV:ok	0.06	0.0	5147.04	0.0	0.32	0.0	5147.04	0.0	2475.0	32(3),32(3)
216		97 SLV:ok	0.06	0.0	4997.60	0.0	0.32	0.0	4997.60	0.0	2475.0	32(3),32(3)
217		101 SLV:ok	0.08	0.0	5895.06	0.0	0.32	0.0	5895.06	0.0	2475.0	32(3),32(3)
218		105 SLV:ok	0.04	0.0	3647.13	0.0	0.26	0.0	3647.13	0.0	2475.0	35(2),35(2)
219		109 SLV:ok	0.04	0.0	3684.44	0.0	0.26	0.0	3684.44	0.0	2475.0	35(2),35(2)
220		113 SLV:ok	0.09	0.0	-6223.10	0.0	0.32	0.0	-6223.10	0.0	2475.0	31(3),31(3)
221		117 SLV:ok	0.09	0.0	6257.65	0.0	0.32	0.0	6257.65	0.0	2475.0	32(3),32(3)
222	333	121 SLV:ok	0.05	-1457.65	1.031e+04	2656.69	0.35	-1457.65	1.031e+04	2656.69	2475.0	32(3),32(3)
223	334	125 SLV:ok	0.0	0.0	0.0	0.0	0.37	2283.38	-1.239e+04	7246.39	2475.0	0(2),31(3)
224	328	129 SLV:ok	0.04	-969.35	1.044e+04	3732.61	0.33	-969.35	1.044e+04	3732.61	2500.0	32(3),32(3)
225	329	133 SLV:ok	0.0	0.0	0.0	0.0	0.35	1515.54	-1.196e+04	7537.03	2500.0	0(2),31(3)
226	335	137 SLV:ok	0.0	0.0	0.0	0.0	0.29	-982.18	7476.07	7502.41	2475.0	0(2),33(2)
227	336	141 SLV:ok	0.06	1177.29	-1.229e+04	4439.44	0.39	-1689.79	1.340e+04	6198.32	2475.0	31(3),32(3)
228		145 SLV:ok	0.06	0.0	5014.97	0.0	0.32	0.0	5014.97	0.0	2475.0	32(3),32(3)
229	337	149 SLV:ok	0.0	0.0	0.0	0.0	0.37	1691.01	-1.126e+04	8104.95	2475.0	0(2),31(3)
230	338	153 SLV:ok	0.0	0.0	0.0	0.0	0.36	1362.03	-9959.85	8265.85	2475.0	0(2),31(3)
231		157 SLV:ok	0.04	0.0	-3524.71	0.0	0.26	0.0	-3524.71	0.0	2475.0	36(2),36(2)
232		161 SLV:ok	0.07	0.0	-4999.88	0.0	0.29	0.0	-4999.88	0.0	2500.0	31(3),31(3)
233		165 SLV:ok	0.10	0.0	6434.45	0.0	0.33	0.0	6434.45	0.0	2475.0	32(3),32(3)
234		169 SLV:ok	0.08	0.0	-5816.93	0.0	0.32	0.0	-5816.93	0.0	2475.0	31(3),31(3)
235		173 SLV:ok	0.08	0.0	5483.73	0.0	0.29	0.0	5483.73	0.0	2500.0	32(3),32(3)
236		177 SLV:ok	0.09	0.0	-6243.87	0.0	0.32	0.0	-6243.87	0.0	2475.0	31(3),31(3)
237		183 SLV:ok	0.09	0.0	-5979.42	0.0	0.32	0.0	-5979.42	0.0	2475.0	29(3),29(3)
238		187 SLV:ok	0.09	0.0	6080.24	0.0	0.32	0.0	6080.24	0.0	2475.0	30(3),30(3)
239		191 SLV:ok	0.08	0.0	5568.27	0.0	0.32	0.0	5568.27	0.0	2475.0	32(3),32(3)
240		195 SLV:ok	0.09	0.0	-6883.24	0.0	0.27	0.0	-6883.24	0.0	3025.0	31(3),31(3)
241		199 SLV:ok	0.08	0.0	5622.51	0.0	0.32	0.0	5622.51	0.0	2475.0	32(3),32(3)
242		95 SLV:ok	0.05	0.0	4456.35	0.0	0.31	0.0	4456.35	0.0	2475.0	32(3),32(3)
243		103 SLV:ok	0.09	0.0	5946.75	0.0	0.32	0.0	5946.75	0.0	2475.0	32(3),32(3)
244		111 SLV:ok	0.07	0.0	5022.64	0.0	0.26	0.0	5022.64	0.0	2475.0	35(2),35(2)
245		119 SLV:ok	0.10	0.0	7302.54	0.0	0.27	0.0	7302.54	0.0	3025.0	32(3),32(3)
246		127 SLV:ok	0.06	0.0	-5011.89	0.0	0.32	0.0	-5011.89	0.0	2475.0	31(3),31(3)
247		135 SLV:ok	0.04	0.0	-3858.22	0.0	0.26	0.0	-3858.22	0.0	2475.0	36(2),36(2)
248		143 SLV:ok	0.04	0.0	-3687.10	0.0	0.26	0.0	-3687.10	0.0	2475.0	36(2),36(2)
317		175 SLV:ok	0.06	0.0	-5117.94	0.0	0.32	0.0	-5117.94	0.0	2475.0	31(3),31(3)
319	321	123 SLV:ok	0.0	0.0	0.0	0.0	0.40	1857.45	-1.742e+04	1.404e+04	3000.0	0(2),34(2)

321	323	139	SLV:ok	0.0	0.0	0.0	0.0	0.30	979.52	-8678.50	6145.27	2475.0	0(2),36(2)
323		131	SLV:ok	0.03	0.0	-2946.27	0.0	0.25	0.0	-2946.27	0.0	2475.0	34(2),34(2)
328		155	SLV:ok	0.07	0.0	5112.70	0.0	0.29	0.0	5112.70	0.0	2500.0	35(2),35(2)
329	330	185	SLV:ok	0.16	3905.79	5861.07	1432.29	0.33	3905.79	5861.07	1432.29	2500.0	35(2),35(2)
330		159	SLV:ok	0.06	0.0	4535.03	0.0	0.28	0.0	4535.03	0.0	2500.0	32(3),32(3)
331		171	SLV:ok	0.07	0.0	-4816.78	0.0	0.32	0.0	5040.17	0.0	2475.0	34(2),32(3)
333		167	SLV:ok	0.09	0.0	-6039.56	0.0	0.32	0.0	-6039.56	0.0	2475.0	31(3),31(3)
334	317	163	SLV:ok	0.02	1209.56	0.0	4665.99	0.32	-19.80	4730.41	3457.84	2475.0	36(2),32(3)
336		181	SLV:ok	0.08	0.0	5672.12	0.0	0.32	0.0	5672.12	0.0	2475.0	32(3),32(3)
337		91	SLV:ok	0.14	0.0	7683.59	0.0	0.34	0.0	7683.59	0.0	2475.0	32(3),32(3)
338		197	SLV:ok	0.13	0.0	-7311.45	0.0	0.33	0.0	-7311.45	0.0	2475.0	31(3),31(3)
343	346	202	SLV:ok	0.07	2916.82	0.0	2917.42	0.33	2572.65	-1.931e+04	1.445e+04	3500.0	36(2),29(3)
346	349	206	SLV:ok	0.09	1210.54	-1.153e+04	3454.81	0.35	-1210.65	1.151e+04	6845.92	2500.0	36(2),35(2)
349		210	SLV:ok	0.09	0.0	-5947.85	0.0	0.32	0.0	-5947.85	0.0	2475.0	31(3),31(3)
352	354	203	SLV:ok	0.05	1857.33	-1.371e+04	4505.04	0.38	-1857.31	1.405e+04	1.642e+04	3000.0	34(2),33(2)
354	356	207	SLV:ok	0.02	979.47	-9447.56	3588.36	0.37	-1238.25	1.153e+04	5354.68	2475.0	36(2),30(3)
356		211	SLV:ok	0.05	0.0	4451.25	0.0	0.31	0.0	4451.25	0.0	2475.0	32(3),32(3)
358	359	209	SLV:ok	0.0	0.0	0.0	0.0	0.54	4250.82	-2.648e+04	2.860e+04	3000.0	0(2),31(3)
359	360	212	SLV:ok	0.07	-2795.82	2.132e+04	1.366e+04	0.51	2795.90	-2.132e+04	1.382e+04	2475.0	32(3),31(3)
360		204	SLV:ok	0.16	0.0	-8365.64	0.0	0.34	0.0	-8365.64	0.0	2475.0	31(3),31(3)

Pilas.l

ver. (+)
0.0
0.17

ver. (-)
0.25
0.64

< TABELLA VERIFICHE ANTE-OPERAM >

Elementi ante senza rinforzo

Trave	Note	Pos. cm	%Af	Af inf.	Af. sup	Af long.	M _T = 14 x/d	Z=360.0 V N/M	P=23 V V/T cls	P=32 V V/T acc	Staffe Rif. cmb L=cm
91	ok,NV	0.0	0.29	6.0	6.0	0.0	0.08	0.96	0.57	0.94	2d6/25 L=272 39,39,39
	s=3,m=54	307.5	0.29	6.0	6.0	0.0	0.08	0.87	0.65	1.07	2d6/25 L=272 38,40,40
92	ok,NV	0.0	0.29	6.0	6.0	0.0	0.08	0.71	0.50	0.83	2d6/25 L=285 29,29,45
	s=3,m=54	320.0	0.29	6.0	6.0	0.0	0.08	0.71	0.48	0.80	2d6/25 L=285 30,32,48
93	ok,NV	0.0	0.29	6.0	6.0	0.0	0.08	0.72	0.50	0.82	2d6/25 L=282 29,29,45
	s=3,m=54	317.5	0.29	6.0	6.0	0.0	0.08	0.78	0.52	0.86	2d6/25 L=282 38,40,40
94	ok,NV	0.0	0.29	6.0	6.0	2.3	0.08	0.79	0.65	2.32	2d6/25 L=297 37,4,42
	s=3,m=54	330.0	0.29	6.0	6.0	2.3	0.08	0.70	0.58	2.16	2d6/25 L=297 38,4,42
95	ok,NV	0.0	0.29	6.0	6.0	0.0	0.08	0.57	0.20	0.32	2d6/25 L=440 39,39,39
	s=3,m=54	470.0	0.29	6.0	6.0	0.0	0.08	0.56	0.20	0.31	2d6/25 L=440 40,40,40
96	ok,NV	0.0	0.29	6.0	6.0	2.3	0.08	0.70	0.59	2.21	2d6/25 L=297 37,4,42
	s=3,m=54	330.0	0.29	6.0	6.0	2.3	0.08	0.79	0.64	2.33	2d6/25 L=297 38,4,42
97	ok,NV	0.0	0.29	6.0	6.0	0.0	0.08	0.78	0.53	0.87	2d6/25 L=282 37,37,39
	s=3,m=54	317.5	0.29	6.0	6.0	0.0	0.08	0.74	0.50	0.83	2d6/25 L=282 30,30,46
98	ok,NV	0.0	0.29	6.0	6.0	0.0	0.08	0.73	0.49	0.80	2d6/25 L=275 37,29,47
	s=3,m=54	310.0	0.29	6.0	6.0	0.0	0.08	0.75	0.52	0.85	2d6/25 L=275 38,38,38
361	ok,NV	0.0	0.29	6.0	6.0	2.3	0.08	0.88	0.64	2.35	2d6/25 L=283 37,39,42
	s=3,m=54	317.5	0.29	6.0	6.0	2.3	0.08	0.94	0.56	2.07	2d6/25 L=283 40,40,42
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	M _T = 28 x/d	Z=720.0 V N/M	P=23 V V/T cls	P=32 V V/T acc	Staffe Rif. cmb L=cm
193	NV,NV	0.0	0.11	2.4	2.4	4.5	0.06	1.22	0.49	2.32	2d6/25 L=272 37,42,42
	s=3,m=54	307.5	0.11	2.4	2.4	4.5	0.06	1.18	0.56	2.69	2d6/25 L=272 4,33,42
194	NV,NV	0.0	0.11	2.4	2.4	0.0	0.06	1.18	0.48	0.79	2d6/25 L=285 29,4,3
	s=3,m=54	320.0	0.11	2.4	2.4	0.0	0.06	1.12	0.48	0.78	2d6/25 L=285 30,4,4
195	NV,NV	0.0	0.11	2.4	2.4	0.0	0.06	1.15	0.48	0.78	2d6/25 L=282 37,4,4
	s=3,m=54	317.5	0.11	2.4	2.4	0.0	0.06	1.15	0.48	0.78	2d6/25 L=282 30,3,3
196	NV,NV	0.0	0.11	2.4	2.4	4.5	0.06	1.20	0.78	3.67	2d6/25 L=297 4,42,42
	s=3,m=54	330.0	0.11	2.4	2.4	4.5	0.06	1.17	0.75	3.50	2d6/25 L=297 40,42,42
197	NV,NV	0.0	0.11	2.4	2.4	0.0	0.06	1.16	0.18	0.29	2d6/25 L=440 39,39,39
	s=3,m=54	470.0	0.11	2.4	2.4	0.0	0.06	1.18	0.18	0.28	2d6/25 L=440 40,40,40
198	NV,NV	0.0	0.11	2.4	2.4	4.5	0.06	1.17	0.76	3.54	2d6/25 L=297 29,42,42
	s=3,m=54	330.0	0.11	2.4	2.4	4.5	0.06	1.15	0.78	3.65	2d6/25 L=297 38,42,42
199	NV,NV	0.0	0.11	2.4	2.4	0.0	0.06	1.15	0.47	0.78	2d6/25 L=282 37,4,3
	s=3,m=54	317.5	0.11	2.4	2.4	0.0	0.06	1.15	0.48	0.78	2d6/25 L=282 30,4,4
200	NV,NV	0.0	0.11	2.4	2.4	0.0	0.06	1.11	0.47	0.77	2d6/25 L=275 29,31,39
	s=3,m=54	310.0	0.11	2.4	2.4	0.0	0.06	1.18	0.49	0.78	2d6/25 L=275 30,4,4
362	NV,NV	0.0	0.11	2.4	2.4	2.3	0.06	1.23	0.56	2.61	2d6/25 L=283 4,33,43
	s=3,m=54	317.5	0.11	2.4	2.4	2.3	0.06	1.22	0.47	2.23	2d6/25 L=283 38,33,43
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	M _T = 42 x/d	Z=1080.0 V N/M	P=23 V V/T cls	P=32 V V/T acc	Staffe Rif. cmb L=cm
295	ok,NV	0.0	0.18	3.1	3.1	4.5	0.07	0.56	0.60	2.86	2d6/30 L=272 31,43,43
	s=23,m=54	307.5	0.18	3.1	3.1	4.5	0.07	0.70	0.67	3.30	2d6/30 L=272 11,43,43

296	ok,NV	0.0	0.18	3.1	3.1	0.0	0.07	0.69	0.44	0.72	2d6/30 L=285	37,11,9
	s=23,m=54	320.0	0.18	3.1	3.1	0.0	0.07	0.56	0.42	0.70	2d6/30 L=285	40,11,11
297	ok,NV	0.0	0.18	3.1	3.1	0.0	0.07	0.53	0.43	0.69	2d6/30 L=282	37,11,11
	s=23,m=54	317.5	0.18	3.1	3.1	0.0	0.07	0.67	0.44	0.72	2d6/30 L=282	30,9,9
298	ok,NV	0.0	0.18	3.1	3.1	4.5	0.07	0.71	0.72	3.48	2d6/30 L=297	9,44,44
	s=23,m=54	330.0	0.18	3.1	3.1	4.5	0.07	0.57	0.70	3.37	2d6/30 L=297	40,44,44
299	ok,NV	0.0	0.18	3.1	3.1	0.0	0.07	0.54	0.18	0.22	2d6/30 L=440	39,43,39
	s=23,m=54	470.0	0.18	3.1	3.1	0.0	0.07	0.61	0.15	0.22	2d6/30 L=440	40,43,40
300	ok,NV	0.0	0.18	3.1	3.1	4.5	0.07	0.66	0.65	3.10	2d6/30 L=297	39,44,44
	s=23,m=54	330.0	0.18	3.1	3.1	4.5	0.07	0.84	0.71	3.50	2d6/30 L=297	40,44,44
301	ok,NV	0.0	0.18	3.1	3.1	0.0	0.07	0.86	0.45	0.69	2d6/30 L=282	39,9,39
	s=23,m=54	317.5	0.18	3.1	3.1	0.0	0.07	0.82	0.49	0.73	2d6/30 L=282	40,11,11
302	ok,NV	0.0	0.18	3.1	3.1	0.0	0.07	0.82	0.42	0.64	2d6/30 L=275	39,11,11
	s=23,m=54	310.0	0.18	3.1	3.1	0.0	0.07	0.81	0.48	0.74	2d6/30 L=275	40,11,9
363	ok,NV	0.0	0.18	3.1	3.1	4.5	0.07	0.77	0.69	3.34	2d6/30 L=283	31,43,43
	s=23,m=54	317.5	0.18	3.1	3.1	4.5	0.07	0.62	0.62	2.91	2d6/30 L=283	32,43,43

Trave	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc				
	0.29	6.03	6.03	4.52	0.08	1.23	0.78	3.67				
TraveM negativo i	M positivo i	M negativo f	M positivo f	Luce per V	V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As		
	daN cm	daN cm	daN cm	cm	daN	daN	daN	daN	daN	cm2		
91	1.502e+06	1.502e+06	1.502e+06	1.502e+06	272.50	1.103e+04	1.103e+04	0.0	0.0	0.0	0.0	0.0
92	1.502e+06	1.502e+06	1.502e+06	1.502e+06	285.00	1.054e+04	1.054e+04	0.0	0.0	0.0	0.0	0.0
93	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0	0.0
94	1.502e+06	1.502e+06	1.502e+06	1.502e+06	297.50	1.010e+04	1.010e+04	0.0	0.0	0.0	0.0	0.0
95	1.502e+06	1.502e+06	1.502e+06	1.502e+06	440.00	6829.03	6829.03	0.0	0.0	0.0	0.0	0.0
96	1.502e+06	1.502e+06	1.502e+06	1.502e+06	297.50	1.010e+04	1.010e+04	0.0	0.0	0.0	0.0	0.0
97	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0	0.0
98	1.502e+06	1.502e+06	1.502e+06	1.502e+06	275.00	1.093e+04	1.093e+04	0.0	0.0	0.0	0.0	0.0
193	5.955e+05	5.955e+05	5.955e+05	5.955e+05	272.50	4370.70	4370.70	0.0	0.0	0.0	0.0	0.0
194	5.955e+05	5.955e+05	5.955e+05	5.955e+05	285.00	4179.00	4179.00	0.0	0.0	0.0	0.0	0.0
195	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0	0.0
196	5.955e+05	5.955e+05	5.955e+05	5.955e+05	297.50	4003.42	4003.42	0.0	0.0	0.0	0.0	0.0
197	5.955e+05	5.955e+05	5.955e+05	5.955e+05	440.00	2706.86	2706.86	0.0	0.0	0.0	0.0	0.0
198	5.955e+05	5.955e+05	5.955e+05	5.955e+05	297.50	4003.42	4003.42	0.0	0.0	0.0	0.0	0.0
199	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0	0.0
200	5.955e+05	5.955e+05	5.955e+05	5.955e+05	275.00	4330.97	4330.97	0.0	0.0	0.0	0.0	0.0
295	7.713e+05	7.713e+05	7.713e+05	7.713e+05	272.50	5661.04	5661.04	0.0	0.0	0.0	0.0	0.0
296	7.713e+05	7.713e+05	7.713e+05	7.713e+05	285.00	5412.75	5412.75	0.0	0.0	0.0	0.0	0.0
297	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0	0.0
298	7.713e+05	7.713e+05	7.713e+05	7.713e+05	297.50	5185.32	5185.32	0.0	0.0	0.0	0.0	0.0
299	7.713e+05	7.713e+05	7.713e+05	7.713e+05	440.00	3505.99	3505.99	0.0	0.0	0.0	0.0	0.0
300	7.713e+05	7.713e+05	7.713e+05	7.713e+05	297.50	5185.32	5185.32	0.0	0.0	0.0	0.0	0.0
301	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0	0.0
302	7.713e+05	7.713e+05	7.713e+05	7.713e+05	275.00	5609.58	5609.58	0.0	0.0	0.0	0.0	0.0
361	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0	0.0
362	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0	0.0
363	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0	0.0

TraveM negativo i	M positivo i	M negativo f	M positivo f	V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As
	1.502e+06	1.502e+06	1.502e+06	1.502e+06	1.103e+04	1.103e+04	0.0	0.0	0.0

< TABELLA VERIFICHE POST-OPERAM >												
Elementi post rinforzo tipo: C8A.7.2 INCAMICIATURA IN ACCIAIO e assimilabili												
Elementi post rinforzo tipo: C8A.7.1 INCAMICIATURA IN C.A.												
Elementi non rinforzati												

Trave	Note	Pos. cm	%Af	Af inf.	Af. sup	Af long.	M_T= 1 x/d	Z=360.0 V N/M	P=3 V V/T cls	P=37 V V/T acc	Staffe Rif. cmb L=cm	
45	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.56	0.23	0.38	2d6/25 L=290	41,41,41
	s=3,m=54	335.0	0.29	6.0	6.0	0.0	0.08	0.48	0.24	0.40	2d6/25 L=290	42,42,42
46	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.45	0.43	1.56	2d6/25 L=322	41,39,37
	s=3,m=54	362.5	0.29	6.0	6.0	2.3	0.08	0.55	0.45	1.68	2d6/25 L=322	42,39,37
47	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.53	0.33	0.55	2d6/25 L=318	41,41,41
	s=3,m=54	357.5	0.29	6.0	6.0	0.0	0.08	0.52	0.33	0.55	2d6/25 L=318	42,42,42
48	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.57	0.44	0.62	2d6/25 L=325	41,37,41
	s=3,m=54	365.0	0.29	6.0	6.0	0.0	0.08	0.60	0.42	0.58	2d6/25 L=325	42,37,42
Trave	Note	Pos. cm	%Af	Af inf.	Af. sup	Af long.	M_T= 2 x/d	Z=360.0 V N/M	P=37 V V/T cls	P=48 V V/T acc	Staffe Rif. cmb	

49	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.72	0.22	0.33	2d6/25 L=555 39,39,39
	s=3,m=54	590.0	0.29	6.0	6.0	0.0	0.08	0.58	0.22	0.34	2d6/25 L=555 38,40,40
50	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.61	0.43	0.61	2d6/25 L=273 29,29,45
	s=3,m=54	307.5	0.29	6.0	6.0	0.0	0.08	0.60	0.45	0.64	2d6/25 L=273 30,30,46
51	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.56	0.36	0.58	2d6/25 L=285 31,39,39
	s=3,m=54	320.0	0.29	6.0	6.0	0.0	0.08	0.56	0.35	0.57	2d6/25 L=285 38,38,38
52	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.56	0.35	0.57	2d6/25 L=282 37,31,47
	s=3,m=54	317.5	0.29	6.0	6.0	0.0	0.08	0.56	0.35	0.58	2d6/25 L=282 30,30,48
53	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.58	0.38	0.62	2d6/25 L=295 37,37,37
	s=3,m=54	330.0	0.29	6.0	6.0	0.0	0.08	0.58	0.36	0.58	2d6/25 L=295 38,40,38
54	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.51	0.18	0.30	2d6/25 L=435 37,37,37
	s=3,m=54	470.0	0.29	6.0	6.0	0.0	0.08	0.52	0.18	0.30	2d6/25 L=435 38,38,38
55	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.62	0.37	0.61	2d6/25 L=295 37,39,37
	s=3,m=54	330.0	0.29	6.0	6.0	0.0	0.08	0.61	0.39	0.64	2d6/25 L=295 38,38,38
56	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.58	0.37	0.60	2d6/25 L=282 29,29,45
	s=3,m=54	317.5	0.29	6.0	6.0	0.0	0.08	0.59	0.36	0.59	2d6/25 L=282 38,32,48
57	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.59	0.36	0.59	2d6/25 L=282 37,37,37
	s=3,m=54	317.5	0.29	6.0	6.0	0.0	0.08	0.58	0.37	0.60	2d6/25 L=282 32,40,40
58	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.61	0.45	0.64	2d6/25 L=275 29,29,45
	s=3,m=54	310.0	0.29	6.0	6.0	0.0	0.08	0.61	0.43	0.61	2d6/25 L=275 30,30,46
59	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.59	0.23	0.35	2d6/25 L=555 37,39,39
	s=3,m=54	590.0	0.29	6.0	6.0	0.0	0.08	0.73	0.22	0.33	2d6/25 L=555 40,40,40
M_T= 3 Z=360.0 P=2 P=48											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
344	ok,ok	0.0	0.22	6.0	6.0	0.0	0.07	0.58	0.32	0.66	2d6/25 L=131 41,41,41
	s=20,m=54	171.0	0.22	6.0	6.0	0.0	0.07	0.37	0.32	0.67	2d6/25 L=131 42,42,42
62	ok,ok	0.0	0.22	6.0	6.0	0.0	0.07	0.39	0.28	0.57	2d6/25 L=125 41,41,41
	s=20,m=54	165.1	0.22	6.0	6.0	0.0	0.07	0.50	0.31	0.62	2d6/25 L=125 42,42,42
325	ok,ok	0.0	0.22	6.0	6.0	2.3	0.07	0.45	0.37	1.83	2d6/25 L=325 41,30,38
	s=20,m=54	365.0	0.22	6.0	6.0	2.3	0.07	0.60	0.39	1.96	2d6/25 L=325 42,30,38
61	ok,ok	0.0	0.22	6.0	6.0	0.0	0.07	0.55	0.27	0.58	2d6/25 L=318 41,41,41
	s=20,m=54	357.5	0.22	6.0	6.0	0.0	0.07	0.55	0.27	0.58	2d6/25 L=318 42,42,42
60	ok,ok	0.0	0.22	6.0	6.0	0.0	0.07	0.60	0.41	0.67	2d6/25 L=323 41,38,41
	s=20,m=54	362.5	0.22	6.0	6.0	0.0	0.07	0.65	0.40	0.63	2d6/25 L=323 42,38,42
M_T= 4 Z=360.0 P=17 P=20											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
65	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.09	0.49	1.95	2d6/25 L=408 39,11,4
	s=3,m=54	425.0	0.29	6.0	6.0	2.3	0.08	0.86	0.74	3.07	2d6/25 L=408 40,11,4
99	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.96	0.47	0.76	2d6/25 L=402 39,4,39
	s=3,m=54	437.5	0.29	6.0	6.0	0.0	0.08	0.75	0.43	0.70	2d6/25 L=402 40,4,40
64	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.79	0.49	0.71	2d6/25 L=377 29,41,37
	s=3,m=54	412.5	0.29	6.0	6.0	0.0	0.08	0.76	0.49	0.69	2d6/25 L=377 40,41,40
63	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.79	0.31	0.49	2d6/25 L=555 37,39,39
	s=3,m=54	590.0	0.29	6.0	6.0	0.0	0.08	0.78	0.28	0.44	2d6/25 L=555 40,40,40
M_T= 6 Z=360.0 P=5 P=12											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
76	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.80	0.30	0.48	2d6/25 L=377 39,39,39
	s=3,m=54	412.5	0.29	6.0	6.0	0.0	0.08	0.55	0.29	0.48	2d6/25 L=377 38,40,40
77	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.42	0.25	0.35	2d6/25 L=377 31,41,47
	s=3,m=54	412.5	0.29	6.0	6.0	0.0	0.08	0.53	0.24	0.37	2d6/25 L=377 38,42,46
69	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.56	0.33	0.42	2d6/25 L=415 39,39,39
	s=3,m=54	450.0	0.29	6.0	6.0	0.0	0.08	0.57	0.34	0.40	2d6/25 L=415 38,40,40
68	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.56	0.22	0.32	2d6/25 L=435 37,39,37
	s=3,m=54	470.0	0.29	6.0	6.0	0.0	0.08	0.49	0.21	0.30	2d6/25 L=435 30,38,38
67	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.53	0.32	0.38	2d6/25 L=390 29,39,39
	s=3,m=54	425.0	0.29	6.0	6.0	0.0	0.08	0.82	0.38	0.51	2d6/25 L=390 40,40,40
78	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.70	0.30	0.50	2d6/25 L=817 37,3,3
	s=3,m=54	850.0	0.29	6.0	6.0	0.0	0.08	0.77	0.31	0.51	2d6/25 L=817 40,3,4
320	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.92	0.38	0.62	2d6/25 L=557 39,39,39
	s=3,m=54	590.0	0.29	6.0	6.0	0.0	0.08	0.74	0.32	0.52	2d6/25 L=557 40,4,4
M_T= 8 Z=360.0 P=13 P=16											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
73	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.88	0.36	0.57	2d6/25 L=555 39,39,39
	s=3,m=54	590.0	0.29	6.0	6.0	0.0	0.08	0.88	0.39	0.61	2d6/25 L=555 38,40,40
72	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.82	0.47	0.71	2d6/25 L=377 39,39,39
	s=3,m=54	412.5	0.29	6.0	6.0	0.0	0.08	0.74	0.48	0.70	2d6/25 L=377 30,4,4
71	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.75	0.42	0.69	2d6/25 L=377 31,31,47
	s=3,m=54	412.5	0.29	6.0	6.0	0.0	0.08	1.00	0.47	0.78	2d6/25 L=377 40,40,40
100	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.91	0.76	3.18	2d6/25 L=432 4,11,4
	s=3,m=54	450.0	0.29	6.0	6.0	2.3	0.08	0.11	0.52	2.05	2d6/25 L=432 40,11,4
M_T= 9 Z=360.0 P=3 P=4											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
74	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.82	0.36	0.59	2d6/25 L=555 37,39,39
	s=3,m=54	590.0	0.29	6.0	6.0	0.0	0.08	0.81	0.36	0.59	2d6/25 L=555 38,40,40
M_T= 10 Z=360.0 P=4 P=38											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb

75	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.69	0.59	1.21	2d6/25 L=120 42,42,40
	s=3,m=54	169.9	0.29	6.0	6.0	2.3	0.08	0.60	0.63	1.37	2d6/25 L=120 42,42,40
86	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.56	0.49	1.12	2d6/25 L=120 41,41,40
	s=3,m=54	165.1	0.29	6.0	6.0	2.3	0.08	0.59	0.45	0.96	2d6/25 L=120 42,41,40
87	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.53	0.46	0.72	2d6/25 L=485 41,3,3
	s=3,m=54	525.2	0.29	6.0	6.0	0.0	0.08	0.81	0.52	0.81	2d6/25 L=485 42,4,4
88	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.82	0.52	0.84	2d6/25 L=520 41,3,3
	s=3,m=54	559.8	0.29	6.0	6.0	0.0	0.08	0.78	0.50	0.79	2d6/25 L=520 42,4,4
M_T= 11 Z=360.0 P=1 P=47											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
79	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.52	0.45	0.72	2d6/25 L=120 41,42,42
	s=3,m=54	165.1	0.29	6.0	6.0	0.0	0.08	0.64	0.49	0.78	2d6/25 L=120 42,42,42
89	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.56	0.46	0.72	2d6/25 L=485 41,3,3
	s=3,m=54	525.2	0.29	6.0	6.0	0.0	0.08	0.80	0.51	0.80	2d6/25 L=485 42,4,4
90	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.83	0.53	0.83	2d6/25 L=520 41,3,3
	s=3,m=54	559.8	0.29	6.0	6.0	0.0	0.08	0.78	0.50	0.79	2d6/25 L=520 42,4,4
M_T= 12 Z=360.0 P=8 P=42											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
101	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.53	0.27	0.34	2d6/25 L=505 42,39,4
	s=3,m=54	525.2	0.29	6.0	6.0	0.0	0.08	0.93	0.57	0.93	2d6/25 L=505 3,4,3
81	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.70	0.33	1.44	2d6/25 L=242 41,38,38
	s=3,m=54	282.4	0.29	6.0	6.0	2.3	0.08	0.41	0.31	1.33	2d6/25 L=242 42,38,38
82	ok,ok	0.0	0.29	6.0	6.0	4.5	0.08	0.46	0.33	1.44	2d6/25 L=237 41,38,38
	s=3,m=54	277.4	0.29	6.0	6.0	4.5	0.08	0.61	0.33	1.39	2d6/25 L=237 42,38,38
M_T= 13 Z=360.0 P=9 P=43											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
102	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.53	0.29	0.35	2d6/25 L=505 42,40,4
	s=3,m=54	525.2	0.29	6.0	6.0	0.0	0.08	0.92	0.58	0.92	2d6/25 L=505 3,4,3
84	ok,ok	0.0	0.29	6.0	6.0	4.5	0.08	0.70	0.35	1.51	2d6/25 L=242 41,37,37
	s=3,m=54	282.4	0.29	6.0	6.0	4.5	0.08	0.44	0.34	1.45	2d6/25 L=242 42,37,37
83	ok,ok	0.0	0.29	6.0	6.0	4.5	0.08	0.47	0.35	1.52	2d6/25 L=237 41,37,37
	s=3,m=54	277.4	0.29	6.0	6.0	4.5	0.08	0.63	0.34	1.44	2d6/25 L=237 42,37,37
M_T= 14 Z=360.0 P=23 P=32											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
91	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.96	0.57	0.94	2d6/25 L=272 39,39,39
	s=3,m=54	307.5	0.29	6.0	6.0	0.0	0.08	0.87	0.65	1.07	2d6/25 L=272 38,40,40
92	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.71	0.50	0.83	2d6/25 L=285 29,29,45
	s=3,m=54	320.0	0.29	6.0	6.0	0.0	0.08	0.71	0.48	0.80	2d6/25 L=285 30,32,48
93	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.72	0.50	0.82	2d6/25 L=282 29,29,45
	s=3,m=54	317.5	0.29	6.0	6.0	0.0	0.08	0.78	0.52	0.86	2d6/25 L=282 38,40,40
94	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.79	0.65	2.32	2d6/25 L=297 37,4,42
	s=3,m=54	330.0	0.29	6.0	6.0	2.3	0.08	0.70	0.58	2.16	2d6/25 L=297 38,4,42
95	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.57	0.20	0.32	2d6/25 L=440 39,39,39
	s=3,m=54	470.0	0.29	6.0	6.0	0.0	0.08	0.56	0.20	0.31	2d6/25 L=440 40,40,40
96	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.70	0.59	2.21	2d6/25 L=297 37,4,42
	s=3,m=54	330.0	0.29	6.0	6.0	2.3	0.08	0.79	0.64	2.33	2d6/25 L=297 38,4,42
97	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.78	0.53	0.87	2d6/25 L=282 37,37,39
	s=3,m=54	317.5	0.29	6.0	6.0	0.0	0.08	0.74	0.50	0.83	2d6/25 L=282 30,30,46
98	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.73	0.49	0.80	2d6/25 L=275 37,29,47
	s=3,m=54	310.0	0.29	6.0	6.0	0.0	0.08	0.75	0.52	0.85	2d6/25 L=275 38,38,38
361	ok,ok	0.0	0.29	6.0	6.0	2.3	0.08	0.88	0.64	2.35	2d6/25 L=283 37,39,42
	s=3,m=54	317.5	0.29	6.0	6.0	2.3	0.08	0.94	0.56	2.07	2d6/25 L=283 40,40,42
M_T= 15 Z=360.0 P=1 P=2											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
353	ok,ok	0.0	0.29	6.0	6.0	0.0	0.08	0.82	0.30	0.50	2d6/25 L=557 39,39,39
	s=3,m=54	590.0	0.29	6.0	6.0	0.0	0.08	0.73	0.29	0.47	2d6/25 L=557 38,40,40
M_T= 15 Z=720.0 P=3 P=37											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
147	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	0.95	0.15	0.24	2d6/25 L=310 42,41,51
	s=3,m=54	335.0	0.11	2.4	2.4	0.0	0.06	0.88	0.19	0.31	2d6/25 L=310 44,42,42
148	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	0.70	0.34	0.48	2d6/25 L=337 41,3,3
	s=3,m=54	362.5	0.11	2.4	2.4	0.0	0.06	1.02	0.40	0.58	2d6/25 L=337 36,3,4
149	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.02	0.31	0.51	2d6/25 L=333 33,3,3
	s=3,m=54	357.5	0.11	2.4	2.4	0.0	0.06	0.96	0.32	0.53	2d6/25 L=333 34,4,4
150	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.09	0.37	0.59	2d6/25 L=340 33,43,41
	s=3,m=54	365.0	0.11	2.4	2.4	0.0	0.06	1.08	0.33	0.53	2d6/25 L=340 42,4,4
M_T= 16 Z=720.0 P=37 P=48											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
151	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.17	0.29	1.04	2d6/25 L=555 39,44,42
	s=3,m=54	590.0	0.11	2.4	2.4	2.3	0.06	1.13	0.28	1.03	2d6/25 L=555 32,44,42
152	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.19	0.40	1.48	2d6/25 L=273 37,39,44
	s=3,m=54	307.5	0.11	2.4	2.4	2.3	0.06	1.09	0.42	1.68	2d6/25 L=273 30,3,44
153	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.17	0.30	0.50	2d6/25 L=285 29,29,45
	s=3,m=54	320.0	0.11	2.4	2.4	0.0	0.06	1.05	0.30	0.49	2d6/25 L=285 38,32,48
154	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.11	0.30	0.49	2d6/25 L=282 29,39,47
	s=3,m=54	317.5	0.11	2.4	2.4	0.0	0.06	1.10	0.30	0.49	2d6/25 L=282 38,30,38

155	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.14	0.33	1.62	2d6/25 L=295 29,44,44
	s=3,m=54	330.0	0.11	2.4	2.4	2.3	0.06	1.12	0.33	1.62	2d6/25 L=295 40,43,43
156	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.16	0.17	0.28	2d6/25 L=435 39,39,39
	s=3,m=54	470.0	0.11	2.4	2.4	0.0	0.06	1.22	0.16	0.27	2d6/25 L=435 40,40,40
157	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.16	0.44	0.52	2d6/25 L=295 29,43,39
	s=3,m=54	330.0	0.11	2.4	2.4	0.0	0.06	1.20	0.42	0.54	2d6/25 L=295 30,44,40
158	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.15	0.32	0.52	2d6/25 L=282 37,37,37
	s=3,m=54	317.5	0.11	2.4	2.4	0.0	0.06	1.19	0.31	0.51	2d6/25 L=282 30,40,46
159	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.13	0.31	0.50	2d6/25 L=282 29,31,47
	s=3,m=54	317.5	0.11	2.4	2.4	0.0	0.06	1.19	0.32	0.52	2d6/25 L=282 30,32,46
160	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.10	0.43	1.68	2d6/25 L=275 29,34,44
	s=3,m=54	310.0	0.11	2.4	2.4	2.3	0.06	1.21	0.40	1.47	2d6/25 L=275 38,40,44
161	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.13	0.28	1.01	2d6/25 L=555 31,44,42
	s=3,m=54	590.0	0.11	2.4	2.4	2.3	0.06	1.17	0.29	1.04	2d6/25 L=555 38,44,42
M_T= 17 Z=720.0 P=2 P=48											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
347	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	0.97	0.25	0.37	2d6/25 L=146 42,43,43
	s=3,m=54	171.0	0.11	2.4	2.4	0.0	0.06	0.45	0.26	0.40	2d6/25 L=146 44,44,44
164	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	0.51	0.20	0.30	2d6/25 L=140 41,42,42
	s=3,m=54	165.1	0.11	2.4	2.4	0.0	0.06	0.80	0.24	0.36	2d6/25 L=140 44,42,42
326	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	0.73	0.33	0.49	2d6/25 L=340 41,3,3
	s=3,m=54	365.0	0.11	2.4	2.4	0.0	0.06	1.04	0.38	0.57	2d6/25 L=340 34,3,4
163	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.00	0.31	0.51	2d6/25 L=333 43,3,3
	s=3,m=54	357.5	0.11	2.4	2.4	0.0	0.06	0.96	0.32	0.53	2d6/25 L=333 34,4,4
162	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.10	0.37	0.59	2d6/25 L=338 33,41,41
	s=3,m=54	362.5	0.11	2.4	2.4	0.0	0.06	1.08	0.33	0.52	2d6/25 L=338 42,4,4
M_T= 18 Z=720.0 P=17 P=20											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
167	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	0.62	0.49	1.94	2d6/25 L=408 1,10,3
	s=3,m=54	425.0	0.11	2.4	2.4	2.3	0.06	2.15	0.75	3.11	2d6/25 L=408 4,10,3
201	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.36	0.47	0.75	2d6/25 L=402 3,4,3
	s=3,m=54	437.5	0.11	2.4	2.4	0.0	0.06	1.14	0.44	0.70	2d6/25 L=402 32,4,4
166	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.19	0.58	2.74	2d6/25 L=377 4,43,43
	s=3,m=54	412.5	0.11	2.4	2.4	4.5	0.06	1.16	0.57	2.68	2d6/25 L=377 30,43,43
165	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.14	0.30	0.41	2d6/25 L=555 39,42,39
	s=3,m=54	590.0	0.11	2.4	2.4	0.0	0.06	1.17	0.30	0.37	2d6/25 L=555 38,42,40
M_T= 19 Z=720.0 P=10 P=17											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
168	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.18	0.64	2.80	2d6/25 L=133 36,39,39
	s=3,m=54	165.1	0.11	2.4	2.4	4.5	0.06	1.18	0.61	2.64	2d6/25 L=133 36,39,39
M_T= 20 Z=720.0 P=5 P=12											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
178	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.16	0.47	2.08	2d6/25 L=377 39,42,42
	s=3,m=54	412.5	0.11	2.4	2.4	4.5	0.06	1.02	0.47	2.07	2d6/25 L=377 38,42,42
179	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	0.92	0.29	1.36	2d6/25 L=377 39,43,43
	s=3,m=54	412.5	0.11	2.4	2.4	2.3	0.06	1.15	0.27	1.22	2d6/25 L=377 40,44,43
171	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.07	0.34	1.60	2d6/25 L=415 37,42,42
	s=3,m=54	450.0	0.11	2.4	2.4	2.3	0.06	1.12	0.31	1.37	2d6/25 L=415 38,40,42
170	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	0.96	0.16	0.27	2d6/25 L=435 39,39,39
	s=3,m=54	470.0	0.11	2.4	2.4	0.0	0.06	1.02	0.17	0.28	2d6/25 L=435 40,40,40
169	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.12	0.32	1.41	2d6/25 L=390 39,39,42
	s=3,m=54	425.0	0.11	2.4	2.4	2.3	0.06	1.14	0.36	1.66	2d6/25 L=390 30,42,42
180	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.51	0.40	0.50	2d6/25 L=815 4,42,4
	s=3,m=54	850.0	0.11	2.4	2.4	0.0	0.06	1.56	0.40	0.51	2d6/25 L=815 4,42,3
322	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.34	0.37	0.58	2d6/25 L=555 4,4,3
	s=3,m=54	590.0	0.11	2.4	2.4	0.0	0.06	1.14	0.33	0.53	2d6/25 L=555 32,4,4
M_T= 21 Z=720.0 P=7 P=16											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
172	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.18	0.66	2.88	2d6/25 L=135 36,40,40
	s=3,m=54	165.1	0.11	2.4	2.4	4.5	0.06	1.18	0.63	2.71	2d6/25 L=135 36,40,40
M_T= 22 Z=720.0 P=13 P=16											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
175	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.16	0.36	0.54	2d6/25 L=555 39,4,4
	s=3,m=54	590.0	0.11	2.4	2.4	0.0	0.06	1.20	0.37	0.56	2d6/25 L=555 3,3,3
174	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.18	0.60	2.80	2d6/25 L=377 31,43,43
	s=3,m=54	412.5	0.11	2.4	2.4	4.5	0.06	1.19	0.61	2.86	2d6/25 L=377 4,43,43
173	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.14	0.41	0.66	2d6/25 L=377 29,4,4
	s=3,m=54	412.5	0.11	2.4	2.4	0.0	0.06	1.25	0.44	0.71	2d6/25 L=377 3,3,3
202	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	2.32	0.76	3.18	2d6/25 L=432 4,10,3
	s=3,m=54	450.0	0.11	2.4	2.4	2.3	0.06	0.99	0.51	2.02	2d6/25 L=432 1,10,3
M_T= 23 Z=720.0 P=3 P=4											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
176	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.16	0.34	0.55	2d6/25 L=555 39,4,3
	s=3,m=54	590.0	0.11	2.4	2.4	0.0	0.06	1.15	0.34	0.56	2d6/25 L=555 4,4,4
M_T= 24 Z=720.0 P=4 P=38											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb

177	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	0.91	0.37	0.47	2d6/25 L=145 36,42,42
	s=3,m=54	169.9	0.11	2.4	2.4	0.0	0.06	1.00	0.42	0.53	2d6/25 L=145 42,42,42
188	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	0.97	0.34	1.62	2d6/25 L=135 41,40,40
	s=3,m=54	165.1	0.11	2.4	2.4	2.3	0.06	1.20	0.32	1.46	2d6/25 L=135 44,40,40
189	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.16	0.45	0.71	2d6/25 L=495 41,3,4
	s=3,m=54	525.2	0.11	2.4	2.4	0.0	0.06	1.74	0.51	0.82	2d6/25 L=495 4,3,3
190	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.69	0.56	0.83	2d6/25 L=535 3,40,3
	s=3,m=54	559.8	0.11	2.4	2.4	0.0	0.06	1.48	0.54	0.80	2d6/25 L=535 4,40,4
M_T= 25 Z=720.0 P=1 P=47											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
348	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.21	0.36	1.17	2d6/25 L=141 36,33,40
	s=3,m=54	171.0	0.11	2.4	2.4	2.3	0.06	0.73	0.38	1.00	2d6/25 L=141 44,44,40
181	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	0.68	0.30	1.17	2d6/25 L=130 41,42,39
	s=3,m=54	165.1	0.11	2.4	2.4	2.3	0.06	1.22	0.33	1.28	2d6/25 L=130 36,42,39
191	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.15	0.44	0.72	2d6/25 L=493 41,3,4
	s=3,m=54	525.2	0.11	2.4	2.4	0.0	0.06	1.69	0.50	0.81	2d6/25 L=493 3,3,3
192	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.68	0.57	0.83	2d6/25 L=535 3,39,3
	s=3,m=54	559.8	0.11	2.4	2.4	0.0	0.06	1.48	0.55	0.80	2d6/25 L=535 4,39,4
M_T= 26 Z=720.0 P=8 P=42											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
182	ok,ok	0.0	0.11	2.4	2.4	9.0	0.06	2.70	1.35	6.25	2d6/25 L=153 4,2,2
	s=3,m=54	165.1	0.11	2.4	2.4	9.0	0.06	1.29	1.24	5.58	2d6/25 L=153 3,2,2
203	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.16	0.44	1.99	2d6/25 L=510 3,1,1
	s=3,m=54	525.2	0.11	2.4	2.4	4.5	0.06	2.40	0.60	2.98	2d6/25 L=510 4,1,1
183	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.23	0.35	1.47	2d6/25 L=255 41,40,40
	s=3,m=54	282.4	0.11	2.4	2.4	4.5	0.06	0.72	0.39	1.70	2d6/25 L=255 42,40,40
184	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	0.82	0.41	1.77	2d6/25 L=252 43,40,40
	s=3,m=54	277.4	0.11	2.4	2.4	4.5	0.06	1.19	0.39	1.66	2d6/25 L=252 43,40,40
M_T= 27 Z=720.0 P=9 P=43											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
187	ok,ok	0.0	0.11	2.4	2.4	6.8	0.06	2.66	0.96	4.60	2d6/25 L=153 4,2,2
	s=3,m=54	165.1	0.11	2.4	2.4	6.8	0.06	1.22	0.85	3.93	2d6/25 L=153 3,2,2
204	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.15	0.33	1.48	2d6/25 L=510 42,33,1
	s=3,m=54	525.2	0.11	2.4	2.4	2.3	0.06	2.34	0.59	2.46	2d6/25 L=510 4,3,1
186	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.20	0.36	1.49	2d6/25 L=255 43,39,39
	s=3,m=54	282.4	0.11	2.4	2.4	4.5	0.06	0.84	0.40	1.77	2d6/25 L=255 42,39,39
185	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	0.84	0.41	1.78	2d6/25 L=252 33,39,39
	s=3,m=54	277.4	0.11	2.4	2.4	4.5	0.06	1.18	0.37	1.56	2d6/25 L=252 43,39,39
M_T= 28 Z=720.0 P=23 P=32											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
193	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.22	0.49	2.32	2d6/25 L=272 37,42,42
	s=3,m=54	307.5	0.11	2.4	2.4	4.5	0.06	1.18	0.56	2.69	2d6/25 L=272 4,33,42
194	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.18	0.48	0.79	2d6/25 L=285 29,4,3
	s=3,m=54	320.0	0.11	2.4	2.4	0.0	0.06	1.12	0.48	0.78	2d6/25 L=285 30,4,4
195	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.15	0.48	0.78	2d6/25 L=282 37,4,4
	s=3,m=54	317.5	0.11	2.4	2.4	0.0	0.06	1.15	0.48	0.78	2d6/25 L=282 30,3,3
196	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.20	0.78	3.67	2d6/25 L=297 4,42,42
	s=3,m=54	330.0	0.11	2.4	2.4	4.5	0.06	1.17	0.75	3.50	2d6/25 L=297 40,42,42
197	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.16	0.18	0.29	2d6/25 L=440 39,39,39
	s=3,m=54	470.0	0.11	2.4	2.4	0.0	0.06	1.18	0.18	0.28	2d6/25 L=440 40,40,40
198	ok,ok	0.0	0.11	2.4	2.4	4.5	0.06	1.17	0.76	3.54	2d6/25 L=297 29,42,42
	s=3,m=54	330.0	0.11	2.4	2.4	4.5	0.06	1.15	0.78	3.65	2d6/25 L=297 38,42,42
199	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.15	0.47	0.78	2d6/25 L=282 37,4,3
	s=3,m=54	317.5	0.11	2.4	2.4	0.0	0.06	1.15	0.48	0.78	2d6/25 L=282 30,4,4
200	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.11	0.47	0.77	2d6/25 L=275 29,31,39
	s=3,m=54	310.0	0.11	2.4	2.4	0.0	0.06	1.18	0.49	0.78	2d6/25 L=275 30,4,4
362	ok,ok	0.0	0.11	2.4	2.4	2.3	0.06	1.23	0.56	2.61	2d6/25 L=283 4,33,43
	s=3,m=54	317.5	0.11	2.4	2.4	2.3	0.06	1.22	0.47	2.23	2d6/25 L=283 38,33,43
M_T= 53 Z=720.0 P=1 P=2											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
355	ok,ok	0.0	0.11	2.4	2.4	0.0	0.06	1.17	0.35	0.41	2d6/25 L=555 39,42,39
	s=3,m=54	590.0	0.11	2.4	2.4	0.0	0.06	1.17	0.34	0.41	2d6/25 L=555 39,42,40
M_T= 29 Z=1080.0 P=3 P=37											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
249	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.25	0.16	0.12	2d6/30 L=310 43,39,43
	s=23,m=54	335.0	0.18	3.1	3.1	0.0	0.07	0.28	0.16	0.18	2d6/30 L=310 36,39,52
250	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.27	0.43	2.10	2d6/30 L=337 41,39,39
	s=23,m=54	362.5	0.18	3.1	3.1	2.3	0.07	0.48	0.46	2.27	2d6/30 L=337 11,39,39
251	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.44	0.29	0.47	2d6/30 L=333 41,9,9
	s=23,m=54	357.5	0.18	3.1	3.1	0.0	0.07	0.44	0.29	0.48	2d6/30 L=333 42,9,11
252	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.45	0.44	1.97	2d6/30 L=340 43,40,39
	s=23,m=54	365.0	0.18	3.1	3.1	2.3	0.07	0.28	0.43	1.84	2d6/30 L=340 43,40,39
M_T= 30 Z=1080.0 P=37 P=48											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
253	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.46	0.18	0.18	2d6/30 L=555 39,2,39
	s=23,m=54	590.0	0.18	3.1	3.1	0.0	0.07	0.45	0.18	0.22	2d6/30 L=555 40,40,40

254	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	0.37	0.61	2.84	2d6/30 L=273 37,44,44
	s=23,m=54	307.5	0.18	3.1	3.1	4.5	0.07	0.43	0.64	3.02	2d6/30 L=273 32,44,44
255	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.45	0.26	0.42	2d6/30 L=285 39,9,11
	s=23,m=54	320.0	0.18	3.1	3.1	0.0	0.07	0.41	0.25	0.40	2d6/30 L=285 32,9,9
256	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.38	0.24	0.40	2d6/30 L=282 37,11,11
	s=23,m=54	317.5	0.18	3.1	3.1	0.0	0.07	0.39	0.25	0.41	2d6/30 L=282 30,9,9
257	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.43	0.49	2.38	2d6/30 L=295 31,44,44
	s=23,m=54	330.0	0.18	3.1	3.1	2.3	0.07	0.58	0.49	2.37	2d6/30 L=295 32,43,43
258	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.54	0.13	0.22	2d6/30 L=435 39,39,39
	s=23,m=54	470.0	0.18	3.1	3.1	0.0	0.07	0.63	0.16	0.22	2d6/30 L=435 40,40,40
259	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.68	0.41	2.01	2d6/30 L=295 39,44,44
	s=23,m=54	330.0	0.18	3.1	3.1	2.3	0.07	0.59	0.38	1.85	2d6/30 L=295 40,44,43
260	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.57	0.30	0.45	2d6/30 L=282 31,39,47
	s=23,m=54	317.5	0.18	3.1	3.1	0.0	0.07	0.64	0.27	0.44	2d6/30 L=282 40,32,48
261	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.62	0.28	0.40	2d6/30 L=282 39,9,39
	s=23,m=54	317.5	0.18	3.1	3.1	0.0	0.07	0.52	0.31	0.43	2d6/30 L=282 40,9,40
262	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	0.43	0.64	3.02	2d6/30 L=275 37,44,44
	s=23,m=54	310.0	0.18	3.1	3.1	4.5	0.07	0.37	0.61	2.81	2d6/30 L=275 38,44,44
263	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.45	0.18	0.22	2d6/30 L=555 39,2,39
	s=23,m=54	590.0	0.18	3.1	3.1	0.0	0.07	0.46	0.18	0.18	2d6/30 L=555 40,2,40
M_T= 31 Z=1080.0 P=2 P=48											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
350	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.23	0.10	0.13	2d6/30 L=146 34,41,51
	s=23,m=54	171.0	0.18	3.1	3.1	0.0	0.07	0.10	0.12	0.17	2d6/30 L=146 36,36,52
266	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.21	0.19	0.13	2d6/30 L=140 41,40,42
	s=23,m=54	165.1	0.18	3.1	3.1	0.0	0.07	0.25	0.19	0.19	2d6/30 L=140 36,40,42
327	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.28	0.40	1.97	2d6/30 L=340 41,40,40
	s=23,m=54	365.0	0.18	3.1	3.1	2.3	0.07	0.46	0.42	2.09	2d6/30 L=340 9,40,40
265	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.42	0.29	0.47	2d6/30 L=333 33,9,9
	s=23,m=54	357.5	0.18	3.1	3.1	0.0	0.07	0.44	0.29	0.48	2d6/30 L=333 42,11,11
264	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.45	0.40	1.98	2d6/30 L=338 43,40,40
	s=23,m=54	362.5	0.18	3.1	3.1	2.3	0.07	0.28	0.37	1.84	2d6/30 L=338 43,40,40
M_T= 32 Z=1080.0 P=17 P=20											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
269	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.32	0.49	1.68	2d6/30 L=413 2,9,43
	s=23,m=54	425.0	0.18	3.1	3.1	2.3	0.07	1.24	0.75	2.68	2d6/30 L=413 9,9,43
303	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.99	0.52	2.40	2d6/30 L=407 39,42,43
	s=23,m=54	437.5	0.18	3.1	3.1	2.3	0.07	0.61	0.49	2.04	2d6/30 L=407 11,42,43
268	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.66	0.51	2.53	2d6/30 L=382 11,43,43
	s=23,m=54	412.5	0.18	3.1	3.1	2.3	0.07	0.55	0.51	2.51	2d6/30 L=382 38,43,43
267	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.65	0.23	0.35	2d6/30 L=560 39,9,39
	s=23,m=54	590.0	0.18	3.1	3.1	0.0	0.07	0.44	0.21	0.31	2d6/30 L=560 40,11,11
M_T= 33 Z=1080.0 P=10 P=17											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
270	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.36	0.45	1.15	2d6/30 L=133 44,44,47
	s=23,m=54	165.1	0.18	3.1	3.1	2.3	0.07	0.68	0.49	0.99	2d6/30 L=133 44,44,47
M_T= 34 Z=1080.0 P=5 P=12											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
280	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.49	0.37	1.71	2d6/30 L=377 39,35,51
	s=23,m=54	412.5	0.18	3.1	3.1	2.3	0.07	0.36	0.38	1.78	2d6/30 L=377 40,43,43
281	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.31	0.36	1.68	2d6/30 L=377 37,33,43
	s=23,m=54	412.5	0.18	3.1	3.1	2.3	0.07	0.43	0.34	1.58	2d6/30 L=377 40,43,44
273	ok,ok	0.0	0.18	3.1	3.1	6.8	0.07	0.38	1.03	4.70	2d6/30 L=415 31,2,2
	s=23,m=54	450.0	0.18	3.1	3.1	6.8	0.07	0.35	1.01	4.62	2d6/30 L=415 40,2,2
272	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.34	0.22	0.17	2d6/30 L=435 39,2,37
	s=23,m=54	470.0	0.18	3.1	3.1	0.0	0.07	0.27	0.21	0.15	2d6/30 L=435 30,2,46
271	ok,ok	0.0	0.18	3.1	3.1	6.8	0.07	0.28	0.94	4.25	2d6/30 L=390 39,2,2
	s=23,m=54	425.0	0.18	3.1	3.1	6.8	0.07	0.69	0.98	4.52	2d6/30 L=390 40,2,2
282	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.84	0.28	0.47	2d6/30 L=815 11,11,11
	s=23,m=54	850.0	0.18	3.1	3.1	0.0	0.07	0.92	0.29	0.48	2d6/30 L=815 9,9,9
324	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.94	0.35	0.56	2d6/30 L=555 39,11,9
	s=23,m=54	590.0	0.18	3.1	3.1	0.0	0.07	0.46	0.30	0.47	2d6/30 L=555 11,11,11
M_T= 35 Z=1080.0 P=7 P=16											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
274	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.45	0.38	0.42	2d6/30 L=135 44,44,44
	s=23,m=54	165.1	0.18	3.1	3.1	0.0	0.07	0.63	0.42	0.48	2d6/30 L=135 44,44,44
M_T= 36 Z=1080.0 P=13 P=16											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
277	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.51	0.33	0.49	2d6/30 L=555 11,11,11
	s=23,m=54	590.0	0.18	3.1	3.1	0.0	0.07	0.89	0.35	0.54	2d6/30 L=555 40,11,9
276	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	0.74	0.53	2.61	2d6/30 L=377 31,43,43
	s=23,m=54	412.5	0.18	3.1	3.1	4.5	0.07	0.65	0.53	2.58	2d6/30 L=377 11,43,43
275	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.56	0.42	2.07	2d6/30 L=377 11,43,43
	s=23,m=54	412.5	0.18	3.1	3.1	2.3	0.07	1.11	0.49	2.40	2d6/30 L=377 40,33,43
304	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	1.32	0.76	2.51	2d6/30 L=432 9,9,43
	s=23,m=54	450.0	0.18	3.1	3.1	2.3	0.07	0.33	0.50	1.59	2d6/30 L=432 2,9,43

Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif.	cmb
M_T= 37 Z=1080.0 P=3 P=4												
278	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.50	0.31	0.50	2d6/30 L=555	11,11,9
	s=23,m=54	590.0	0.18	3.1	3.1	0.0	0.07	0.58	0.32	0.52	2d6/30 L=555	11,11,11
M_T= 38 Z=1080.0 P=4 P=38												
279	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.24	0.38	1.75	2d6/30 L=145	34,40,40
	s=23,m=54	169.9	0.18	3.1	3.1	2.3	0.07	0.44	0.41	1.92	2d6/30 L=145	44,40,40
290	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.48	0.32	0.31	2d6/30 L=135	35,40,43
	s=23,m=54	165.1	0.18	3.1	3.1	0.0	0.07	0.49	0.28	0.25	2d6/30 L=135	44,40,43
291	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.56	0.41	0.64	2d6/30 L=495	9,9,11
	s=23,m=54	525.2	0.18	3.1	3.1	0.0	0.07	1.08	0.48	0.76	2d6/30 L=495	42,9,9
292	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	1.10	0.49	0.79	2d6/30 L=535	43,9,9
	s=23,m=54	559.8	0.18	3.1	3.1	0.0	0.07	0.68	0.44	0.70	2d6/30 L=535	11,11,11
M_T= 39 Z=1080.0 P=1 P=47												
351	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.28	0.32	1.46	2d6/30 L=146	42,40,40
	s=23,m=54	171.0	0.18	3.1	3.1	2.3	0.07	0.12	0.29	1.29	2d6/30 L=146	44,40,40
283	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.20	0.20	0.30	2d6/30 L=133	33,42,44
	s=23,m=54	165.1	0.18	3.1	3.1	0.0	0.07	0.63	0.24	0.36	2d6/30 L=133	44,42,44
293	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.59	0.40	0.64	2d6/30 L=493	43,9,11
	s=23,m=54	525.2	0.18	3.1	3.1	0.0	0.07	1.10	0.47	0.75	2d6/30 L=493	42,9,9
294	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	1.09	0.49	0.79	2d6/30 L=535	43,9,9
	s=23,m=54	559.8	0.18	3.1	3.1	0.0	0.07	0.68	0.44	0.70	2d6/30 L=535	11,11,11
M_T= 40 Z=1080.0 P=8 P=42												
284	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	1.17	1.02	5.16	2d6/30 L=153	11,2,2
	s=23,m=54	165.1	0.18	3.1	3.1	4.5	0.07	1.17	0.88	4.31	2d6/30 L=153	44,2,2
305	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	1.15	0.30	1.49	2d6/30 L=510	42,2,2
	s=23,m=54	525.2	0.18	3.1	3.1	2.3	0.07	1.37	0.63	3.02	2d6/30 L=510	9,1,2
285	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	1.11	0.30	1.12	2d6/30 L=255	43,39,40
	s=23,m=54	282.4	0.18	3.1	3.1	2.3	0.07	0.39	0.26	0.84	2d6/30 L=255	42,39,40
286	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.39	0.30	1.18	2d6/30 L=252	33,39,40
	s=23,m=54	277.4	0.18	3.1	3.1	2.3	0.07	0.66	0.27	0.90	2d6/30 L=252	44,39,40
M_T= 41 Z=1080.0 P=9 P=43												
289	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	1.16	0.99	4.95	2d6/30 L=153	11,2,2
	s=23,m=54	165.1	0.18	3.1	3.1	4.5	0.07	1.16	0.84	4.10	2d6/30 L=153	44,2,2
306	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	1.11	0.31	1.50	2d6/30 L=510	2,2,2
	s=23,m=54	525.2	0.18	3.1	3.1	2.3	0.07	1.29	0.62	3.03	2d6/30 L=510	9,1,2
288	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	1.19	0.28	1.08	2d6/30 L=255	41,40,39
	s=23,m=54	282.4	0.18	3.1	3.1	2.3	0.07	0.43	0.26	0.92	2d6/30 L=255	36,40,39
287	ok,ok	0.0	0.18	3.1	3.1	2.3	0.07	0.40	0.33	1.15	2d6/30 L=252	33,31,39
	s=23,m=54	277.4	0.18	3.1	3.1	2.3	0.07	0.72	0.26	0.88	2d6/30 L=252	44,31,39
M_T= 42 Z=1080.0 P=23 P=32												
295	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	0.56	0.60	2.86	2d6/30 L=272	31,43,43
	s=23,m=54	307.5	0.18	3.1	3.1	4.5	0.07	0.70	0.67	3.30	2d6/30 L=272	11,43,43
296	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.69	0.44	0.72	2d6/30 L=285	37,11,9
	s=23,m=54	320.0	0.18	3.1	3.1	0.0	0.07	0.56	0.42	0.70	2d6/30 L=285	40,11,11
297	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.53	0.43	0.69	2d6/30 L=282	37,11,11
	s=23,m=54	317.5	0.18	3.1	3.1	0.0	0.07	0.67	0.44	0.72	2d6/30 L=282	30,9,9
298	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	0.71	0.72	3.48	2d6/30 L=297	9,44,44
	s=23,m=54	330.0	0.18	3.1	3.1	4.5	0.07	0.57	0.70	3.37	2d6/30 L=297	40,44,44
299	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.54	0.18	0.22	2d6/30 L=440	39,43,39
	s=23,m=54	470.0	0.18	3.1	3.1	0.0	0.07	0.61	0.15	0.22	2d6/30 L=440	40,43,40
300	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	0.66	0.65	3.10	2d6/30 L=297	39,44,44
	s=23,m=54	330.0	0.18	3.1	3.1	4.5	0.07	0.84	0.71	3.50	2d6/30 L=297	40,44,44
301	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.86	0.45	0.69	2d6/30 L=282	39,9,39
	s=23,m=54	317.5	0.18	3.1	3.1	0.0	0.07	0.82	0.49	0.73	2d6/30 L=282	40,11,11
302	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.82	0.42	0.64	2d6/30 L=275	39,11,11
	s=23,m=54	310.0	0.18	3.1	3.1	0.0	0.07	0.81	0.48	0.74	2d6/30 L=275	40,11,9
363	ok,ok	0.0	0.18	3.1	3.1	4.5	0.07	0.77	0.69	3.34	2d6/30 L=283	31,43,43
	s=23,m=54	317.5	0.18	3.1	3.1	4.5	0.07	0.62	0.62	2.91	2d6/30 L=283	32,43,43
M_T= 54 Z=1080.0 P=1 P=2												
357	ok,ok	0.0	0.18	3.1	3.1	0.0	0.07	0.46	0.22	0.34	2d6/30 L=555	39,11,9
	s=23,m=54	590.0	0.18	3.1	3.1	0.0	0.07	0.35	0.21	0.33	2d6/30 L=555	40,11,11
M_T= 43 Z=1293.0 P=42 P=43												
307	ok,ok	0.0	0.31	3.1	3.1	0.0	0.12	0.52	0.15	0.21	2d6/30 L=435	39,39,39
	s=22,m=54	470.0	0.31	3.1	3.1	0.0	0.12	0.40	0.15	0.18	2d6/30 L=435	40,40,40
M_T= 44 Z=1410.2 P=27 P=42												
309	ok,ok	0.0	0.31	3.1	3.1	2.3	0.12	0.43	0.53	1.38	2d6/30 L=147	44,39,40
	s=22,m=54	161.3	0.31	3.1	3.1	2.3	0.12	0.23	0.35	0.98	2d6/30 L=147	39,39,40

308	ok,ok	0.0	0.31	3.1	3.1	2.3	0.12	0.23	0.49	1.16	2d6/30 L=128 39,31,39
	s=22,m=54	139.5	0.31	3.1	3.1	2.3	0.12	0.62	0.67	1.91	2d6/30 L=128 44,31,39
339	ok,ok	0.0	0.31	3.1	3.1	0.0	0.12	0.73	0.39	0.57	2d6/30 L=278 43,43,43
	s=22,m=54	301.3	0.31	3.1	3.1	0.0	0.12	0.40	0.29	0.43	2d6/30 L=278 36,42,9
M_T= 45 Z=1417.0 P=27 P=28											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
310	ok,ok	0.0	0.31	3.1	3.1	2.3	0.12	0.37	0.33	1.16	2d6/30 L=440 39,41,43
	s=22,m=54	470.0	0.31	3.1	3.1	2.3	0.12	0.38	0.30	0.97	2d6/30 L=440 40,41,43
M_T= 46 Z=1410.2 P=28 P=43											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
311	ok,ok	0.0	0.31	3.1	3.1	0.0	0.12	0.36	0.44	0.35	2d6/30 L=147 43,40,9
	s=22,m=54	161.3	0.31	3.1	3.1	0.0	0.12	0.77	0.48	0.33	2d6/30 L=147 43,39,44
312	ok,ok	0.0	0.31	3.1	3.1	2.3	0.12	0.72	0.47	1.21	2d6/30 L=128 43,31,40
	s=22,m=54	139.5	0.31	3.1	3.1	2.3	0.12	0.68	0.65	1.97	2d6/30 L=128 11,31,40
340	ok,ok	0.0	0.31	3.1	3.1	0.0	0.12	1.21	0.48	0.71	2d6/30 L=278 43,43,43
	s=22,m=54	301.3	0.31	3.1	3.1	0.0	0.12	0.71	0.36	0.45	2d6/30 L=278 43,42,42
M_T= 47 Z=1370.0 P=28 P=30											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
313	ok,ok	0.0	0.31	3.1	3.1	4.5	0.12	0.38	0.70	2.63	2d6/30 L=298 39,2,2
	s=22,m=54	330.0	0.31	3.1	3.1	4.5	0.12	0.34	0.72	2.73	2d6/30 L=298 32,2,2
341	ok,ok	0.0	0.31	3.1	3.1	2.3	0.12	0.37	0.38	1.49	2d6/30 L=282 39,2,39
	s=22,m=54	317.5	0.31	3.1	3.1	2.3	0.12	0.47	0.40	1.59	2d6/30 L=282 40,2,2
M_T= 48 Z=1405.0 P=30 P=45											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
314	ok,ok	0.0	0.31	3.1	3.1	0.0	0.12	0.87	0.46	0.73	2d6/30 L=539 9,9,9
	s=22,m=54	564.2	0.31	3.1	3.1	0.0	0.12	0.92	0.47	0.74	2d6/30 L=539 11,11,11
M_T= 49 Z=1440.0 P=43 P=45											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
315	ok,ok	0.0	0.31	3.1	3.1	2.3	0.12	0.43	0.53	2.05	2d6/30 L=295 39,2,2
	s=22,m=54	330.0	0.31	3.1	3.1	2.3	0.12	0.30	0.50	1.89	2d6/30 L=295 40,2,2
342	ok,ok	0.0	0.31	3.1	3.1	2.3	0.12	0.34	0.42	1.64	2d6/30 L=282 39,2,2
	s=22,m=54	317.5	0.31	3.1	3.1	2.3	0.12	0.43	0.41	1.60	2d6/30 L=282 40,2,40
M_T= 50 Z=1405.0 P=28 P=43											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
316	ok,ok	0.0	0.31	3.1	3.1	0.0	0.12	0.94	0.47	0.77	2d6/30 L=537 9,2,2
	s=22,m=54	564.2	0.31	3.1	3.1	0.0	0.12	0.94	0.47	0.75	2d6/30 L=537 11,11,11
Trave			%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	
			0.31	6.03	6.03	9.05	0.12	2.70	1.35	6.25	

TraveM	negativo i	M positivo i	M negativo f	M positivo f	Luce per V	V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As
	daN cm	daN cm	daN cm	daN cm	cm	daN	daN	daN	daN	daN	cm2
45	1.502e+06	1.502e+06	1.502e+06	1.502e+06	290.00	1.036e+04	1.036e+04	0.0	0.0	0.0	0.0
46	1.502e+06	1.502e+06	1.502e+06	1.502e+06	322.50	9317.13	9317.13	0.0	0.0	0.0	0.0
47	1.502e+06	1.502e+06	1.502e+06	1.502e+06	317.50	9463.86	9463.86	0.0	0.0	0.0	0.0
48	1.502e+06	1.502e+06	1.502e+06	1.502e+06	325.00	9245.46	9245.46	0.0	0.0	0.0	0.0
49	1.502e+06	1.502e+06	1.502e+06	1.502e+06	555.00	5414.01	5414.01	0.0	0.0	0.0	0.0
50	1.502e+06	1.502e+06	1.502e+06	1.502e+06	272.50	1.103e+04	1.103e+04	0.0	0.0	0.0	0.0
51	1.502e+06	1.502e+06	1.502e+06	1.502e+06	285.00	1.054e+04	1.054e+04	0.0	0.0	0.0	0.0
52	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0
53	1.502e+06	1.502e+06	1.502e+06	1.502e+06	295.00	1.019e+04	1.019e+04	0.0	0.0	0.0	0.0
54	1.502e+06	1.502e+06	1.502e+06	1.502e+06	435.00	6907.53	6907.53	0.0	0.0	0.0	0.0
55	1.502e+06	1.502e+06	1.502e+06	1.502e+06	295.00	1.019e+04	1.019e+04	0.0	0.0	0.0	0.0
56	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0
57	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0
58	1.502e+06	1.502e+06	1.502e+06	1.502e+06	275.00	1.093e+04	1.093e+04	0.0	0.0	0.0	0.0
59	1.502e+06	1.502e+06	1.502e+06	1.502e+06	555.00	5414.01	5414.01	0.0	0.0	0.0	0.0
60	1.507e+06	1.507e+06	1.507e+06	1.507e+06	322.50	9342.84	9342.84	0.0	0.0	0.0	0.0
61	1.507e+06	1.507e+06	1.507e+06	1.507e+06	317.50	9489.97	9489.97	0.0	0.0	0.0	0.0
62	1.507e+06	1.507e+06	1.507e+06	1.507e+06	125.11	2.408e+04	2.408e+04	0.0	0.0	0.0	0.0
63	1.502e+06	1.502e+06	1.502e+06	1.502e+06	555.00	5414.01	5414.01	0.0	0.0	0.0	0.0
64	1.502e+06	1.502e+06	1.502e+06	1.502e+06	377.50	7959.67	7959.67	0.0	0.0	0.0	0.0
65	1.502e+06	1.502e+06	1.502e+06	1.502e+06	407.50	7373.67	7373.67	0.0	0.0	0.0	0.0
67	1.502e+06	1.502e+06	1.502e+06	1.502e+06	390.00	7704.55	7704.55	0.0	0.0	0.0	0.0
68	1.502e+06	1.502e+06	1.502e+06	1.502e+06	435.00	6907.53	6907.53	0.0	0.0	0.0	0.0
69	1.502e+06	1.502e+06	1.502e+06	1.502e+06	415.00	7240.42	7240.42	0.0	0.0	0.0	0.0
71	1.502e+06	1.502e+06	1.502e+06	1.502e+06	377.50	7959.67	7959.67	0.0	0.0	0.0	0.0
72	1.502e+06	1.502e+06	1.502e+06	1.502e+06	377.50	7959.67	7959.67	0.0	0.0	0.0	0.0
73	1.502e+06	1.502e+06	1.502e+06	1.502e+06	555.00	5414.01	5414.01	0.0	0.0	0.0	0.0
74	1.502e+06	1.502e+06	1.502e+06	1.502e+06	555.00	5414.01	5414.01	0.0	0.0	0.0	0.0
75	1.502e+06	1.502e+06	1.502e+06	1.502e+06	119.89	2.506e+04	2.506e+04	0.0	0.0	0.0	0.0
76	1.502e+06	1.502e+06	1.502e+06	1.502e+06	377.50	7959.67	7959.67	0.0	0.0	0.0	0.0
77	1.502e+06	1.502e+06	1.502e+06	1.502e+06	377.50	7959.67	7959.67	0.0	0.0	0.0	0.0
78	1.502e+06	1.502e+06	1.502e+06	1.502e+06	817.50	3675.56	3675.56	0.0	0.0	0.0	0.0
79	1.502e+06	1.502e+06	1.502e+06	1.502e+06	120.11	2.502e+04	2.502e+04	0.0	0.0	0.0	0.0
81	1.502e+06	1.502e+06	1.502e+06	1.502e+06	242.42	1.239e+04	1.239e+04	0.0	0.0	0.0	0.0

82	1.502e+06	1.502e+06	1.502e+06	1.502e+06	237.42	1.266e+04	1.266e+04	0.0	0.0	0.0	0.0
83	1.502e+06	1.502e+06	1.502e+06	1.502e+06	237.42	1.266e+04	1.266e+04	0.0	0.0	0.0	0.0
84	1.502e+06	1.502e+06	1.502e+06	1.502e+06	242.42	1.239e+04	1.239e+04	0.0	0.0	0.0	0.0
86	1.502e+06	1.502e+06	1.502e+06	1.502e+06	120.11	2.502e+04	2.502e+04	0.0	0.0	0.0	0.0
87	1.502e+06	1.502e+06	1.502e+06	1.502e+06	485.15	6193.47	6193.47	0.0	0.0	0.0	0.0
88	1.502e+06	1.502e+06	1.502e+06	1.502e+06	519.85	5780.10	5780.10	0.0	0.0	0.0	0.0
89	1.502e+06	1.502e+06	1.502e+06	1.502e+06	485.15	6193.47	6193.47	0.0	0.0	0.0	0.0
90	1.502e+06	1.502e+06	1.502e+06	1.502e+06	519.85	5780.10	5780.10	0.0	0.0	0.0	0.0
91	1.502e+06	1.502e+06	1.502e+06	1.502e+06	272.50	1.103e+04	1.103e+04	0.0	0.0	0.0	0.0
92	1.502e+06	1.502e+06	1.502e+06	1.502e+06	285.00	1.054e+04	1.054e+04	0.0	0.0	0.0	0.0
93	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0
94	1.502e+06	1.502e+06	1.502e+06	1.502e+06	297.50	1.010e+04	1.010e+04	0.0	0.0	0.0	0.0
95	1.502e+06	1.502e+06	1.502e+06	1.502e+06	440.00	6829.03	6829.03	0.0	0.0	0.0	0.0
96	1.502e+06	1.502e+06	1.502e+06	1.502e+06	297.50	1.010e+04	1.010e+04	0.0	0.0	0.0	0.0
97	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0
98	1.502e+06	1.502e+06	1.502e+06	1.502e+06	275.00	1.093e+04	1.093e+04	0.0	0.0	0.0	0.0
99	1.502e+06	1.502e+06	1.502e+06	1.502e+06	402.50	7465.28	7465.28	0.0	0.0	0.0	0.0
100	1.502e+06	1.502e+06	1.502e+06	1.502e+06	432.50	6947.46	6947.46	0.0	0.0	0.0	0.0
101	1.502e+06	1.502e+06	1.502e+06	1.502e+06	505.15	5948.26	5948.26	0.0	0.0	0.0	0.0
102	1.502e+06	1.502e+06	1.502e+06	1.502e+06	505.15	5948.26	5948.26	0.0	0.0	0.0	0.0
147	5.955e+05	5.955e+05	5.955e+05	5.955e+05	310.00	3841.99	3841.99	0.0	0.0	0.0	0.0
148	5.955e+05	5.955e+05	5.955e+05	5.955e+05	337.50	3528.94	3528.94	0.0	0.0	0.0	0.0
149	5.955e+05	5.955e+05	5.955e+05	5.955e+05	332.50	3582.00	3582.00	0.0	0.0	0.0	0.0
150	5.955e+05	5.955e+05	5.955e+05	5.955e+05	340.00	3502.99	3502.99	0.0	0.0	0.0	0.0
151	5.955e+05	5.955e+05	5.955e+05	5.955e+05	555.00	2145.98	2145.98	0.0	0.0	0.0	0.0
152	5.955e+05	5.955e+05	5.955e+05	5.955e+05	272.50	4370.70	4370.70	0.0	0.0	0.0	0.0
153	5.955e+05	5.955e+05	5.955e+05	5.955e+05	285.00	4179.00	4179.00	0.0	0.0	0.0	0.0
154	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0
155	5.955e+05	5.955e+05	5.955e+05	5.955e+05	295.00	4037.34	4037.34	0.0	0.0	0.0	0.0
156	5.955e+05	5.955e+05	5.955e+05	5.955e+05	435.00	2737.97	2737.97	0.0	0.0	0.0	0.0
157	5.955e+05	5.955e+05	5.955e+05	5.955e+05	295.00	4037.34	4037.34	0.0	0.0	0.0	0.0
158	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0
159	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0
160	5.955e+05	5.955e+05	5.955e+05	5.955e+05	275.00	4330.97	4330.97	0.0	0.0	0.0	0.0
161	5.955e+05	5.955e+05	5.955e+05	5.955e+05	555.00	2145.98	2145.98	0.0	0.0	0.0	0.0
162	5.955e+05	5.955e+05	5.955e+05	5.955e+05	337.50	3528.94	3528.94	0.0	0.0	0.0	0.0
163	5.955e+05	5.955e+05	5.955e+05	5.955e+05	332.50	3582.00	3582.00	0.0	0.0	0.0	0.0
164	5.955e+05	5.955e+05	5.955e+05	5.955e+05	140.11	8500.35	8500.35	0.0	0.0	0.0	0.0
165	5.955e+05	5.955e+05	5.955e+05	5.955e+05	555.00	2145.98	2145.98	0.0	0.0	0.0	0.0
166	5.955e+05	5.955e+05	5.955e+05	5.955e+05	377.50	3155.01	3155.01	0.0	0.0	0.0	0.0
167	5.955e+05	5.955e+05	5.955e+05	5.955e+05	407.50	2922.74	2922.74	0.0	0.0	0.0	0.0
168	5.955e+05	5.955e+05	5.955e+05	5.955e+05	132.61	8981.07	8981.07	0.0	0.0	0.0	0.0
169	5.955e+05	5.955e+05	5.955e+05	5.955e+05	390.00	3053.89	3053.89	0.0	0.0	0.0	0.0
170	5.955e+05	5.955e+05	5.955e+05	5.955e+05	435.00	2737.97	2737.97	0.0	0.0	0.0	0.0
171	5.955e+05	5.955e+05	5.955e+05	5.955e+05	415.00	2869.92	2869.92	0.0	0.0	0.0	0.0
172	5.955e+05	5.955e+05	5.955e+05	5.955e+05	135.11	8814.90	8814.90	0.0	0.0	0.0	0.0
173	5.955e+05	5.955e+05	5.955e+05	5.955e+05	377.50	3155.01	3155.01	0.0	0.0	0.0	0.0
174	5.955e+05	5.955e+05	5.955e+05	5.955e+05	377.50	3155.01	3155.01	0.0	0.0	0.0	0.0
175	5.955e+05	5.955e+05	5.955e+05	5.955e+05	555.00	2145.98	2145.98	0.0	0.0	0.0	0.0
176	5.955e+05	5.955e+05	5.955e+05	5.955e+05	555.00	2145.98	2145.98	0.0	0.0	0.0	0.0
177	5.955e+05	5.955e+05	5.955e+05	5.955e+05	144.89	8220.37	8220.37	0.0	0.0	0.0	0.0
178	5.955e+05	5.955e+05	5.955e+05	5.955e+05	377.50	3155.01	3155.01	0.0	0.0	0.0	0.0
179	5.955e+05	5.955e+05	5.955e+05	5.955e+05	377.50	3155.01	3155.01	0.0	0.0	0.0	0.0
180	5.955e+05	5.955e+05	5.955e+05	5.955e+05	815.00	1461.37	1461.37	0.0	0.0	0.0	4.0
181	5.955e+05	5.955e+05	5.955e+05	5.955e+05	130.11	9153.64	9153.64	0.0	0.0	0.0	0.0
182	5.955e+05	5.955e+05	5.955e+05	5.955e+05	152.61	7804.11	7804.11	0.0	0.0	0.0	0.0
183	5.955e+05	5.955e+05	5.955e+05	5.955e+05	254.92	4672.04	4672.04	0.0	0.0	0.0	0.0
184	5.955e+05	5.955e+05	5.955e+05	5.955e+05	252.42	4718.32	4718.32	0.0	0.0	0.0	0.0
185	5.955e+05	5.955e+05	5.955e+05	5.955e+05	252.42	4718.32	4718.32	0.0	0.0	0.0	0.0
186	5.955e+05	5.955e+05	5.955e+05	5.955e+05	254.92	4672.04	4672.04	0.0	0.0	0.0	0.0
187	5.955e+05	5.955e+05	5.955e+05	5.955e+05	152.61	7804.11	7804.11	0.0	0.0	0.0	0.0
188	5.955e+05	5.955e+05	5.955e+05	5.955e+05	135.11	8814.90	8814.90	0.0	0.0	0.0	0.0
189	5.955e+05	5.955e+05	5.955e+05	5.955e+05	495.15	2405.35	2405.35	0.0	0.0	0.0	0.0
190	5.955e+05	5.955e+05	5.955e+05	5.955e+05	534.85	2226.83	2226.83	0.0	0.0	0.0	0.0
191	5.955e+05	5.955e+05	5.955e+05	5.955e+05	492.65	2417.56	2417.56	0.0	0.0	0.0	0.0
192	5.955e+05	5.955e+05	5.955e+05	5.955e+05	534.85	2226.83	2226.83	0.0	0.0	0.0	0.0
193	5.955e+05	5.955e+05	5.955e+05	5.955e+05	272.50	4370.70	4370.70	0.0	0.0	0.0	0.0
194	5.955e+05	5.955e+05	5.955e+05	5.955e+05	285.00	4179.00	4179.00	0.0	0.0	0.0	0.0
195	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0
196	5.955e+05	5.955e+05	5.955e+05	5.955e+05	297.50	4003.42	4003.42	0.0	0.0	0.0	0.0
197	5.955e+05	5.955e+05	5.955e+05	5.955e+05	440.00	2706.86	2706.86	0.0	0.0	0.0	0.0
198	5.955e+05	5.955e+05	5.955e+05	5.955e+05	297.50	4003.42	4003.42	0.0	0.0	0.0	0.0
199	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0
200	5.955e+05	5.955e+05	5.955e+05	5.955e+05	275.00	4330.97	4330.97	0.0	0.0	0.0	0.0
201	5.955e+05	5.955e+05	5.955e+05	5.955e+05	402.50	2959.05	2959.05	0.0	0.0	0.0	0.0
202	5.955e+05	5.955e+05	5.955e+05	5.955e+05	432.50	2753.80	2753.80	0.0	0.0	0.0	0.0

203	5.955e+05	5.955e+05	5.955e+05	5.955e+05	510.15	2334.63	2334.63	0.0	0.0	0.0	0.0
204	5.955e+05	5.955e+05	5.955e+05	5.955e+05	510.15	2334.63	2334.63	0.0	0.0	0.0	0.0
249	7.713e+05	7.713e+05	7.713e+05	7.713e+05	310.00	4976.24	4976.24	0.0	0.0	0.0	0.0
250	7.713e+05	7.713e+05	7.713e+05	7.713e+05	337.50	4570.77	4570.77	0.0	0.0	0.0	0.0
251	7.713e+05	7.713e+05	7.713e+05	7.713e+05	332.50	4639.50	4639.50	0.0	0.0	0.0	0.0
252	7.713e+05	7.713e+05	7.713e+05	7.713e+05	340.00	4537.16	4537.16	0.0	0.0	0.0	0.0
253	7.713e+05	7.713e+05	7.713e+05	7.713e+05	555.00	2779.52	2779.52	0.0	0.0	0.0	0.0
254	7.713e+05	7.713e+05	7.713e+05	7.713e+05	272.50	5661.04	5661.04	0.0	0.0	0.0	0.0
255	7.713e+05	7.713e+05	7.713e+05	7.713e+05	285.00	5412.75	5412.75	0.0	0.0	0.0	0.0
256	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0
257	7.713e+05	7.713e+05	7.713e+05	7.713e+05	295.00	5229.27	5229.27	0.0	0.0	0.0	0.0
258	7.713e+05	7.713e+05	7.713e+05	7.713e+05	435.00	3546.29	3546.29	0.0	0.0	0.0	0.0
259	7.713e+05	7.713e+05	7.713e+05	7.713e+05	295.00	5229.27	5229.27	0.0	0.0	0.0	0.0
260	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0
261	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0
262	7.713e+05	7.713e+05	7.713e+05	7.713e+05	275.00	5609.58	5609.58	0.0	0.0	0.0	0.0
263	7.713e+05	7.713e+05	7.713e+05	7.713e+05	555.00	2779.52	2779.52	0.0	0.0	0.0	0.0
264	7.713e+05	7.713e+05	7.713e+05	7.713e+05	337.50	4570.77	4570.77	0.0	0.0	0.0	0.0
265	7.713e+05	7.713e+05	7.713e+05	7.713e+05	332.50	4639.50	4639.50	0.0	0.0	0.0	0.0
266	7.713e+05	7.713e+05	7.713e+05	7.713e+05	140.11	1.101e+04	1.101e+04	0.0	0.0	0.0	0.0
267	7.713e+05	7.713e+05	7.713e+05	7.713e+05	560.00	2754.70	2754.70	0.0	0.0	0.0	0.0
268	7.713e+05	7.713e+05	7.713e+05	7.713e+05	382.50	4033.03	4033.03	0.0	0.0	0.0	0.0
269	7.713e+05	7.713e+05	7.713e+05	7.713e+05	412.50	3739.72	3739.72	0.0	0.0	0.0	0.0
270	7.713e+05	7.713e+05	7.713e+05	7.713e+05	132.61	1.163e+04	1.163e+04	0.0	0.0	0.0	0.0
271	7.713e+05	7.713e+05	7.713e+05	7.713e+05	390.00	3955.47	3955.47	0.0	0.0	0.0	0.0
272	7.713e+05	7.713e+05	7.713e+05	7.713e+05	435.00	3546.29	3546.29	0.0	0.0	0.0	0.0
273	7.713e+05	7.713e+05	7.713e+05	7.713e+05	415.00	3717.19	3717.19	0.0	0.0	0.0	0.0
274	7.713e+05	7.713e+05	7.713e+05	7.713e+05	135.11	1.142e+04	1.142e+04	0.0	0.0	0.0	0.0
275	7.713e+05	7.713e+05	7.713e+05	7.713e+05	377.50	4086.45	4086.45	0.0	0.0	0.0	0.0
276	7.713e+05	7.713e+05	7.713e+05	7.713e+05	377.50	4086.45	4086.45	0.0	0.0	0.0	0.0
277	7.713e+05	7.713e+05	7.713e+05	7.713e+05	555.00	2779.52	2779.52	0.0	0.0	0.0	0.0
278	7.713e+05	7.713e+05	7.713e+05	7.713e+05	555.00	2779.52	2779.52	0.0	0.0	0.0	0.0
279	7.713e+05	7.713e+05	7.713e+05	7.713e+05	144.89	1.065e+04	1.065e+04	0.0	0.0	0.0	0.0
280	7.713e+05	7.713e+05	7.713e+05	7.713e+05	377.50	4086.45	4086.45	0.0	0.0	0.0	0.0
281	7.713e+05	7.713e+05	7.713e+05	7.713e+05	377.50	4086.45	4086.45	0.0	0.0	0.0	0.0
282	7.713e+05	7.713e+05	7.713e+05	7.713e+05	815.00	1892.80	1892.80	0.0	0.0	0.0	0.0
283	7.713e+05	7.713e+05	7.713e+05	7.713e+05	132.61	1.163e+04	1.163e+04	0.0	0.0	0.0	0.0
284	7.713e+05	7.713e+05	7.713e+05	7.713e+05	152.61	1.011e+04	1.011e+04	0.0	0.0	0.0	0.0
285	7.713e+05	7.713e+05	7.713e+05	7.713e+05	254.92	6051.35	6051.35	0.0	0.0	0.0	0.0
286	7.713e+05	7.713e+05	7.713e+05	7.713e+05	252.42	6111.28	6111.28	0.0	0.0	0.0	0.0
287	7.713e+05	7.713e+05	7.713e+05	7.713e+05	252.42	6111.28	6111.28	0.0	0.0	0.0	0.0
288	7.713e+05	7.713e+05	7.713e+05	7.713e+05	254.92	6051.35	6051.35	0.0	0.0	0.0	0.0
289	7.713e+05	7.713e+05	7.713e+05	7.713e+05	152.61	1.011e+04	1.011e+04	0.0	0.0	0.0	0.0
290	7.713e+05	7.713e+05	7.713e+05	7.713e+05	135.11	1.142e+04	1.142e+04	0.0	0.0	0.0	0.0
291	7.713e+05	7.713e+05	7.713e+05	7.713e+05	495.15	3115.48	3115.48	0.0	0.0	0.0	0.0
292	7.713e+05	7.713e+05	7.713e+05	7.713e+05	534.85	2884.25	2884.25	0.0	0.0	0.0	0.0
293	7.713e+05	7.713e+05	7.713e+05	7.713e+05	492.65	3131.29	3131.29	0.0	0.0	0.0	0.0
294	7.713e+05	7.713e+05	7.713e+05	7.713e+05	534.85	2884.25	2884.25	0.0	0.0	0.0	0.0
295	7.713e+05	7.713e+05	7.713e+05	7.713e+05	272.50	5661.04	5661.04	0.0	0.0	0.0	0.0
296	7.713e+05	7.713e+05	7.713e+05	7.713e+05	285.00	5412.75	5412.75	0.0	0.0	0.0	0.0
297	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0
298	7.713e+05	7.713e+05	7.713e+05	7.713e+05	297.50	5185.32	5185.32	0.0	0.0	0.0	0.0
299	7.713e+05	7.713e+05	7.713e+05	7.713e+05	440.00	3505.99	3505.99	0.0	0.0	0.0	0.0
300	7.713e+05	7.713e+05	7.713e+05	7.713e+05	297.50	5185.32	5185.32	0.0	0.0	0.0	0.0
301	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0
302	7.713e+05	7.713e+05	7.713e+05	7.713e+05	275.00	5609.58	5609.58	0.0	0.0	0.0	0.0
303	7.713e+05	7.713e+05	7.713e+05	7.713e+05	407.50	3785.61	3785.61	0.0	0.0	0.0	0.0
304	7.713e+05	7.713e+05	7.713e+05	7.713e+05	432.50	3566.79	3566.79	0.0	0.0	0.0	0.0
305	7.713e+05	7.713e+05	7.713e+05	7.713e+05	510.15	3023.87	3023.87	0.0	0.0	0.0	0.0
306	7.713e+05	7.713e+05	7.713e+05	7.713e+05	510.15	3023.87	3023.87	0.0	0.0	0.0	0.0
307	4.099e+05	4.099e+05	4.099e+05	4.099e+05	435.00	1884.44	1884.44	0.0	0.0	0.0	0.0
308	4.099e+05	4.099e+05	4.099e+05	4.099e+05	274.96	2981.29	2981.29	0.0	0.0	0.0	0.0
309	4.099e+05	4.099e+05	4.099e+05	4.099e+05	274.96	2981.29	2981.29	0.0	0.0	0.0	0.0
310	4.099e+05	4.099e+05	4.099e+05	4.099e+05	440.00	1863.03	1863.03	0.0	0.0	0.0	0.0
311	4.099e+05	4.099e+05	4.099e+05	4.099e+05	274.96	2981.29	2981.29	0.0	0.0	0.0	0.0
312	4.099e+05	4.099e+05	4.099e+05	4.099e+05	274.96	2981.29	2981.29	0.0	0.0	0.0	0.0
313	4.099e+05	4.099e+05	4.099e+05	4.099e+05	297.50	2755.40	2755.40	0.0	0.0	0.0	0.0
314	4.099e+05	4.099e+05	4.099e+05	4.099e+05	539.40	1519.71	1519.71	0.0	0.0	0.0	0.0
315	4.099e+05	4.099e+05	4.099e+05	4.099e+05	295.00	2778.75	2778.75	0.0	0.0	0.0	0.0
316	4.099e+05	4.099e+05	4.099e+05	4.099e+05	536.92	1526.73	1526.73	0.0	0.0	0.0	0.0
320	1.502e+06	1.502e+06	1.502e+06	1.502e+06	557.50	5389.73	5389.73	0.0	0.0	0.0	0.0
322	5.955e+05	5.955e+05	5.955e+05	5.955e+05	555.00	2145.98	2145.98	0.0	0.0	0.0	0.0
324	7.713e+05	7.713e+05	7.713e+05	7.713e+05	555.00	2779.52	2779.52	0.0	0.0	0.0	0.0
325	1.507e+06	1.507e+06	1.507e+06	1.507e+06	325.00	9270.97	9270.97	0.0	0.0	0.0	0.0
326	5.955e+05	5.955e+05	5.955e+05	5.955e+05	340.00	3502.99	3502.99	0.0	0.0	0.0	0.0
327	7.713e+05	7.713e+05	7.713e+05	7.713e+05	340.00	4537.16	4537.16	0.0	0.0	0.0	0.0

339	4.099e+05	4.099e+05	4.099e+05	4.099e+05	278.29	2945.58	2945.58	0.0	0.0	0.0	0.0
340	4.099e+05	4.099e+05	4.099e+05	4.099e+05	278.29	2945.58	2945.58	0.0	0.0	0.0	0.0
341	4.099e+05	4.099e+05	4.099e+05	4.099e+05	282.50	2901.71	2901.71	0.0	0.0	0.0	0.0
342	4.099e+05	4.099e+05	4.099e+05	4.099e+05	282.50	2901.71	2901.71	0.0	0.0	0.0	0.0
344	1.507e+06	1.507e+06	1.507e+06	1.507e+06	131.00	2.300e+04	2.300e+04	0.0	0.0	0.0	0.0
347	5.955e+05	5.955e+05	5.955e+05	5.955e+05	146.00	8157.65	8157.65	0.0	0.0	0.0	0.0
348	5.955e+05	5.955e+05	5.955e+05	5.955e+05	141.00	8446.92	8446.92	0.0	0.0	0.0	0.0
350	7.713e+05	7.713e+05	7.713e+05	7.713e+05	146.00	1.057e+04	1.057e+04	0.0	0.0	0.0	0.0
351	7.713e+05	7.713e+05	7.713e+05	7.713e+05	146.00	1.057e+04	1.057e+04	0.0	0.0	0.0	0.0
353	1.502e+06	1.502e+06	1.502e+06	1.502e+06	557.50	5389.73	5389.73	0.0	0.0	0.0	0.0
355	5.955e+05	5.955e+05	5.955e+05	5.955e+05	555.00	2145.98	2145.98	0.0	0.0	0.0	0.0
357	7.713e+05	7.713e+05	7.713e+05	7.713e+05	555.00	2779.52	2779.52	0.0	0.0	0.0	0.0
361	1.502e+06	1.502e+06	1.502e+06	1.502e+06	282.50	1.064e+04	1.064e+04	0.0	0.0	0.0	0.0
362	5.955e+05	5.955e+05	5.955e+05	5.955e+05	282.50	4215.99	4215.99	0.0	0.0	0.0	0.0
363	7.713e+05	7.713e+05	7.713e+05	7.713e+05	282.50	5460.65	5460.65	0.0	0.0	0.0	0.0
TraveM negativo i M positivo iM negativo f M positivo f					V M-i M+f	V M+i M-f	VEd,min	VEd,max	Vr1	As	
1.507e+06 1.507e+06 1.507e+06 1.507e+06					2.506e+04	2.506e+04	0.0	0.0	0.0	0.0	

STATI LIMITE D' ESERCIZIO

LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

rRfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
rRfyk	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
rPfck	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
wR	apertura caratteristica delle fessure in combinazioni rare [mm]
wF	apertura caratteristica delle fessure in combinazioni frequenti [mm]
wP	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]
dR	massima deformazione in combinazioni rare
dF	massima deformazione in combinazioni frequenti
dP	massima deformazione in combinazioni quasi permanenti

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastr	rRfck	rRfyk	rPfck	per sezioni significative
travi	rRfck	rRfyk	rPfck	per sezioni significative
	wR	wF	wP	per sezioni significative
	dR	dF	dP	massimi in campata
setti e gusci	rRfck	rRfyk	rPfck	massimi nei nodi dell'elemento
	wR	wF	wP	massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).

Pilas.	Pos. cm	rRfck	rRfyk	rPfck	Rif. cmb	Pos. cm	rRfck	rRfyk	rPfck	Rif. cmb
1	0.0	0.27	0.06	0.33	25,25,61	360.0	0.25	0.05	0.31	25,25,61
2	0.0	0.25	0.05	0.30	25,25,61	360.0	0.22	0.05	0.26	25,25,61
3	0.0	0.43	0.09	0.52	25,25,61	360.0	0.52	0.11	0.62	25,25,61
4	0.0	0.54	0.12	0.64	25,25,61	360.0	0.56	0.12	0.67	25,25,61
5	0.0	0.17	0.04	0.22	28,28,61	360.0	0.15	0.03	0.19	28,28,61
6	0.0	0.27	0.06	0.33	25,25,61	360.0	0.31	0.06	0.39	25,25,61
7	0.0	0.27	0.06	0.33	25,25,61	360.0	0.31	0.06	0.38	25,25,61
8	0.0	0.43	0.09	0.51	25,25,61	360.0	0.52	0.11	0.62	25,25,61
9	0.0	0.53	0.11	0.63	25,25,61	360.0	0.55	0.12	0.65	25,25,61
10	0.0	0.27	0.06	0.33	25,25,61	360.0	0.24	0.05	0.29	25,25,61
11	0.0	0.24	0.05	0.30	25,25,61	360.0	0.22	0.05	0.26	25,25,61
12	0.0	0.23	0.05	0.28	25,25,61	360.0	0.21	0.04	0.25	25,25,61
13	0.0	0.35	0.08	0.42	25,25,61	360.0	0.33	0.07	0.39	25,25,61
14	0.0	0.28	0.06	0.34	25,25,61	360.0	0.26	0.06	0.31	25,25,61
15	0.0	0.29	0.06	0.36	25,25,61	360.0	0.28	0.06	0.33	25,25,61
16	0.0	0.39	0.08	0.47	25,25,61	360.0	0.37	0.08	0.44	25,25,61
17	0.0	0.38	0.08	0.45	25,25,61	360.0	0.37	0.08	0.44	25,25,61
18	0.0	0.23	0.05	0.29	25,25,61	360.0	0.22	0.05	0.27	25,25,61
19	0.0	0.26	0.06	0.33	25,25,61	360.0	0.25	0.05	0.31	25,25,61
20	0.0	0.63	0.13	0.75	25,25,61	360.0	0.79	0.16	0.94	25,25,61
21	0.0	0.65	0.14	0.78	25,25,61	360.0	0.82	0.17	0.97	25,25,61
22	0.0	0.16	0.04	0.21	28,28,61	360.0	0.14	0.03	0.18	28,28,61
23	0.0	0.40	0.09	0.48	25,25,61	360.0	0.37	0.08	0.45	25,25,61
24	0.0	0.24	0.05	0.29	25,25,61	360.0	0.22	0.05	0.26	25,25,61
25	0.0	0.45	0.10	0.54	25,25,61	360.0	0.44	0.09	0.52	25,25,61
26	0.0	0.29	0.06	0.36	25,25,61	360.0	0.28	0.06	0.34	25,25,61
27	0.0	0.30	0.06	0.36	25,25,61	360.0	0.37	0.08	0.45	25,25,61
28	0.0	0.47	0.10	0.56	25,25,61	360.0	0.55	0.11	0.65	25,25,61
29	0.0	0.26	0.06	0.32	25,25,61	360.0	0.28	0.06	0.35	25,25,61
30	0.0	0.33	0.07	0.39	25,25,61	360.0	0.31	0.07	0.37	25,25,61
31	0.0	0.42	0.09	0.51	25,25,61	360.0	0.49	0.10	0.58	25,25,61
32	0.0	0.27	0.06	0.33	25,25,61	360.0	0.33	0.07	0.41	25,25,61
33	0.0	0.55	0.11	0.66	25,25,61	360.0	0.81	0.16	0.95	25,25,61
34	0.0	0.57	0.12	0.69	25,25,61	360.0	0.84	0.17	0.98	25,25,61
35	0.0	0.20	0.04	0.25	25,25,61	360.0	0.21	0.05	0.26	25,25,61
36	0.0	0.32	0.07	0.39	25,25,61	360.0	0.38	0.08	0.44	25,25,61
37	0.0	0.24	0.05	0.28	25,25,61	360.0	0.22	0.05	0.26	25,25,61
38	0.0	0.16	0.03	0.20	25,25,61	360.0	0.14	0.03	0.17	25,25,61
39	0.0	0.21	0.04	0.26	25,25,61	360.0	0.26	0.05	0.31	25,25,61
40	0.0	0.18	0.04	0.22	25,25,61	360.0	0.20	0.04	0.25	25,25,61
41	0.0	0.48	0.10	0.58	25,25,61	360.0	0.58	0.12	0.70	25,25,61
42	0.0	0.24	0.05	0.29	25,25,61	360.0	0.30	0.06	0.37	25,25,61
43	0.0	0.36	0.08	0.44	25,25,61	360.0	0.45	0.09	0.54	25,25,61
44	0.0	0.29	0.06	0.35	25,25,61	360.0	0.27	0.06	0.32	25,25,61
103	0.0	0.24	0.05	0.30	25,25,61	360.0	0.22	0.05	0.27	25,25,61
104	0.0	0.21	0.04	0.26	25,25,61	360.0	0.18	0.04	0.22	25,25,61
105	0.0	0.54	0.11	0.64	25,25,61	360.0	0.55	0.11	0.64	24,24,61
106	0.0	0.49	0.10	0.58	25,25,61	360.0	0.45	0.10	0.53	25,25,61
107	0.0	0.22	0.05	0.28	28,28,61	360.0	0.22	0.04	0.27	28,28,61
108	0.0	0.35	0.07	0.44	25,25,61	360.0	0.35	0.07	0.42	25,25,61
109	0.0	0.36	0.07	0.44	25,25,61	360.0	0.35	0.07	0.42	25,25,61
110	0.0	0.54	0.11	0.64	25,25,61	360.0	0.55	0.11	0.63	24,24,61
111	0.0	0.47	0.10	0.56	25,25,61	360.0	0.44	0.09	0.52	25,25,61
112	0.0	0.22	0.05	0.27	25,25,61	360.0	0.20	0.04	0.24	25,25,61
113	0.0	0.21	0.04	0.25	25,25,61	360.0	0.18	0.04	0.22	25,25,61
114	0.0	0.18	0.04	0.22	25,25,61	360.0	0.16	0.03	0.19	25,25,61
115	0.0	0.28	0.06	0.33	25,25,61	360.0	0.25	0.05	0.30	25,25,61
116	0.0	0.22	0.05	0.27	25,25,61	360.0	0.20	0.04	0.25	25,25,61
117	0.0	0.24	0.05	0.30	25,25,61	360.0	0.22	0.05	0.27	25,25,61
118	0.0	0.35	0.07	0.42	25,25,61	360.0	0.32	0.07	0.38	25,25,61
119	0.0	0.32	0.07	0.39	25,25,61	360.0	0.30	0.07	0.36	25,25,61
120	0.0	0.24	0.05	0.29	25,25,61	360.0	0.20	0.04	0.24	25,25,61
121	0.0	0.28	0.06	0.35	25,25,61	360.0	0.25	0.05	0.31	25,25,61
122	0.0	0.87	0.18	1.03	25,25,61	360.0	0.87	0.17	1.01	25,25,61
123	0.0	0.91	0.18	1.08	25,25,61	360.0	0.91	0.18	1.07	25,25,61
124	0.0	0.21	0.04	0.26	25,28,61	360.0	0.20	0.04	0.25	28,28,61
125	0.0	0.33	0.07	0.40	25,25,61	360.0	0.33	0.07	0.40	25,25,61
126	0.0	0.19	0.04	0.24	25,25,61	360.0	0.17	0.04	0.20	25,25,61
127	0.0	0.40	0.09	0.49	25,25,61	360.0	0.39	0.08	0.47	28,28,61
128	0.0	0.27	0.06	0.33	25,25,61	360.0	0.24	0.05	0.30	28,28,61
129	0.0	0.38	0.08	0.46	25,25,61	360.0	0.36	0.07	0.44	25,25,61
130	0.0	0.49	0.10	0.58	25,25,61	360.0	0.50	0.10	0.58	25,25,61
131	0.0	0.28	0.06	0.36	25,25,61	360.0	0.29	0.06	0.37	25,25,61

132	0.0	0.26	0.06	0.32	25,25,61	360.0	0.25	0.05	0.30	25,25,61
133	0.0	0.47	0.10	0.56	25,25,61	360.0	0.47	0.10	0.56	25,25,61
134	0.0	0.38	0.08	0.46	25,25,61	360.0	0.37	0.08	0.45	25,25,61
135	0.0	0.96	0.18	1.10	24,24,61	360.0	1.10	0.23	1.22	24,24,61
136	0.0	0.99	0.19	1.12	24,24,61	360.0	1.11	0.22	1.22	24,24,61
137	0.0	0.21	0.04	0.26	25,25,61	360.0	0.23	0.05	0.28	25,25,61
138	0.0	0.48	0.10	0.58	25,25,61	360.0	0.49	0.10	0.58	25,25,61
139	0.0	0.27	0.06	0.33	25,25,61	360.0	0.26	0.06	0.31	25,25,61
140	0.0	0.13	0.03	0.16	25,25,61	360.0	0.11	0.02	0.14	25,25,61
141	0.0	0.41	0.08	0.47	24,24,61	360.0	0.38	0.07	0.41	24,24,61
142	0.0	0.23	0.05	0.29	25,25,61	360.0	0.24	0.05	0.29	25,25,61
143	0.0	0.55	0.11	0.66	25,25,61	360.0	0.54	0.11	0.65	25,25,61
144	0.0	0.39	0.08	0.47	24,24,61	360.0	0.39	0.08	0.45	24,24,61
145	0.0	0.48	0.10	0.58	25,25,61	360.0	0.46	0.09	0.54	25,25,61
146	0.0	0.25	0.05	0.30	25,25,61	360.0	0.23	0.05	0.27	25,25,61
205	0.0	0.17	0.04	0.21	28,28,61	360.0	0.22	0.04	0.26	26,26,60
206	0.0	0.12	0.02	0.14	28,28,61	360.0	0.10	0.02	0.11	28,28,61
207	0.0	1.00	0.58	1.18	25,24,61	360.0	1.30	1.00	1.58	28,28,61
208	0.0	0.26	0.06	0.31	28,28,61	360.0	0.27	0.06	0.30	26,26,60
209	0.0	0.21	0.04	0.26	28,28,61	360.0	0.19	0.04	0.23	25,25,61
210	0.0	0.62	0.21	0.72	25,24,61	360.0	0.97	0.51	1.20	25,25,61
211	0.0	0.65	0.22	0.75	25,24,61	360.0	1.00	0.53	1.23	25,25,61
212	0.0	1.00	0.59	1.18	25,24,61	360.0	1.29	1.01	1.57	28,28,61
213	0.0	0.26	0.05	0.31	28,28,61	360.0	0.25	0.05	0.28	26,26,61
214	0.0	0.12	0.03	0.15	28,28,61	360.0	0.10	0.02	0.12	28,28,61
215	0.0	0.12	0.03	0.15	28,28,61	360.0	0.12	0.02	0.14	28,28,61
216	0.0	0.09	0.02	0.11	26,26,60	360.0	0.07	0.01	0.08	28,28,61
217	0.0	0.14	0.03	0.16	26,26,60	360.0	0.11	0.02	0.13	26,26,60
218	0.0	0.12	0.03	0.14	28,28,61	360.0	0.10	0.02	0.12	28,28,61
219	0.0	0.14	0.03	0.17	28,28,61	360.0	0.13	0.03	0.15	28,28,61
220	0.0	0.22	0.05	0.26	28,28,61	360.0	0.21	0.04	0.24	28,28,61
221	0.0	0.19	0.04	0.23	28,28,61	360.0	0.18	0.04	0.21	28,28,61
222	0.0	0.17	0.04	0.21	28,28,61	360.0	0.17	0.04	0.20	28,28,61
223	0.0	0.20	0.04	0.25	28,28,61	360.0	0.18	0.04	0.21	28,28,61
224	0.0	1.46	0.63	1.62	25,24,61	360.0	1.58	0.81	1.85	25,25,61
225	0.0	1.40	0.47	1.55	25,24,61	360.0	1.63	0.68	1.90	25,25,61
226	0.0	0.21	0.04	0.26	28,28,61	360.0	0.20	0.04	0.24	25,25,61
227	0.0	0.22	0.05	0.27	28,28,61	360.0	0.26	0.05	0.31	28,28,61
228	0.0	0.11	0.02	0.13	26,26,60	360.0	0.09	0.02	0.10	26,26,60
229	0.0	0.32	0.07	0.38	28,28,61	360.0	0.41	0.08	0.48	28,28,61
230	0.0	0.19	0.04	0.23	26,26,60	360.0	0.27	0.05	0.31	26,26,60
231	0.0	0.47	0.10	0.55	24,24,61	360.0	0.79	0.33	0.97	25,25,61
232	0.0	0.43	0.08	0.49	25,25,61	360.0	0.49	0.10	0.56	25,24,61
233	0.0	0.22	0.04	0.28	25,25,61	360.0	0.23	0.05	0.28	25,25,61
234	0.0	0.15	0.03	0.17	28,28,61	360.0	0.14	0.03	0.16	28,28,61
235	0.0	0.40	0.08	0.47	25,25,61	360.0	0.53	0.10	0.62	25,28,61
236	0.0	0.42	0.08	0.51	25,25,61	360.0	0.65	0.20	0.80	28,28,61
237	0.0	2.09	1.77	2.48	25,25,61	360.0	2.65	2.58	3.14	28,28,61
238	0.0	2.01	1.72	2.36	25,25,61	360.0	2.50	2.50	2.96	28,28,61
239	0.0	0.20	0.04	0.23	25,25,61	360.0	0.28	0.05	0.32	25,25,61
240	0.0	0.47	0.09	0.53	24,25,61	360.0	0.71	0.23	0.84	25,25,61
241	0.0	0.16	0.03	0.19	28,28,61	360.0	0.16	0.03	0.18	28,28,61
242	0.0	0.08	0.02	0.09	28,28,61	360.0	0.07	0.01	0.08	28,28,61
243	0.0	0.81	0.56	0.96	25,25,61	360.0	1.08	1.06	1.28	28,28,61
244	0.0	0.19	0.04	0.23	25,25,61	360.0	0.23	0.04	0.28	25,25,61
245	0.0	0.76	0.25	0.84	24,24,61	360.0	1.00	0.49	1.19	25,24,61
246	0.0	0.65	0.35	0.77	25,24,61	360.0	0.99	0.86	1.20	28,28,61
247	0.0	0.62	0.18	0.71	24,24,61	360.0	1.00	0.51	1.18	28,28,61
248	0.0	0.15	0.03	0.18	28,28,61	360.0	0.14	0.03	0.17	28,28,61
317	0.0	0.18	0.03	0.19	26,26,60	147.0	1.33	1.25	1.56	28,28,61
319	0.0	0.25	0.05	0.31	25,25,61	360.0	0.29	0.06	0.36	25,25,61
321	0.0	0.35	0.07	0.41	25,25,61	360.0	0.34	0.07	0.39	24,24,61
323	0.0	0.56	0.30	0.66	25,24,61	360.0	0.83	0.72	0.99	28,28,61
328	0.0	0.66	0.39	0.70	26,28,60	337.0	0.22	0.07	0.26	26,26,60
329	0.0	0.25	0.05	0.27	26,26,60	290.0	0.99	0.76	1.14	26,26,60
330	0.0	0.11	0.02	0.13	24,24,61	47.0	0.20	0.07	0.25	24,24,61
331	0.0	0.16	0.03	0.18	26,26,60	360.0	1.12	1.22	1.30	28,28,61
332	0.0	0.13	0.03	0.16	25,28,61	330.6	0.14	0.03	0.17	28,28,61
333	0.0	0.15	0.03	0.18	24,25,61	213.0	0.38	0.15	0.46	26,26,60
334	0.0	0.19	0.04	0.21	26,26,60	213.0	0.42	0.13	0.47	26,26,60
335	0.0	0.09	0.02	0.10	26,26,60	330.6	0.08	0.02	0.10	28,28,61
336	0.0	0.31	0.06	0.35	28,28,61	290.0	1.28	1.18	1.50	26,26,60
337	0.0	0.52	0.11	0.58	28,28,61	290.0	2.11	2.08	2.42	26,26,60
338	0.0	0.27	0.05	0.31	28,28,61	360.0	1.95	1.99	2.23	28,28,61
343	0.0	0.17	0.04	0.22	25,25,61	360.0	0.23	0.05	0.29	25,25,61
346	0.0	0.29	0.06	0.36	24,24,61	360.0	0.28	0.06	0.34	24,24,61

349	0.0	0.59	0.25	0.71	25,25,61	360.0	0.92	0.63	1.13	28,28,61
352	0.0	0.20	0.04	0.25	25,25,61	360.0	0.23	0.05	0.29	25,25,61
354	0.0	0.26	0.05	0.32	25,25,61	360.0	0.25	0.05	0.30	24,24,61
356	0.0	0.38	0.18	0.45	25,24,61	360.0	0.63	0.58	0.77	28,28,61
358	0.0	0.39	0.08	0.46	25,25,61	360.0	0.38	0.08	0.45	25,25,61
359	0.0	0.34	0.07	0.41	25,25,61	360.0	0.31	0.07	0.37	25,25,61
360	0.0	0.19	0.04	0.23	28,28,61	360.0	0.18	0.04	0.21	28,28,61

Pilas.		rRfck	rRfyk	rPfck		rRfck	rRfyk	rPfck		
		2.65	2.58	3.14						

Trave	Pos. cm	rRfck	rRfyk	rPfck	Rif. cmb	wR mm	wF mm	wP mm	Rif. cmb	dR cm	dF cm	dP cm	Rif. cmb
45	0.0	0.03	0.03	0.04	26,26,60	0.0	0.0	0.0	0,0,0	-0.01	-9.39e-03	-9.16e-03	25,54,61
	335.0	0.07	0.07	0.08	24,24,61	0.0	0.0	0.0	0,0,0				
46	0.0	0.15	0.16	0.17	24,24,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	25,54,61
	362.5	0.25	0.26	0.29	25,25,61	0.0	0.0	0.0	0,0,0				
47	0.0	0.20	0.21	0.23	24,24,61	0.0	0.0	0.0	0,0,0	-0.01	-9.67e-03	-9.32e-03	24,54,61
	357.5	0.23	0.23	0.26	25,25,61	0.0	0.0	0.0	0,0,0				
48	0.0	0.21	0.22	0.24	24,24,61	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-0.01	24,54,61
	365.0	0.19	0.19	0.22	25,25,61	0.0	0.0	0.0	0,0,0				
49	0.0	0.10	0.10	0.13	28,28,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	590.0	0.11	0.11	0.14	24,24,61	0.0	0.0	0.0	0,0,0				
50	0.0	0.11	0.12	0.13	24,24,61	0.0	0.0	0.0	0,0,0	-6.88e-03	6.48e-03	6.38e-03	25,54,61
	307.5	0.18	0.19	0.21	25,25,61	0.0	0.0	0.0	0,0,0				
51	0.0	0.17	0.17	0.19	25,24,61	0.0	0.0	0.0	0,0,0	-7.26e-03	-6.56e-03	-6.33e-03	24,54,61
	320.0	0.16	0.17	0.18	25,24,61	0.0	0.0	0.0	0,0,0				
52	0.0	0.16	0.17	0.19	25,24,61	0.0	0.0	0.0	0,0,0	-7.05e-03	-6.37e-03	-6.14e-03	25,54,61
	317.5	0.16	0.17	0.19	24,24,61	0.0	0.0	0.0	0,0,0				
53	0.0	0.17	0.18	0.20	24,24,61	0.0	0.0	0.0	0,0,0	-9.68e-03	-8.66e-03	-8.33e-03	24,54,61
	330.0	0.15	0.16	0.17	25,25,61	0.0	0.0	0.0	0,0,0				
54	0.0	0.09	0.09	0.11	25,25,61	0.0	0.0	0.0	0,0,0	-3.98e-03	-4.01e-03	-4.02e-03	26,55,60
	470.0	0.08	0.08	0.10	24,24,61	0.0	0.0	0.0	0,0,0				
55	0.0	0.16	0.17	0.18	25,25,61	0.0	0.0	0.0	0,0,0	-9.83e-03	-8.81e-03	-8.47e-03	25,54,61
	330.0	0.16	0.17	0.19	24,24,61	0.0	0.0	0.0	0,0,0				
56	0.0	0.15	0.16	0.18	24,24,61	0.0	0.0	0.0	0,0,0	-7.28e-03	-6.60e-03	-6.37e-03	24,54,61
	317.5	0.16	0.17	0.19	25,25,61	0.0	0.0	0.0	0,0,0				
57	0.0	0.15	0.16	0.17	24,24,61	0.0	0.0	0.0	0,0,0	-6.93e-03	-6.26e-03	-6.03e-03	24,54,61
	317.5	0.17	0.18	0.20	25,25,61	0.0	0.0	0.0	0,0,0				
58	0.0	0.18	0.19	0.21	25,25,61	0.0	0.0	0.0	0,0,0	-7.04e-03	-6.23e-03	-6.07e-03	25,54,61
	310.0	0.11	0.12	0.13	24,24,61	0.0	0.0	0.0	0,0,0				
59	0.0	0.11	0.11	0.14	24,24,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	22,53,60
	590.0	0.10	0.10	0.13	28,28,61	0.0	0.0	0.0	0,0,0				
60	0.0	0.19	0.22	0.22	24,24,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	24,54,61
	362.5	0.16	0.19	0.19	25,25,61	0.0	0.0	0.0	0,0,0				
61	0.0	0.18	0.22	0.22	24,24,61	0.0	0.0	0.0	0,0,0	-8.97e-03	-8.13e-03	-7.85e-03	25,54,61
	357.5	0.21	0.25	0.25	25,25,61	0.0	0.0	0.0	0,0,0				
62	0.0	0.01	0.02	0.02	26,28,60	0.0	0.0	0.0	0,0,0	-5.71e-03	-5.18e-03	-5.04e-03	25,54,61
	165.1	0.06	0.08	0.07	24,24,61	0.0	0.0	0.0	0,0,0				
63	0.0	0.25	0.27	0.31	24,24,61	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	24,54,61
	590.0	0.20	0.21	0.24	25,25,61	0.0	0.0	0.0	0,0,0				
64	0.0	0.34	0.36	0.39	24,25,61	0.09	0.09	0.09	25,54,61	-0.02	-0.02	-0.02	25,54,61
	412.5	0.28	0.30	0.33	24,24,61	0.07	0.07	0.0	24,54,0				
65	0.0	1.47e-03	0.01	1.96e-03	22,25,60	0.0	0.0	0.0	0,0,0	0.09	0.09	0.08	25,54,61
	425.0	0.64	0.67	0.74	25,25,61	0.21	0.20	0.19	25,54,61				
67	0.0	0.05	0.06	0.07	24,24,61	0.0	0.0	0.0	0,0,0	0.01	0.01	0.01	25,54,61
	425.0	0.23	0.25	0.28	25,25,61	0.0	0.0	0.0	0,0,0				
68	0.0	0.08	0.09	0.10	24,25,61	0.0	0.0	0.0	0,0,0	-5.95e-03	-5.93e-03	-5.93e-03	26,55,60
	470.0	0.06	0.07	0.08	24,25,61	0.0	0.0	0.0	0,0,0				
69	0.0	0.17	0.18	0.20	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-0.01	25,54,61
	450.0	0.09	0.10	0.12	24,24,61	0.0	0.0	0.0	0,0,0				
71	0.0	0.30	0.31	0.35	25,25,61	0.07	0.08	0.07	25,54,61	-0.01	-0.01	-0.01	24,54,61
	412.5	0.39	0.41	0.46	24,25,61	0.11	0.11	0.10	25,54,61				
72	0.0	0.30	0.31	0.35	24,24,61	0.08	0.08	0.07	24,54,61	-0.02	-0.02	-0.02	25,54,61
	412.5	0.34	0.36	0.39	25,25,61	0.09	0.09	0.09	25,54,61				
73	0.0	0.31	0.32	0.36	25,25,61	0.08	0.08	0.08	25,54,61	-0.06	-0.05	-0.05	25,54,61
	590.0	0.38	0.40	0.44	24,24,61	0.11	0.11	0.10	24,54,61				
74	0.0	0.32	0.34	0.38	25,24,61	0.08	0.09	0.08	24,54,61	-0.06	-0.06	-0.06	25,54,61
	590.0	0.33	0.35	0.39	24,24,61	0.09	0.09	0.09	24,54,61				
75	0.0	0.01	0.01	0.01	25,25,61	0.0	0.0	0.0	0,0,0	-2.20e-03	-2.05e-03	-2.02e-03	28,57,61
	169.9	0.06	0.07	0.08	25,25,61	0.0	0.0	0.0	0,0,0				
76	0.0	0.09	0.10	0.11	25,25,61	0.0	0.0	0.0	0,0,0	-9.32e-03	-8.72e-03	-8.51e-03	24,54,61
	412.5	0.12	0.13	0.15	24,25,61	0.0	0.0	0.0	0,0,0				
77	0.0	0.12	0.13	0.14	25,25,61	0.0	0.0	0.0	0,0,0	-6.48e-03	-6.09e-03	-5.95e-03	25,54,61
	412.5	0.13	0.13	0.15	24,25,61	0.0	0.0	0.0	0,0,0				
78	0.0	0.46	0.49	0.56	24,25,61	0.14	0.14	0.14	25,54,61	-0.15	-0.10	-0.09	24,54,61

	850.0	0.50	0.53	0.61	25,25,61	0.15	0.15	0.15	25,54,61				
79	0.0	0.05	0.06	0.06	25,25,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	25,54,61
	165.1	0.08	0.09	0.10	24,24,61	0.0	0.0	0.0	0,0,0				
81	0.0	0.15	0.16	0.17	24,24,61	0.0	0.0	0.0	0,0,0	0.03	0.02	0.02	25,54,61
	282.4	0.07	0.08	0.09	25,25,61	0.0	0.0	0.0	0,0,0				
82	0.0	0.04	0.04	0.05	28,28,61	0.0	0.0	0.0	0,0,0	-5.14e-03	-4.69e-03	-4.55e-03	25,54,61
	277.4	0.02	0.02	0.02	24,24,61	0.0	0.0	0.0	0,0,0				
83	0.0	0.05	0.05	0.06	28,28,61	0.0	0.0	0.0	0,0,0	-6.92e-03	-6.39e-03	-6.24e-03	25,54,61
	277.4	8.83e-03	9.07e-03	0.01	24,24,61	0.0	0.0	0.0	0,0,0				
84	0.0	0.14	0.15	0.16	24,24,61	0.0	0.0	0.0	0,0,0	0.03	0.02	0.02	25,54,61
	282.4	0.08	0.09	0.10	28,25,61	0.0	0.0	0.0	0,0,0				
86	0.0	0.14	0.15	0.17	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	165.1	0.02	0.02	0.02	24,24,61	0.0	0.0	0.0	0,0,0				
87	0.0	0.34	0.36	0.40	24,24,61	0.09	0.09	0.09	24,54,61	-0.05	-0.04	-0.04	25,54,61
	525.2	0.51	0.53	0.59	25,25,61	0.16	0.15	0.14	25,54,61				
88	0.0	0.52	0.54	0.61	24,24,61	0.16	0.15	0.15	24,54,61	-0.13	-0.11	-0.05	24,54,61
	559.8	0.44	0.45	0.51	25,25,61	0.13	0.12	0.12	25,54,61				
89	0.0	0.36	0.37	0.41	24,24,61	0.10	0.10	0.09	24,54,61	-0.05	-0.04	-0.04	25,54,61
	525.2	0.50	0.53	0.59	24,24,61	0.15	0.15	0.14	24,54,61				
90	0.0	0.52	0.54	0.60	24,24,61	0.16	0.15	0.15	24,54,61	-0.13	-0.11	-0.05	24,54,61
	559.8	0.44	0.46	0.51	25,25,61	0.13	0.12	0.12	25,54,61				
91	0.0	0.14	0.15	0.15	24,24,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	25,54,61
	307.5	0.33	0.35	0.38	25,25,61	0.09	0.09	0.08	25,54,61				
92	0.0	0.29	0.31	0.34	25,25,61	0.07	0.07	0.0	25,54,0	-0.01	-0.01	-0.01	24,54,61
	320.0	0.28	0.29	0.32	25,25,61	0.07	0.0	0.0	25,0,0				
93	0.0	0.28	0.29	0.32	25,25,61	0.07	0.0	0.0	25,0,0	-0.01	-0.01	-0.01	25,54,61
	317.5	0.29	0.30	0.33	24,24,61	0.07	0.07	0.0	24,54,0				
94	0.0	0.34	0.36	0.39	25,25,61	0.09	0.09	0.09	25,54,61	-0.02	-0.02	-0.01	25,54,61
	330.0	0.21	0.22	0.24	24,24,61	0.0	0.0	0.0	0,0,0				
95	0.0	0.10	0.10	0.12	25,25,61	0.0	0.0	0.0	0,0,0	-2.09e-03	-2.11e-03	-2.11e-03	26,55,60
	470.0	0.09	0.10	0.12	24,24,61	0.0	0.0	0.0	0,0,0				
96	0.0	0.22	0.23	0.25	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.01	25,54,61
	330.0	0.33	0.34	0.37	24,24,61	0.09	0.09	0.08	24,54,61				
97	0.0	0.28	0.30	0.32	24,24,61	0.07	0.0	0.0	24,0,0	-0.01	-0.01	-0.01	24,54,61
	317.5	0.28	0.29	0.32	25,25,61	0.07	0.0	0.0	25,0,0				
98	0.0	0.26	0.27	0.29	24,24,61	0.06	0.0	0.0	24,0,0	-0.01	-9.11e-03	-9.03e-03	24,54,61
	310.0	0.29	0.30	0.34	25,25,61	0.07	0.07	0.0	25,54,0				
99	0.0	0.42	0.44	0.49	25,25,61	0.12	0.12	0.11	25,54,61	-0.02	-0.02	-0.02	24,54,61
	437.5	0.33	0.35	0.38	25,25,61	0.09	0.09	0.08	25,54,61				
100	0.0	0.69	0.72	0.80	25,25,61	0.22	0.21	0.20	25,54,61	-0.20	-0.09	-0.09	25,54,61
	450.0	0.0	6.49e-03	0.0	0,24,0	0.0	0.0	0.0	0,0,0				
101	0.0	0.32	0.33	0.37	25,24,61	0.08	0.08	0.08	24,54,61	0.35	0.34	0.32	24,54,61
	525.2	0.72	0.74	0.84	24,24,61	0.23	0.22	0.21	24,54,61				
102	0.0	0.30	0.31	0.35	25,24,61	0.08	0.08	0.07	24,54,61	0.34	0.32	0.31	24,54,61
	525.2	0.70	0.73	0.82	24,24,61	0.23	0.22	0.21	24,54,61				
147	0.0	0.05	0.08	0.06	26,26,60	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	335.0	0.10	0.17	0.12	24,24,61	0.0	0.0	0.0	0,0,0				
148	0.0	0.21	0.35	0.24	24,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.01	25,54,61
	362.5	0.41	0.67	0.48	25,25,61	0.29	0.0	0.0	25,0,0				
149	0.0	0.32	0.53	0.37	24,24,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	25,54,61
	357.5	0.36	0.59	0.42	24,25,61	0.0	0.0	0.0	0,0,0				
150	0.0	0.32	0.52	0.36	24,24,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	24,54,61
	365.0	0.31	0.51	0.36	25,25,61	0.0	0.0	0.0	0,0,0				
151	0.0	0.19	0.31	0.25	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	590.0	0.14	0.24	0.19	24,24,61	0.0	0.0	0.0	0,0,0				
152	0.0	0.15	0.24	0.17	24,25,61	0.0	0.0	0.0	0,0,0	0.01	0.01	0.01	25,54,61
	307.5	0.32	0.52	0.37	25,25,61	0.0	0.0	0.0	0,0,0				
153	0.0	0.27	0.45	0.32	25,25,61	0.0	0.0	0.0	0,0,0	-7.80e-03	-7.03e-03	-6.78e-03	24,54,61
	320.0	0.25	0.41	0.29	25,25,61	0.0	0.0	0.0	0,0,0				
154	0.0	0.26	0.43	0.30	25,25,61	0.0	0.0	0.0	0,0,0	-7.99e-03	-7.21e-03	-6.95e-03	25,54,61
	317.5	0.25	0.41	0.29	24,24,61	0.0	0.0	0.0	0,0,0				
155	0.0	0.27	0.46	0.32	24,24,61	0.0	0.0	0.0	0,0,0	-0.01	-9.40e-03	-9.02e-03	24,54,61
	330.0	0.25	0.42	0.29	25,25,61	0.0	0.0	0.0	0,0,0				
156	0.0	0.14	0.26	0.18	25,24,61	0.0	0.0	0.0	0,0,0	-6.61e-03	-6.09e-03	-5.97e-03	26,55,60
	470.0	0.12	0.22	0.15	24,24,61	0.0	0.0	0.0	0,0,0				
157	0.0	0.27	0.45	0.31	25,25,61	0.0	0.0	0.0	0,0,0	-0.01	-9.84e-03	-9.46e-03	25,54,61
	330.0	0.24	0.41	0.28	24,24,61	0.0	0.0	0.0	0,0,0				
158	0.0	0.23	0.38	0.26	24,24,61	0.0	0.0	0.0	0,0,0	-8.51e-03	-7.73e-03	-7.47e-03	24,54,61
	317.5	0.27	0.45	0.31	25,25,61	0.0	0.0	0.0	0,0,0				
159	0.0	0.22	0.37	0.25	24,24,61	0.0	0.0	0.0	0,0,0	6.68e-03	6.26e-03	6.16e-03	26,55,60
	317.5	0.30	0.50	0.36	25,25,61	0.0	0.0	0.0	0,0,0				
160	0.0	0.33	0.54	0.39	25,25,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	25,54,61
	310.0	0.14	0.24	0.17	24,24,61	0.0	0.0	0.0	0,0,0				
161	0.0	0.15	0.25	0.19	24,24,61	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02	25,54,61
	590.0	0.18	0.31	0.24	25,25,61	0.0	0.0	0.0	0,0,0				
162	0.0	0.31	0.51	0.36	24,24,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61

	362.5	0.30	0.50	0.35	25,25,61	0.0	0.0	0.0	0,0,0				
163	0.0	0.32	0.52	0.37	24,24,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	25,54,61
	357.5	0.36	0.59	0.42	24,25,61	0.0	0.0	0.0	0,0,0				
164	0.0	0.04	0.07	0.05	28,28,61	0.0	0.0	0.0	0,0,0	-0.01	-9.55e-03	-9.32e-03	25,54,61
	165.1	0.08	0.15	0.09	24,24,61	0.0	0.0	0.0	0,0,0				
165	0.0	0.38	0.62	0.46	24,24,61	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-0.03	25,54,61
	590.0	0.35	0.57	0.43	25,25,61	0.0	0.0	0.0	0,0,0				
166	0.0	0.58	0.94	0.68	25,25,61	0.48	0.47	0.45	25,54,61	-0.02	-0.02	-0.02	25,54,61
	412.5	0.42	0.68	0.48	24,25,61	0.29	0.0	0.0	25,0,0				
167	0.0	0.02	0.02	0.02	24,25,61	0.0	0.0	0.0	0,0,0	0.26	0.26	0.25	24,54,61
	425.0	1.06	1.71	1.22	24,25,61	1.00	0.94	0.91	25,54,61				
168	0.0	0.12	0.20	0.14	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	165.1	0.10	0.16	0.11	25,25,61	0.0	0.0	0.0	0,0,0				
169	0.0	0.08	0.11	0.10	24,25,61	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02	25,54,61
	425.0	0.38	0.60	0.46	25,25,61	0.0	0.0	0.0	0,0,0				
170	0.0	0.11	0.18	0.15	24,26,61	0.0	0.0	0.0	0,0,0	-7.51e-03	-7.41e-03	-7.39e-03	26,55,60
	470.0	0.11	0.18	0.14	24,26,61	0.0	0.0	0.0	0,0,0				
171	0.0	0.30	0.48	0.37	25,25,61	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	25,54,61
	450.0	0.12	0.18	0.15	24,24,61	0.0	0.0	0.0	0,0,0				
172	0.0	0.09	0.15	0.11	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	165.1	0.08	0.13	0.08	25,25,61	0.0	0.0	0.0	0,0,0				
173	0.0	0.50	0.80	0.58	25,25,61	0.37	0.38	0.36	25,54,61	-0.01	-0.01	-0.01	25,54,61
	412.5	0.61	0.98	0.70	24,24,61	0.50	0.49	0.46	24,54,61				
174	0.0	0.44	0.70	0.50	24,24,61	0.31	0.0	0.0	24,0,0	-0.02	0.02	0.02	25,54,61
	412.5	0.58	0.94	0.68	25,25,61	0.47	0.47	0.45	25,54,61				
175	0.0	0.53	0.87	0.63	25,25,61	0.42	0.43	0.42	25,54,61	-0.05	-0.05	-0.05	25,54,61
	590.0	0.59	0.95	0.69	24,24,61	0.48	0.48	0.46	24,54,61				
176	0.0	0.51	0.85	0.61	25,25,61	0.41	0.42	0.40	25,54,61	-0.06	-0.06	-0.06	24,54,61
	590.0	0.56	0.92	0.66	25,25,61	0.46	0.47	0.45	25,54,61				
177	0.0	0.04	0.06	0.05	25,25,61	0.0	0.0	0.0	0,0,0	-6.10e-03	-5.66e-03	-5.57e-03	25,54,61
	169.9	0.20	0.31	0.23	25,25,61	0.0	0.0	0.0	0,0,0				
178	0.0	0.13	0.21	0.16	24,24,61	0.0	0.0	0.0	0,0,0	-0.01	-9.64e-03	-9.41e-03	24,54,61
	412.5	0.22	0.35	0.27	25,25,61	0.0	0.0	0.0	0,0,0				
179	0.0	0.19	0.30	0.24	25,25,61	0.0	0.0	0.0	0,0,0	-7.02e-03	-6.60e-03	-6.46e-03	25,54,61
	412.5	0.21	0.32	0.25	24,24,61	0.0	0.0	0.0	0,0,0				
180	0.0	0.76	1.23	0.93	25,25,61	0.67	0.67	0.66	25,54,61	-0.44	-0.07	-0.07	25,54,61
	850.0	0.79	1.27	0.95	24,24,61	0.70	0.70	0.68	24,54,61				
181	0.0	0.11	0.17	0.12	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	165.1	0.10	0.16	0.10	24,24,61	0.0	0.0	0.0	0,0,0				
182	0.0	1.28	2.11	1.50	25,25,61	1.28	1.20	1.16	25,54,61	-0.88	-0.85	-0.81	24,54,61
	165.1	0.60	1.01	0.69	24,24,61	0.52	0.51	0.48	24,54,61				
183	0.0	0.13	0.22	0.13	24,24,61	0.0	0.0	0.0	0,0,0	0.05	0.05	0.05	25,54,61
	282.4	0.25	0.41	0.30	28,28,61	0.0	0.0	0.0	0,0,0				
184	0.0	0.09	0.15	0.12	28,28,61	0.0	0.0	0.0	0,0,0	-7.10e-03	-6.42e-03	-6.20e-03	24,54,61
	277.4	0.04	0.07	0.05	28,28,61	0.0	0.0	0.0	0,0,0				
185	0.0	0.14	0.22	0.17	28,28,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	25,54,61
	277.4	7.31e-03	5.55e-03	8.60e-03	24,24,61	0.0	0.0	0.0	0,0,0				
186	0.0	0.10	0.16	0.09	24,24,61	0.0	0.0	0.0	0,0,0	0.05	0.05	0.05	25,54,61
	282.4	0.28	0.46	0.34	28,28,61	0.0	0.0	0.0	0,0,0				
187	0.0	1.26	2.08	1.47	25,25,61	1.26	1.18	1.14	25,54,61	-0.86	-0.83	-0.79	24,54,61
	165.1	0.57	0.96	0.65	24,24,61	0.48	0.48	0.45	24,54,61				
188	0.0	0.35	0.56	0.41	25,25,61	0.0	0.0	0.0	0,0,0	-0.04	-0.03	-0.03	25,54,61
	165.1	0.14	0.22	0.16	26,26,60	0.0	0.0	0.0	0,0,0				
189	0.0	0.52	0.87	0.60	24,25,61	0.43	0.43	0.41	25,54,61	-0.16	-0.04	-0.04	25,54,61
	525.2	0.82	1.36	0.95	24,24,61	0.76	0.73	0.70	24,54,61				
190	0.0	0.81	1.33	0.93	24,24,61	0.74	0.71	0.68	24,54,61	-0.31	-0.26	-0.26	24,54,61
	559.8	0.71	1.17	0.83	25,25,61	0.63	0.61	0.59	25,54,61				
191	0.0	0.55	0.90	0.63	25,25,61	0.45	0.44	0.42	25,54,61	-0.15	-0.04	-0.04	25,54,61
	525.2	0.81	1.33	0.94	24,24,61	0.74	0.71	0.68	24,54,61				
192	0.0	0.81	1.32	0.93	24,24,61	0.73	0.70	0.67	24,54,61	-0.31	-0.26	-0.26	24,54,61
	559.8	0.71	1.17	0.83	25,25,61	0.63	0.61	0.59	25,54,61				
193	0.0	0.19	0.31	0.22	24,25,61	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02	25,54,61
	307.5	0.57	0.93	0.66	25,25,61	0.47	0.46	0.44	25,54,61				
194	0.0	0.47	0.75	0.53	24,25,61	0.34	0.35	0.33	25,54,61	-0.01	-0.01	-0.01	24,54,61
	320.0	0.46	0.74	0.52	25,25,61	0.33	0.34	0.32	25,54,61				
195	0.0	0.45	0.73	0.52	25,25,61	0.33	0.33	0.0	25,54,0	-0.01	-9.88e-03	-0.01	25,54,61
	317.5	0.46	0.75	0.53	24,24,61	0.34	0.35	0.33	24,54,61				
196	0.0	0.58	0.95	0.68	25,25,61	0.48	0.47	0.45	25,54,61	-0.02	-0.02	-0.02	25,54,61
	330.0	0.30	0.49	0.34	25,25,61	0.0	0.0	0.0	0,0,0				
197	0.0	0.15	0.25	0.19	25,24,61	0.0	0.0	0.0	0,0,0	-5.35e-03	-4.84e-03	-4.71e-03	26,55,60
	470.0	0.14	0.23	0.17	24,24,61	0.0	0.0	0.0	0,0,0				
198	0.0	0.34	0.55	0.39	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	330.0	0.54	0.88	0.62	24,24,61	0.43	0.43	0.41	24,54,61				
199	0.0	0.45	0.73	0.51	24,24,61	0.33	0.33	0.0	24,54,0	-0.01	-0.01	-0.01	24,54,61
	317.5	0.45	0.74	0.52	25,25,61	0.34	0.34	0.32	25,54,61				
200	0.0	0.41	0.66	0.46	24,24,61	0.28	0.0	0.0	24,0,0	-9.80e-03	-9.25e-03	-8.88e-03	24,54,61

	310.0	0.48	0.78	0.55	25,25,61	0.36	0.37	0.35	25,54,61				
201	0.0	0.67	1.07	0.76	24,24,61	0.56	0.55	0.52	24,54,61	-0.02	-0.02	-0.01	25,54,61
	437.5	0.54	0.88	0.63	25,25,61	0.43	0.43	0.41	25,54,61				
202	0.0	1.13	1.83	1.31	24,25,61	1.09	1.02	0.98	25,54,61	-0.58	-0.24	-0.23	24,54,61
	450.0	1.32e-03	9.07e-03	1.58e-03	27,26,61	0.0	0.0	0.0	0,0,0				
203	0.0	0.54	0.91	0.62	24,24,61	0.45	0.45	0.42	24,54,61	0.83	0.79	0.75	24,54,61
	525.2	1.13	1.86	1.31	24,25,61	1.11	1.05	1.01	25,54,61				
204	0.0	0.51	0.85	0.58	24,24,61	0.41	0.41	0.39	24,54,61	0.76	0.72	0.69	24,54,61
	525.2	1.10	1.81	1.27	24,25,61	1.07	1.01	0.98	25,54,61				
249	0.0	0.03	0.03	0.04	24,24,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	335.0	0.10	0.12	0.11	26,26,60	0.0	0.0	0.0	0,0,0				
250	0.0	0.15	0.19	0.18	26,26,60	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.01	28,57,61
	362.5	0.32	0.40	0.37	28,28,61	0.0	0.0	0.0	0,0,0				
251	0.0	0.27	0.33	0.31	26,26,60	0.0	0.0	0.0	0,0,0	-0.01	-9.30e-03	-9.03e-03	28,57,61
	357.5	0.28	0.35	0.33	26,26,60	0.0	0.0	0.0	0,0,0				
252	0.0	0.27	0.34	0.31	26,26,60	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	26,55,60
	365.0	0.18	0.22	0.22	28,28,61	0.0	0.0	0.0	0,0,0				
253	0.0	0.13	0.16	0.17	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	590.0	0.13	0.15	0.16	26,26,60	0.0	0.0	0.0	0,0,0				
254	0.0	0.11	0.15	0.14	26,26,60	0.0	0.0	0.0	0,0,0	0.02	0.01	0.01	25,54,61
	307.5	0.25	0.32	0.29	28,28,61	0.0	0.0	0.0	0,0,0				
255	0.0	0.22	0.30	0.25	28,28,61	0.0	0.0	0.0	0,0,0	-7.02e-03	-6.25e-03	-6.05e-03	26,55,60
	320.0	0.19	0.26	0.22	28,28,61	0.0	0.0	0.0	0,0,0				
256	0.0	0.20	0.27	0.23	28,28,61	0.0	0.0	0.0	0,0,0	-7.11e-03	-6.35e-03	-6.16e-03	28,57,61
	317.5	0.20	0.28	0.24	26,26,60	0.0	0.0	0.0	0,0,0				
257	0.0	0.23	0.30	0.27	26,26,60	0.0	0.0	0.0	0,0,0	-0.01	-9.39e-03	-9.09e-03	26,55,60
	330.0	0.17	0.23	0.20	28,28,61	0.0	0.0	0.0	0,0,0				
258	0.0	0.14	0.21	0.17	26,28,60	0.0	0.0	0.0	0,0,0	-0.01	-9.24e-03	-9.02e-03	28,57,60
	470.0	0.06	0.12	0.09	22,25,60	0.0	0.0	0.0	0,0,0				
259	0.0	0.23	0.33	0.27	28,28,61	0.0	0.0	0.0	0,0,0	-0.01	-9.32e-03	-9.02e-03	28,57,61
	330.0	0.16	0.23	0.18	26,26,60	0.0	0.0	0.0	0,0,0				
260	0.0	0.19	0.26	0.22	26,26,60	0.0	0.0	0.0	0,0,0	-8.01e-03	-7.18e-03	-6.97e-03	26,55,60
	317.5	0.19	0.26	0.22	28,28,61	0.0	0.0	0.0	0,0,0				
261	0.0	0.17	0.23	0.19	26,28,60	0.0	0.0	0.0	0,0,0	0.01	9.91e-03	9.75e-03	26,55,60
	317.5	0.25	0.34	0.29	28,28,61	0.0	0.0	0.0	0,0,0				
262	0.0	0.26	0.35	0.31	28,28,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	28,57,61
	310.0	0.11	0.15	0.13	26,26,60	0.0	0.0	0.0	0,0,0				
263	0.0	0.13	0.16	0.17	26,26,60	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02	25,54,61
	590.0	0.13	0.16	0.17	25,25,61	0.0	0.0	0.0	0,0,0				
264	0.0	0.27	0.34	0.31	26,26,60	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	362.5	0.18	0.22	0.21	28,28,61	0.0	0.0	0.0	0,0,0				
265	0.0	0.26	0.33	0.30	26,26,60	0.0	0.0	0.0	0,0,0	-0.01	-9.70e-03	-9.43e-03	28,57,61
	357.5	0.28	0.35	0.32	26,26,60	0.0	0.0	0.0	0,0,0				
266	0.0	0.04	0.05	0.04	25,25,61	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-0.01	25,54,61
	165.1	0.09	0.12	0.10	26,26,60	0.0	0.0	0.0	0,0,0				
267	0.0	0.33	0.40	0.39	26,26,60	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-0.04	25,54,61
	590.0	0.23	0.27	0.28	28,28,61	0.0	0.0	0.0	0,0,0				
268	0.0	0.45	0.55	0.52	28,28,61	0.19	0.19	0.18	28,57,61	-0.02	-0.02	-0.02	28,57,61
	412.5	0.33	0.39	0.38	26,26,60	0.0	0.0	0.0	0,0,0				
269	0.0	0.02	5.64e-03	0.02	26,26,60	0.0	0.0	0.0	0,0,0	0.20	0.19	0.19	26,55,60
	425.0	0.83	1.05	0.96	26,26,60	0.44	0.41	0.40	26,55,60				
270	0.0	0.07	0.09	0.07	25,25,61	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-0.02	25,54,61
	165.1	0.07	0.09	0.07	25,25,61	0.0	0.0	0.0	0,0,0				
271	0.0	0.06	0.04	0.07	26,26,60	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02	25,54,61
	425.0	0.35	0.41	0.42	28,26,61	0.12	0.0	0.0	26,0,0				
272	0.0	0.09	0.07	0.12	26,22,60	0.0	0.0	0.0	0,0,0	-8.57e-03	-8.39e-03	-8.32e-03	24,54,61
	470.0	0.08	0.05	0.10	22,22,60	0.0	0.0	0.0	0,0,0				
273	0.0	0.24	0.25	0.29	28,28,61	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-0.03	25,57,61
	450.0	0.10	0.09	0.13	26,26,60	0.0	0.0	0.0	0,0,0				
274	0.0	0.05	0.07	0.06	25,25,61	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	25,54,61
	165.1	0.06	0.08	0.07	25,25,61	0.0	0.0	0.0	0,0,0				
275	0.0	0.37	0.47	0.43	28,28,61	0.15	0.15	0.0	28,57,0	-0.02	-0.02	-0.02	28,57,61
	412.5	0.55	0.71	0.63	26,26,60	0.27	0.25	0.24	26,55,60				
276	0.0	0.38	0.47	0.43	26,26,60	0.15	0.15	0.0	26,55,0	0.02	0.02	0.02	25,54,61
	412.5	0.43	0.54	0.50	28,28,61	0.19	0.19	0.18	28,57,61				
277	0.0	0.35	0.41	0.41	28,28,61	0.12	0.0	0.0	28,0,0	-0.06	-0.06	-0.06	28,57,61
	590.0	0.49	0.60	0.57	26,26,60	0.22	0.21	0.21	26,55,60				
278	0.0	0.35	0.40	0.41	28,28,61	0.12	0.0	0.0	28,0,0	-0.08	-0.07	-0.07	26,55,60
	590.0	0.40	0.47	0.48	28,28,61	0.15	0.16	0.15	28,57,61				
279	0.0	0.03	0.05	0.03	25,25,61	0.0	0.0	0.0	0,0,0	-7.57e-03	-6.98e-03	-6.81e-03	25,54,61
	169.9	0.18	0.25	0.21	25,25,61	0.0	0.0	0.0	0,0,0				
280	0.0	0.09	0.10	0.12	26,26,60	0.0	0.0	0.0	0,0,0	-0.01	-9.88e-03	-9.69e-03	26,55,60
	412.5	0.18	0.21	0.22	28,28,61	0.0	0.0	0.0	0,0,0				
281	0.0	0.15	0.17	0.19	28,26,61	0.0	0.0	0.0	0,0,0	-6.42e-03	-6.00e-03	-5.93e-03	28,57,61
	412.5	0.18	0.21	0.22	26,26,60	0.0	0.0	0.0	0,0,0				
282	0.0	0.58	0.71	0.71	28,26,61	0.27	0.27	0.27	26,55,60	-0.18	-0.09	-0.10	26,55,60

	850.0	0.63	0.78	0.76	26,26,60	0.30	0.30	0.30	26,55,60				
283	0.0	0.07	0.08	0.08	25,25,61	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-0.02	25,54,61
	165.1	0.14	0.18	0.15	26,26,60	0.0	0.0	0.0	0,0,0				
284	0.0	0.82	1.00	0.97	28,28,61	0.41	0.39	0.38	28,57,61	-0.60	-0.58	-0.56	26,55,60
	165.1	0.61	0.72	0.70	26,26,60	0.28	0.26	0.25	26,55,60				
285	0.0	0.19	0.24	0.20	26,26,60	0.0	0.0	0.0	0,0,0	0.06	0.05	0.05	25,54,61
	282.4	0.21	0.27	0.25	24,24,61	0.0	0.0	0.0	0,0,0				
...													
363	317.5	0.12	0.13	0.13	26,26,60	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-0.02	28,57,61
Trave		rRfck	rRfyk	rPfck		wR	wF	wP		dR	dF	dP	
		1.28	2.11	1.50		1.28	1.20	1.16		0.83	0.79	0.75	