

COMUNE DI CASTIGLIONE FALLETTO

**REALIZZAZIONE DI NUOVI SERBATOI PER
POTENZIAMENTO STOCCAGGIO ESISTENTE**

Novembre 2022



COMMITENZA
TECNOEDIL S.P.A.
Gruppo Egea

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**Costa &
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INGEGNERIA
ARCHITETTURA



A1170

**ORDINE DEGLI INGEGNERI
DELLA PROVINCIA DI CUNEO**
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PROGETTO DEFINITIVO

DOCUMENTO

descrizione elaborato:

RT 03

RELAZIONE DI CALCOLO DELLE STRUTTURE IN C.A.

ed.	rev.	descrizione	redatto	controllato	approvato	data
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commessa:

codice lavoro:

fase:

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1 DESCRIZIONE DELLE OPERE

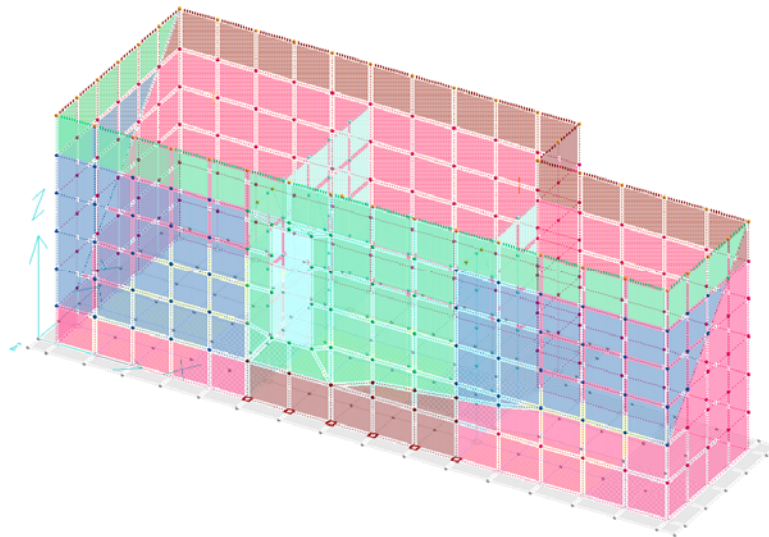
Oggetto della presente relazione di calcolo sono le nuove strutture relative ai lavori di “Realizzazione di nuovi serbatoi in ampliamento per il potenziamento dello stoccaggio esistente” presso il comune di Castiglione Falletto (CN).

L'intervento consiste nella costruzione di un fabbricato ad uso serbatoio, con forma in pianta pressochè rettangolare, seminterrato ad 1 piano fuori terra, con tre vasche, con dimensioni massime in pianta di 15.50 x 5.6 m e altezza interna di 5.40 m. .

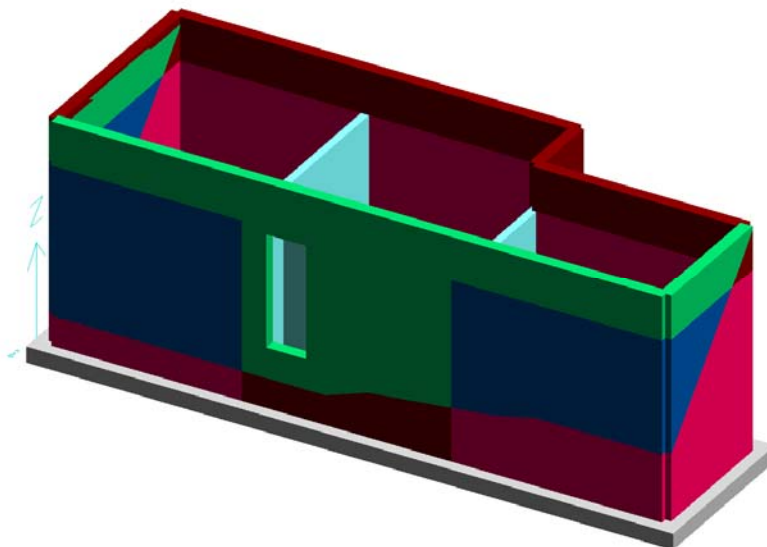
La struttura è prevista secondo le seguenti tipologie costruttive:

- Platea di fondazione in c.a. sp. 40 cm;
- Muri perimetrali in c.a. sp. 30 cm;
- Copertura con lastra predalles h=30 cm (5+20+5 cm);

Acconometria : 30, 30



Assonometria : 30,30



➤ *Viste assonometriche del modello di calcolo*

2 NORMATIVE DI RIFERIMENTO

L'analisi della struttura in oggetto è stata fatta utilizzando i metodi usuali della Scienza delle Costruzioni ed in conformità alle normative e leggi vigenti:

- D.M. 17 gennaio 2018 “Norme Tecniche per le Costruzioni”.
- Circolare 21 Gennaio 2019 n. 7 “Istruzioni per l'applicazione dell'«Aggiornamento delle “Norme tecniche per le costruzioni”» di cui al decreto ministeriale 17 gennaio 2018”

3 CRITERI DI ANALISI DELLA SICUREZZA

Con riferimento alle normative precedentemente citate, le strutture in oggetto sono verificate per quanto riguarda:

- verifica di resistenza;
- verifica a deformazione e fessurazione.

La struttura è stata schematizzata escludendo il contributo degli elementi aventi rigidezza e resistenza trascurabili a fronte dei principali. E' quindi stata considerata l'orditura a telaio tridimensionale, i solai ed i setti verticali ad elevata rigidezza. Le travi di fondazione sono schematizzate come poggianti su vincoli elastici distribuiti.

La struttura è modellata con il metodo degli elementi finiti, applicato a sistemi tridimensionali. Gli elementi utilizzati sono sia monodimensionali (travi e pilastri), che bidimensionali (setti). I vincoli sono considerati puntuali ed inseriti tramite le sei costanti di rigidezza elastica, oppure come elementi asta poggianti su suolo elastico. Le sezioni oggetto di verifica nelle travi sono stampate a passo costante; dei gusci si conoscono le sollecitazioni nel baricentro dell'elemento stesso.

In accordo con le sopracitate normative, sono state considerate nei calcoli le seguenti azioni:

- pesi propri degli elementi strutturali;
- carichi permanenti portati dalla struttura;
- carichi variabili (d'esercizio sui solai, neve);
- forze di piano simulanti il sisma, ricavate tramite analisi statica/dinamica

Le azioni sono state modellate tramite opportuni carichi concentrati e distribuiti su nodi ed aste.

I materiali costituenti la struttura sono considerati elastici e con comportamento lineare. Le loro caratteristiche sono specificate nella stampa dei dati di input.

Le analisi strutturali condotte sono statiche in regime lineare. Il metodo di calcolo è ad elementi finiti.

4 INDIVIDUAZIONE DEL CODICE DI CALCOLO

Per il calcolo delle sollecitazioni e per la verifica degli elementi in cemento armato si è fatto ricorso all'elaboratore elettronico utilizzando il seguente programma di calcolo:

DOLMEN WIN (R), versione 18.0 del 2018 prodotto, distribuito ed assistito dalla CDM DOLMEN srl, con sede in Torino, Via Drovetti 9/F.

Questa procedura è sviluppata in ambiente Windows, ed è stata scritta utilizzando i linguaggi Fortran e C. DOLMEN WIN permette l'analisi elastica lineare di strutture tridimensionali con nodi a sei gradi di libertà utilizzando un solutore ad elementi finiti. Gli elementi considerati sono la trave, con eventuali svincoli interni o rotazione attorno al proprio asse, ed il guscio, sia rettangolare che triangolare, avente comportamento di membrana e di piastra. I carichi possono essere applicati sia ai nodi, come forze o coppie concentrate, sia sulle travi, come forze distribuite, trapezie, concentrate, come coppie e come distorsioni termiche. I vincoli sono forniti tramite le sei costanti di rigidezza elastica.

Eventuali analisi sismiche possono essere effettuate sia in regime statico che dinamico tramite analisi modale, con o senza presa in conto di piani orizzontali rigidi. Il calcolo delle forze sismiche ed il successivo dimensionamento degli elementi resistenti può avvenire sia secondo il DM 16.01.96, sia secondo le Nuove Norme Tecniche 2018.

A supporto del programma è fornito un ampio manuale d'uso contenente fra l'altro una vasta serie di test di validazione sia su esempi classici di Scienza delle Costruzioni, sia su strutture particolarmente impegnative e reperibili nella bibliografia specializzata.

L'affidabilità del codice di calcolo è garantita dall'esistenza di un'ampia documentazione di supporto, composta da un manuale d'uso contenente fra l'altro più esempi dettagliati di calcolo e da una vasta serie di test di validazione, sia su esempi classici di Scienza delle Costruzioni, sia su strutture particolarmente impegnative e reperibili nella bibliografia specializzata. La validità del programma è suffragata da anni di uso intensivo presso centinaia di utenti in tutta Italia e all'estero.

La presenza di un modulo CAD per l'introduzione di dati permette la visualizzazione dettagliata degli elementi introdotti. E' possibile inoltre ottenere rappresentazioni grafiche di deformate e sollecitazioni della struttura. Al termine dell'elaborazione viene inoltre valutata la qualità della soluzione, in base all'uguaglianza del lavoro esterno e dell'energia di deformazione.

NOTIZIE SULL'ELABORATORE

Unità centrale di processo: Intel(R) Core(TM) i3CPU 540 @ 3.07 Ghz

sistema operativo: Windows 7 Professional

capacità di memoria (RAM): 2.00 Gb

unità di memoria di massa: hard-disk da 300 Gb

4.1 ESAME RISULTATI E CONTROLLI

Il modello di calcolo adottato è da ritenersi appropriato in quanto non sono state riscontrate labilità, le reazioni vincolari equilibrano i carichi applicati, la simmetria di carichi e struttura dà origine a sollecitazioni simmetriche.

L'analisi critica dei risultati e dei parametri di controllo nonché il confronto con calcoli di massima eseguiti manualmente porta a confermare la validità dei risultati.

5 MATERIALI IMPIEGATI

Il progetto strutturale per la realizzazione delle nuove opere, setti e fondazioni, prevede l'uso di materiali con le caratteristiche meccaniche minime riportate nei paragrafi seguenti. Per la realizzazione dell'opera in oggetto saranno impiegati i seguenti materiali:

5.1 CALCESTRUZZO

Per la classe di calcestruzzo impiegata per le membrature in fondazione e elevazione, C30/37 sono riportati i valori di:

- $R_{ck} = 300$ Resistenza cubica caratteristica del materiale [daN/cm²]
- $f_{ck} = 249$ Resistenza cilindrica caratteristica del materiale [daN/cm²]
- $\epsilon_{c2} = 0.002$ Inizio del tratto a tensione costante della legge costitutiva
- $\epsilon_{cu} = 0.0035$ Deformazione ultima del calcestruzzo
- $\gamma_c = 1.5$ Coefficiente parziale di sicurezza allo SLU del materiale
- $\alpha_{cc} = 0.85$ Coefficiente riduttivo per le resistenze di lunga durata
- $f_{cd} = 141.1$ Resistenza cilindrica di progetto del materiale [daN/cm²]
- $E_{cm} = 314472$ Modulo elastico medio a compressione [daN/cm²]

Classificazione secondo la norma UNI-EN 206-1:

- per strutture in elevazione

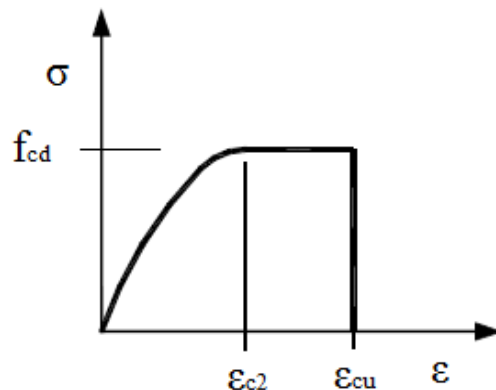
- Classe di abbassamento al cono (slump) S4
- Dimensione massima dell'inerte (mm) 22
- Classe di esposizione XC1

- per strutture in fondazione

- Classe di abbassamento al cono (slump) S3/S4
- Dimensione massima dell'inerte (mm) 31
- Classe di esposizione XC2

I diagrammi costitutivi del calcestruzzo sono stati adottati in conformità alle indicazioni riportate al punto 4.1.2.1.2.2 del *D.M. 17 gennaio 2018*.

In particolare viene utilizzato il diagramma parabola-rettangolo riportato in figura.



Legge costitutiva adottata per il calcestruzzo (parabola-rettangolo).

5.2 ACCIAIO PER CEMENTO ARMATO

Per l'acciaio utilizzato, di tipo B450C, sono riportati i valori di:

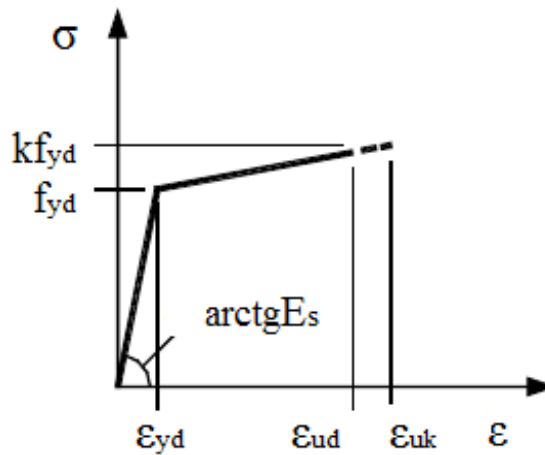
- $f_{yk} = 4500$ Tensione caratteristica di snervamento [daN/cm²]
- $f_{tk} = 5175$ Tensione caratteristica di rottura [daN/cm²]
- $\epsilon_{uk} = 0.075$ Deformazione ultima caratteristica
- $\gamma_s = 1.15$ Coefficiente parziale di sicurezza allo SLU del materiale
- $f_{yd} = 3913.04$ Tensione di progetto di snervamento [daN/cm²]

- $E_s = 2100000$ Modulo elastico [daN/cm²]
- $\epsilon_{ud} = 0.0675$ Deformazione ultima di progetto
- $\epsilon_{yd} = 0.0019$ Deformazione di snervamento di progetto
- $n = 15$ Coefficiente di omogeneizzazione

Copriferro nominale minimo:	STRUTTURE INTERRATE casserate	40 mm
	STRUTTURE IN ELEVAZIONE	30 mm

I diagrammi costitutivi dell'acciaio sono stati adottati in conformità alle indicazioni riportate al punto 4.1.2.1.2.3 del *D.M. 17 gennaio 2018*.

In particolare viene utilizzato il modello bilineare incrudente riportato in figura.



Legge costitutiva adottata per l'acciaio.

6 ANALISI DEI CARICHI NELLE CONDIZIONI

6.1 PESI PROPRI STRUTTURALI

Elementi n.c.a.	2.500 daN/m ³
Solaio predalles h 30	415 daN/m ²
Acqua	1000 daN/m ³

6.2 CARICHI PERMANENTI NON STRUTTURALI

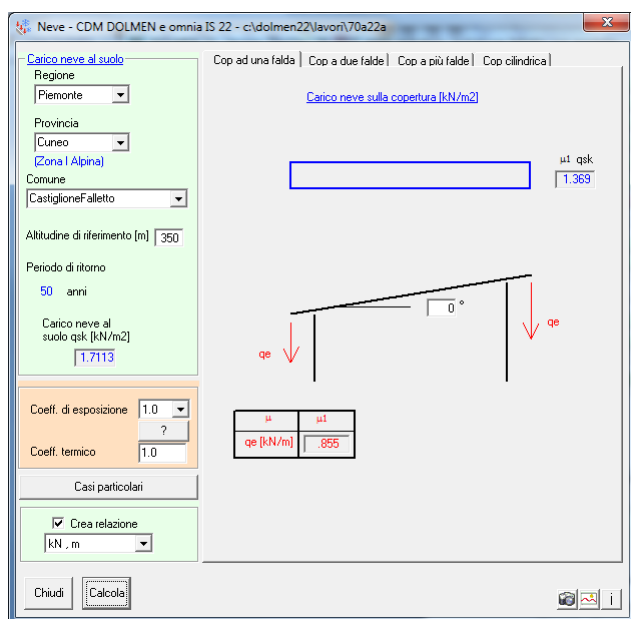
Copertura	1000 daN/m ²
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6.3 CARICHI VARIABILI

Spinta acqua	
Spinta terre	
Carico neve	137 daN/m ²

6.4 NEVE

Il Comune di Castiglione Falletto risulta situarsi ad una quota di 414 m s.l.m. ed è caratterizzato da un valore caratteristico di riferimento del carico neve al suolo per periodo di ritorno 50 anni pari a:



ARICO NEVE lavoro : 70a22a
Unità di misura : m ; KN/mq ; KN/m

Zona 0
Altitudine [m]: 350
Periodo di Ritorno [anni]: 50

qsk (carico neve al suolo) = 1.7113

COPERTURA AD UNA FALDA

alfa (inclinazione della falda [°]) = 0

	mu	qs	qe
mu1	.8	1.369	.855

Si assume:

- carico neve sulla copertura = 137 daN/m²

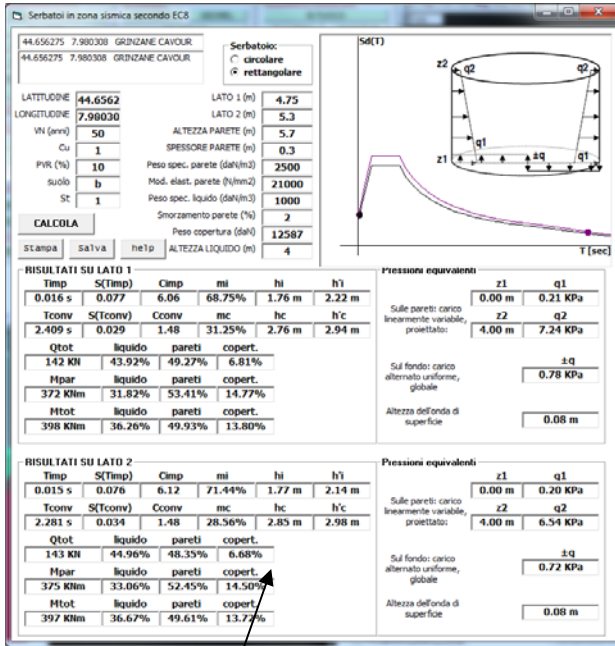
Massa sismica totale 304673 daN

Condizioni di carico sismico generate:

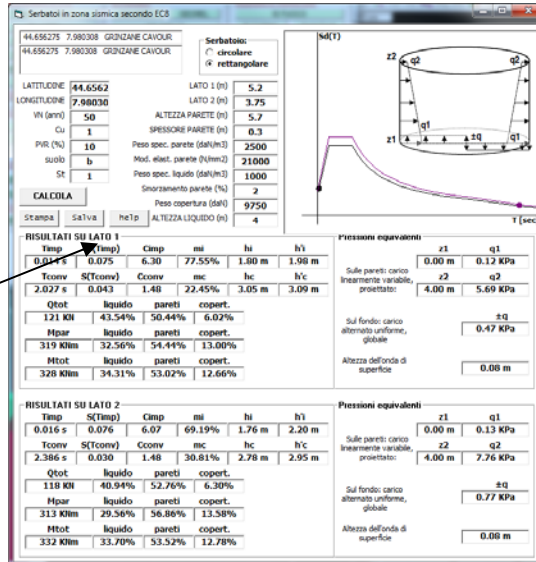
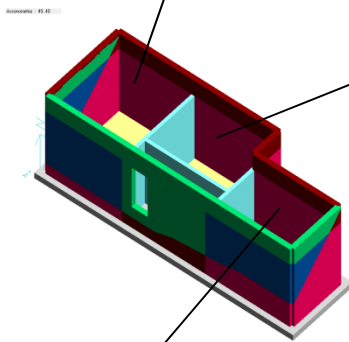
Cond. 021 : Sisma X
 Cond. 022 : Sisma Y
 Cond. 023 : Torcente add. X
 Cond. 024 : Torcente add. Y

Carichi sismici :

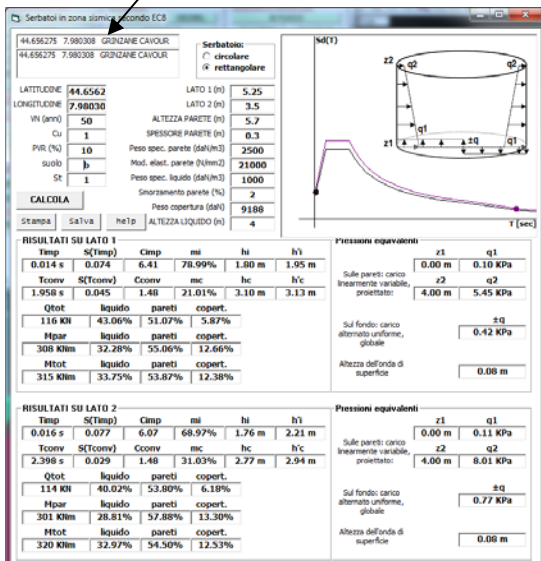
Piani cm	Pesi daN	C. di str.	Forze piano daN	Torc. piano X daNcm	Torc. piano Y daNcm	Bar. X cm	Bar. Y cm
0.0	17743	0.0000	0	0	0	775.4	234.5
94.0	34619	0.0280	969	25689	73675	772.2	240.2
153.0	35827	0.0456	1633	43275	124108	780.6	232.1
282.0	34816	0.0840	2925	77507	222283	778.2	239.0
376.0	33746	0.1120	3780	100164	287262	779.4	243.6
453.0	31927	0.1349	4308	114172	327438	780.2	243.7
570.0	115996	0.1698	19696	521941	1496888	744.6	241.9
304673			33311				



VASCA 1



VASCA 2



VASCA 3

8 DATI STRUTTURA

Vedi allegato

*** DATI STRUTTURA (vedi dati input)

```

Unita` di misura :
LUNGHEZZE      : cm
SUPERFICI      : cm2
DATI SEZIONALI : cm
ANGOLI         : gradi
FORZE          : daN
MOMENTI        : daNcm
CARI CHI LINEARI : daN/m
CARI CHI SUPERFIC. : daN/m2
TENSIONI       : daN/cm2
PESI DI VOLUME : daN/cm3
COEFF. DI WINKLER: daN/cm3
RIGIDENZE VINCOL.: daN/cm - daNcm/rad

NODI --|-----|-----|-----|-----|-----|num. = 482
ASTE--|-----|-----|-----|-----|-----|num. = 42
GUSCI TRIANGOLARI --|-----|-----|-----|-----|num. = 34
GUSCI RETTANGOLARI |-----|-----|-----|-----|num. = 447
PROPRIETA` ASTE---|-----|-----|-----|-----|num. = 1
Nome Materiale Base Al tezza Area Area tag. Y Area tag. Z
Kw vertic. Kw orizz. J tors. J fless. Y J fless. Z
1 1 30.00 20.00 6.00000E+02 5.00000E+02 5.00000E+02
0.000000 0.000000 4.69526E+04 4.50000E+04 2.00000E+04

PROPRIETA` GUSCI--|-----|-----|-----|-----|num. = 3
Nome Materiale Sp. membr. Sp. piastra Kw
1 1 40.00 40.00 5.000000
2 1 30.00 30.00 0.000000
3 1 20.00 20.00 0.000000

MATERIALI -----|-----|-----|-----|num. = 1
Nome Mod. elast. Coeff. nu Mod. tang. Peso spec. Dil. te.
1 3.00000E+05 1.50000E-01 1.30000E+05 2.50000E-03 1.00000E-05

VINCOLI -----|-----|-----|-----|num. = 54

```

Convenzione adottata per i segni: in fase di verifica delle sezioni è stata utilizzata la convenzione di Saint Venant per sforzi di taglio, momento e sforzi assiali

9 CALCOLO SOLLECITAZIONI

Le strutture sono state verificate adottando il metodo agli *stati limite*.

CARICHI NELLE CONDIZIONI

- ° 001) Peso_proprio_____ [Peso proprio]
 344 pesi propri gusci
 2 carichi di solaio
 2] tipo n. 001) globale -415.0 daN/m2 p_proprio_predalles
- ° 002) Permanente_____ [Permanente]
 164 carichi su gusci
 39 tipo n. 004) Linearm. variab. Z locale 3420.0 -> 0.0 daN/m2
 spintelaterali
 23 tipo n. 005) Linearm. variab. Z locale 1260.0 -> 0.0 daN/m2
 spintafrontale
 102 tipo n. 006) Linearm. variab. Z locale 5130.0 -> 0.0 daN/m2
 spintaretro
 2 carichi di solaio
 2] tipo n. 002) globale -1000.0 daN/m2 permanente_cop
- ° 003) pp_fondaz [Peso proprio fondaz]
 127 pesi propri gusci
- ° 004) perm_fondaz [Permanente fondaz]
 80 carichi su gusci
 80 tipo n. 008) Distribuito Z globale -420.0 daN/m2 massettoplatea

- 005) vasca_1 [E2:Ambienti Industriali]
146 carichi su gusci
- 006) vasca_2 [E2:Ambienti Industriali]
111 carichi su gusci
91 tipo n. 002) Linearm. variab. Z locale -4000.0 -> 0.0 daN/m2 ph1-
20 tipo n. 003) Distribuito Z globale -4000.0 daN/m2 phv
- 007) vasca_3 [E2:Ambienti Industriali]
119 carichi su gusci
24 tipo n. 001) Linearm. variab. Z locale 4000.0 -> 0.0 daN/m2 ph1+
75 tipo n. 002) Linearm. variab. Z locale -4000.0 -> 0.0 daN/m2 ph1-
20 tipo n. 003) Distribuito Z globale -4000.0 daN/m2 phv
- 008) Neve [Neve (<1000m slm)]
2 carichi di solaio
2] tipo n. 003) proiez. -137.0 daN/m2 Neve
- 009) SY_vasca_1 [Altro ...]
80 carichi su gusci
15 tipo n. 009) Distribuito Z globale 78.0 daN/m2 syv1z+
15 tipo n. 010) Distribuito Z globale -78.0 daN/m2 syv1z-
50 tipo n. 011) Linearm. variab. Y globale 724.0 -> 21.0 daN/m2 syv1
- 010) SX_vasca_1 [Altro ...]
96 carichi su gusci
18 tipo n. 012) Distribuito Z globale 72.0 daN/m2 sxv1z+
12 tipo n. 013) Distribuito Z globale -72.0 daN/m2 sxv1z-
66 tipo n. 014) Linearm. variab. X globale 654.0 -> 20.0 daN/m2 sxv1
- 011) SX_vasca_2 [Altro ...]
60 carichi su gusci
12 tipo n. 015) Distribuito Z globale 77.0 daN/m2 sxv2z+
8 tipo n. 016) Distribuito Z globale -77.0 daN/m2 sxv2z-
40 tipo n. 017) Linearm. variab. X globale 776.0 -> 13.0 daN/m2 sxv2
- 012) SY_vasca_2 [Altro ...]
71 carichi su gusci
10 tipo n. 018) Distribuito Z globale 47.0 daN/m2 syv2z+
10 tipo n. 019) Distribuito Z globale -47.0 daN/m2 syv2z-
51 tipo n. 020) Linearm. variab. Y globale 569.0 -> 12.0 daN/m2 syv2
- 013) SX_vasca_3 [Altro ...]
67 carichi su gusci
12 tipo n. 021) Distribuito Z globale 77.0 daN/m2 sxv3z+
8 tipo n. 022) Distribuito Z globale -77.0 daN/m2 sxv3z-
47 tipo n. 023) Linearm. variab. X globale 801.0 -> 11.0 daN/m2 sxv3
- 014) SY_vasca_3 [Altro ...]
72 carichi su gusci
10 tipo n. 024) Distribuito Z globale 42.0 daN/m2 syv3z+
10 tipo n. 025) Distribuito Z globale -42.0 daN/m2 syv3z-
52 tipo n. 026) Linearm. variab. Y globale 545.0 -> 10.0 daN/m2 syv3
- 015) sx_spinte [Altro ...]
51 carichi su gusci
39 tipo n. 027) Linearm. variab. Z locale 205.0 -> 0.0 daN/m2
spintelateralisx
12 tipo n. 028) Linearm. variab. Z locale 308.0 -> 0.0 daN/m2
spintaretroSy
- 016) sy_spinte [Altro ...]
113 carichi su gusci
90 tipo n. 028) Linearm. variab. Z locale 308.0 -> 0.0 daN/m2
spintaretroSy
23 tipo n. 029) Linearm. variab. Z locale 76.0 -> 0.0 daN/m2
spintafrontalesy
- 017) Autovett_001_(X) [Modo proprio X]
22 carichi ai nodi
- 018) Autovett_001_(Y) [Modo proprio Y]
22 carichi ai nodi
- 019) Autovett_002_(X) [Modo proprio X]

- 22 carichi ai nodi
- ° 020) Autovett_002_(Y) [Modo proprio Y]
22 carichi ai nodi
 - ° 021) Sisma_X [Sisma X SLU (st lin)]
375 forze sismiche dir. X
 - ° 022) Sisma_Y [Sisma Y SLU (st lin)]
375 forze sismiche dir. Y
 - ° 023) Torcente_add._X [Torcente addiz X SLU]
321 forze sismiche dir. X
 - ° 024) Torcente_add._Y [Torcente addiz Y SLU]
321 forze sismiche dir. Y

DESCRIZIONE CASI DI CARICO:

NOME	DESCRIZIONE	VERIFICA	TIPO	CONDIZ. INSERITE			CASI INSERITI	
				Num.	Coeff.	Segno	Num.	Coeff.
1	SLU SENZA SISMA 1	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.300	+		
				4	1.500	+		
				8	1.500	+		
2	SLU SENZA SISMA 2	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.300	+		
				4	1.500	+		
				8	1.500	+		
3	SLU SENZA SISMA 3	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.300	+		
				4	1.500	+		
				8	1.500	+		
4	SLU SENZA SISMA 4	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.300	+		
				4	1.500	+		
				8	1.500	+		
5	SLU SENZA SISMA 5	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.300	+		
				4	1.500	+		
				8	1.500	+		
6	SLU SENZA SISMA 6	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.300	+		
				4	1.500	+		
				8	1.500	+		
7	SLU SENZA SISMA 7	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.300	+		
				4	1.500	+		
				8	1.500	+		
8	SLU SENZA SISMA 8	S. L. U.	somma	1	1.300	+		
				2	1.500	+		
				3	1.300	+		
				4	1.500	+		
				8	1.500	+		
9	RARA 1	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		

				4	1.000	+		
				8	1.000	+		
10	RARA 2	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	1.000	+		
				8	1.000	+		
11	RARA 3	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				6	1.000	+		
				8	1.000	+		
12	RARA 4	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				7	1.000	+		
				8	1.000	+		
13	RARA 5	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	1.000	+		
				6	1.000	+		
				8	1.000	+		
14	RARA 6	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	1.000	+		
				7	1.000	+		
				8	1.000	+		
15	RARA 7	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				6	1.000	+		
				7	1.000	+		
				8	1.000	+		
16	RARA 8	Rara	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	1.000	+		
				6	1.000	+		
				7	1.000	+		
				8	1.000	+		
17	FREQUENTE 1	Freq.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	0.900	+		
				6	0.900	+		
				7	0.900	+		
18	FREQUENTE 2	Freq.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	0.800	+		
				6	0.800	+		
				7	0.800	+		
				8	0.200	+		
19	QUASI PERMANENTE	Quasi Perm.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	0.800	+		
				6	0.800	+		
				7	0.800	+		
20	SI SMAX SLU	nessuna	somma	17	1.000	quadr.		
				19	1.000	quadr.		
				15	1.000	+		
				23	1.000	±		
21	SI SMAY SLU	nessuna	somma	18	1.000	quadr.		
				20	1.000	quadr.		
				16	1.000	+		

				24	1.000	±		
22	SLU SISMAX P vuoto	S. L. U.	somma	1	1.000	+	20	1.000
				2	1.000	+	21	0.300
				3	1.000	+		
				4	1.000	+		
23	SLU SISMAX P vuoto	S. L. U.	somma	1	1.000	+	21	1.000
				2	1.000	+	20	0.300
				3	1.000	+		
				4	1.000	+		
24	SLD SISMAX P vuoto	S. L. Danno	somma	1	1.000	+	20	0.721
				2	1.000	+	21	0.216
				3	1.000	+		
				4	1.000	+		
25	SLD SISMAX P vuoto	S. L. Danno	somma	1	1.000	+	21	0.721
				2	1.000	+	20	0.216
				3	1.000	+		
				4	1.000	+		
26	SLU SISMA X P v1	S. L. U.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				10	1.000	±		
				9	0.300	±		
				5	1.000	+		
27	SLU SISMA Y P v1	S. L. U.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	1.000	+		
				9	1.000	±		
				10	0.300	±		
28	SLU SISMA X P v2	S. L. U.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				6	1.000	+		
				11	1.000	±		
				12	0.300	±		
29	SLU SISMA Y P v2	S. L. U.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				6	1.000	+		
				12	1.000	±		
				11	0.300	±		
30	SLU SISMA X P v3	S. L. U.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				7	1.000	+		
				13	1.000	±		
				14	0.300	±		
31	SLU SISMA Y P v3	S. L. U.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				7	1.000	+		
				14	1.000	±		
				13	0.300	±		
32	SLU SISMA X P v1-2	S. L. U.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				10	1.000	±		
				9	0.300	±		
				5	1.000	+		
				6	1.000	+		
				11	1.000	±		
				12	0.300	±		
33	SLU SISMA Y P v1-2	S. L. U.	somma	1	1.000	+		
				2	1.000	+		
				3	1.000	+		
				4	1.000	+		
				5	1.000	+		
				9	1.000	±		
				10	0.300	±		
				6	1.000	+		
				12	1.000	±		
				11	0.300	±		

34	SLU SI SMA X P v1-3	S. L. U.	somma	1	1.000	+						
				2	1.000	+						
				3	1.000	+						
				4	1.000	+						
				10	1.000	±						
				9	0.300	±						
				5	1.000	+						
				7	1.000	+						
				13	1.000	±						
				14	0.300	±						

				35	SLU SI SMA Y P v1-3	S. L. U.	somma	1	1.000	+		
								2	1.000	+		
								3	1.000	+		
4	1.000	+										
5	1.000	+										
9	1.000	±										
10	0.300	±										
7	1.000	+										
14	1.000	±										
13	0.300	±										

36	SLU SI SMA X P v2-3	S. L. U.	somma					1	1.000	+		
								2	1.000	+		
				3	1.000	+						
				4	1.000	+						
				6	1.000	+						
				11	1.000	±						
				12	0.300	±						
				7	1.000	+						
				13	1.000	±						
				14	0.300	±						

				37	SLU SI SMA Y P v2-3	S. L. U.	somma	1	1.000	+		
								2	1.000	+		
								3	1.000	+		
4	1.000	+										
6	1.000	+										
12	1.000	±										
11	0.300	±										
7	1.000	+										
14	1.000	±										
13	0.300	±										

38	SLU SI SMA X v1-2-3	S. L. U.	somma					1	1.000	+		
								2	1.000	+		
				3	1.000	+						
				4	1.000	+						
				6	1.000	+						
				11	1.000	±						
				12	0.300	±						
				7	1.000	+						
				13	1.000	±						
				14	0.300	±						
				5	1.000	+						
				10	1.000	±						
				9	0.300	±						

39	SLU SI SMA Y v1-2-3	S. L. U.	somma	1	1.000	+						
				2	1.000	+						
				3	1.000	+						
				4	1.000	+						
				6	1.000	+						
				12	1.000	±						
				11	0.300	±						
				7	1.000	+						
				14	1.000	±						
				13	0.300	±						
				5	1.000	+						
				9	1.000	±						
				10	0.300	±						

40	SLD SI SMA P X v1-2-3	S. L. Danno	somma	1	1.000	+						
				2	1.000	+						
				3	1.000	+						
				4	1.000	+						
				5	1.000	+						
				6	1.000	+						
				7	1.000	+						
				10	0.721	±						
				11	0.721	±						
				13	0.721	±						
				9	0.216	±						
				12	0.216	±						
				14	0.216	±						

41	SLD SI SMA P Y v1-2-3	S. L. Danno	somma	1	1.000	+						
				2	1.000	+						
				3	1.000	+						
				4	1.000	+						

			5	1.000	+		
			6	1.000	+		
			7	1.000	+		
			9	0.721	±		
			12	0.721	±		
			14	0.721	±		
			10	0.216	±		
			11	0.216	±		
			13	0.216	±		

10 VERIFICHE

Le verifiche di tutti gli elementi strutturali sono state condotte in accordo con il paragrafo 7.4.1 NTC 2018

7.4. COSTRUZIONI DI CALCESTRUZZO

7.4.1. GENERALITÀ

Nel caso di comportamento strutturale non dissipativo, la capacità delle membrature deve essere valutata in accordo con le regole di cui al § 4.1, senza nessun requisito aggiuntivo, a condizione che in nessuna sezione si superi il momento resistente massimo in campo sostanzialmente elastico, come definito al § 4.1.2.3.4.2. Per i nodi trave-pilastro di strutture a comportamento non dissipativo si devono applicare le regole di progetto relative alla CD "B" contenute nel § 7.4.4.3. Per le strutture prefabbricate a comportamento non dissipativo si devono applicare anche le regole generali contenute nel § 7.4.5.

La permanenza in campo elastico è ottenuta limitando la deformazione dell'acciaio alla deformazione di snervamento (1.97 per mille).

Eguendo le analisi con le regole del capitolo 4 si eseguono le seguente verifiche.

10.1 PRESSIONI SUL TERRENO

Piano XY, Z = 0 cm

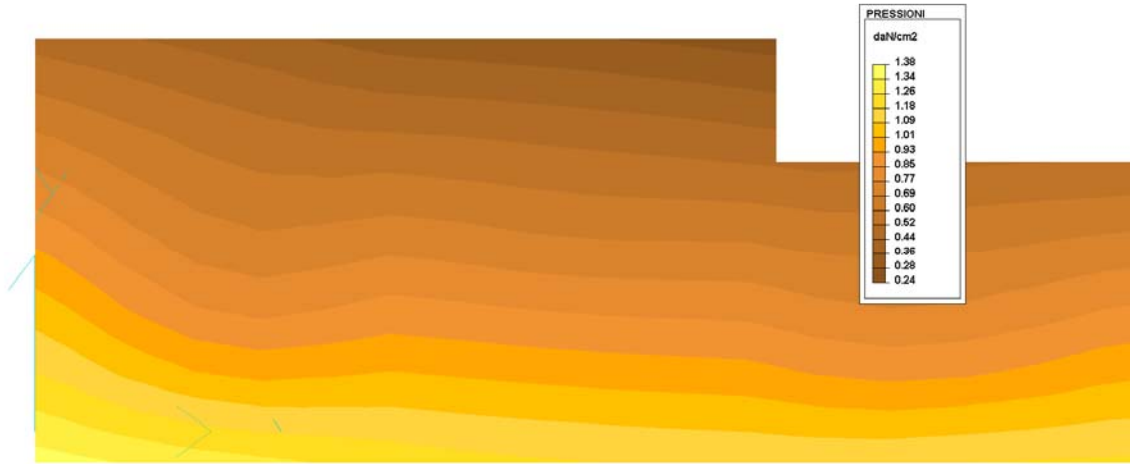


Diagramma di pressioni sul terreno - Combinazione Rara $\sigma_{max} = 1.38 \text{ daN/cm}^2$

10.2 PLATEA

MACROGUSCI 0 platea

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU SENZA SI SMA 1
2	SLU SENZA SI SMA 2
3	SLU SENZA SI SMA 3
4	SLU SENZA SI SMA 4
5	SLU SENZA SI SMA 5
6	SLU SENZA SI SMA 6
7	SLU SENZA SI SMA 7
8	SLU SENZA SI SMA 8
22	SLU SISMAX P vuoto
23	SLU SISMAX P vuoto

DATI:

tensione di snervamento acciai o (fyk):	4500	daN/cm2
coefficiente di sicurezza acciai o	: 1.15	
deformazione ultima acciai o	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento (k):	1	
resistenza cilindrica cls (fck):	249	daN/cm2
coefficiente di sicurezza cls	: 1.5	
coefficiente riduttivo (alfa):	0.85	
copri ferro inferiore (asse armatura):	5	cm
copri ferro superiore (asse armatura):	5	cm
moltiplicatore sollecitazioni	: 1	

LEGENDA:

spess	= spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
Af	= area disposta al lembo teso, in cm2 al metro
Afc	= area disposta al lembo compresso, in cm2 al metro
Mom	= momento flettente [daNcm/cm]
Nor	= sforzo normale [daN]
epsC	= deformazione cls [per mille]
epsF	= deformazione acciai o [per mille]

<-

L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciai o alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)												tx	ty	tt
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
1	5.24	0.03	0.15	5.24	0.16	0.72	5.24	0.16	0.72	5.24	0.16	0.70			
2	5.24	0.16	0.72	5.24	0.12	0.55	5.24	0.11	0.49	5.24	0.13	0.57			
3	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.18	0.80	5.24	0.21	0.96			
4	5.24	0.21	0.96	5.24	0.01	0.03	5.24	0.08	0.38	5.24	0.16	0.70			
5	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.17	0.75	5.24	0.18	0.80			
6	5.24	0.23	1.03	5.24	0.01	0.04	5.24	0.05	0.23	5.24	0.10	0.46			
7	5.24	0.01	0.06	5.24	0.04	0.18	5.24	0.17	0.78	5.24	0.14	0.63			
8	5.24	0.24	1.08	5.24	0.06	0.26	5.24	0.10	0.44	5.24	0.10	0.47			
9	5.24	0.05	0.21	5.24	0.11	0.51	5.24	0.14	0.63	5.24	0.08	0.36			
10	5.24	0.17	0.75	5.24	0.10	0.43	5.24	0.07	0.33	5.24	0.07	0.32			
11	5.24	0.04	0.19	5.24	0.24	1.07	5.24	0.05	0.23	5.24	0.00	0.00			
12	5.24	0.09	0.40	5.24	0.16	0.70	5.24	0.05	0.22	5.24	0.00	0.00			
13	5.24	0.00	0.00	5.24	0.12	0.55	5.24	0.11	0.49	5.24	0.12	0.56			
14	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.19	0.86	5.24	0.21	0.95			
15	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.20	0.91	5.24	0.19	0.86			
16	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.19	0.86	5.24	0.14	0.61			
17	5.24	0.00	0.00	5.24	0.10	0.44	5.24	0.12	0.53	5.24	0.04	0.18			
18	5.24	0.03	0.12	5.24	0.27	1.24	5.24	0.03	0.14	5.24	0.00	0.00			
19	5.24	0.04	0.16	5.24	0.16	0.71	5.24	0.15	0.70	5.24	0.17	0.75			
20	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.18	0.80	5.24	0.21	0.97			
21	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.17	0.75	5.24	0.18	0.80			
22	5.24	0.01	0.04	5.24	0.03	0.15	5.24	0.17	0.75	5.24	0.14	0.61			
23	5.24	0.04	0.18	5.24	0.11	0.48	5.24	0.14	0.61	5.24	0.07	0.33			
24	5.24	0.03	0.15	5.24	0.25	1.11	5.24	0.04	0.19	5.24	0.00	0.00			
25	5.24	0.18	0.80	5.24	0.11	0.51	5.24	0.10	0.43	5.24	0.13	0.60			
26	5.24	0.22	0.99	5.24	0.03	0.11	5.24	0.07	0.31	5.24	0.14	0.64			
27	5.24	0.21	0.93	5.24	0.00	0.00	5.24	0.02	0.10	5.24	0.11	0.49			
28	5.24	0.19	0.87	5.24	0.04	0.18	5.24	0.07	0.29	5.24	0.10	0.43			
29	5.24	0.14	0.63	5.24	0.10	0.43	5.24	0.07	0.30	5.24	0.05	0.22			
30	5.24	0.09	0.38	5.24	0.18	0.80	5.24	0.05	0.21	5.24	0.00	0.00			
31	5.24	0.07	0.30	5.24	0.24	1.08	5.24	0.01	0.03	5.24	0.00	0.00			
32	5.24	0.05	0.22	5.24	0.16	0.72	5.24	0.05	0.23	5.24	0.00	0.00			
33	5.24	0.06	0.27	5.24	0.11	0.51	5.24	0.06	0.29	5.24	0.06	0.28			
34	5.24	0.09	0.41	5.24	0.09	0.39	5.24	0.02	0.07	5.24	0.02	0.08			
35	5.24	0.06	0.25	5.24	0.08	0.34	5.24	0.07	0.30	5.24	0.13	0.58			
36	5.24	0.14	0.62	5.24	0.04	0.18	5.24	0.01	0.02	5.24	0.06	0.29			
37	5.24	0.05	0.24	5.24	0.29	1.33	5.24	0.00	0.00	5.24	0.00	0.00			
38	5.24	0.06	0.26	5.24	0.13	0.57	5.24	0.05	0.21	5.24	0.06	0.27			

39	5.24	0.03	0.15	5.24	0.07	0.32	5.24	0.07	0.33	5.24	0.14	0.62
40	5.24	0.07	0.30	5.24	0.24	1.06	5.24	0.00	0.00	5.24	0.00	0.00
41	5.24	0.06	0.26	5.24	0.12	0.52	5.24	0.06	0.26	5.24	0.07	0.32
42	5.24	0.05	0.23	5.24	0.08	0.37	5.24	0.07	0.30	5.24	0.13	0.57
43	5.24	0.05	0.21	5.24	0.13	0.61	5.24	0.02	0.10	5.24	0.00	0.00
44	5.24	0.10	0.44	5.24	0.09	0.39	5.24	0.04	0.17	5.24	0.05	0.21
45	5.24	0.10	0.47	5.24	0.09	0.41	5.24	0.03	0.14	5.24	0.06	0.26
46	5.24	0.10	0.47	5.24	0.03	0.14	5.24	0.01	0.06	5.24	0.07	0.31
47	5.24	0.02	0.11	5.24	0.04	0.18	5.24	0.07	0.31	5.24	0.10	0.45
48	5.24	0.00	0.01	5.24	0.03	0.15	5.24	0.07	0.30	5.24	0.12	0.56
49	5.24	0.03	0.14	5.24	0.04	0.18	5.24	0.07	0.32	5.24	0.10	0.46
50	5.24	0.17	0.74	5.24	0.01	0.06	5.24	0.00	0.00	5.24	0.06	0.26
51	5.24	0.01	0.06	5.24	0.08	0.38	5.24	0.08	0.38	5.24	0.15	0.68
52	5.24	0.11	0.48	5.24	0.07	0.30	5.24	0.06	0.26	5.24	0.12	0.53
53	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.09	0.39	5.24	0.18	0.83
54	5.24	0.09	0.42	5.24	0.00	0.00	5.24	0.04	0.16	5.24	0.11	0.49
55	5.24	0.00	0.00	5.24	0.03	0.12	5.24	0.07	0.32	5.24	0.12	0.56
56	5.24	0.10	0.45	5.24	0.02	0.07	5.24	0.04	0.18	5.24	0.09	0.42
57	5.24	0.02	0.08	5.24	0.26	1.16	5.24	0.03	0.12	5.24	0.00	0.00
58	5.24	0.07	0.31	5.24	0.15	0.66	5.24	0.00	0.02	5.24	0.00	0.00
59	5.24	0.00	0.00	5.24	0.06	0.28	5.24	0.06	0.26	5.24	0.15	0.66
60	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.07	0.33	5.24	0.19	0.87
61	5.24	0.00	0.02	5.24	0.03	0.12	5.24	0.06	0.29	5.24	0.13	0.59
62	5.24	0.02	0.11	5.24	0.32	1.42	5.24	0.02	0.08	5.24	0.00	0.00
63	5.24	0.01	0.05	5.24	0.08	0.37	5.24	0.08	0.36	5.24	0.14	0.65
64	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.08	0.36	5.24	0.17	0.78
65	5.24	0.02	0.08	5.24	0.05	0.22	5.24	0.07	0.31	5.24	0.12	0.52
66	5.24	0.03	0.12	5.24	0.26	1.18	5.24	0.02	0.11	5.24	0.00	0.00
67	5.24	0.11	0.49	5.24	0.07	0.29	5.24	0.06	0.25	5.24	0.11	0.51
68	5.24	0.11	0.49	5.24	0.00	0.00	5.24	0.02	0.11	5.24	0.10	0.44
69	5.24	0.10	0.45	5.24	0.05	0.21	5.24	0.04	0.20	5.24	0.07	0.34
70	5.24	0.06	0.26	5.24	0.15	0.69	5.24	0.01	0.06	5.24	0.00	0.00
71	5.24	0.05	0.23	5.24	0.07	0.30	5.24	0.01	0.03	5.24	0.04	0.16
72	5.24	0.03	0.14	5.24	0.10	0.45	5.24	0.01	0.06	5.24	0.00	0.00
73	5.24	0.12	0.53	5.24	0.05	0.24	5.24	0.00	0.00	5.24	0.07	0.32
74	5.24	0.16	0.71	5.24	0.07	0.31	5.24	0.00	0.00	5.24	0.04	0.19
75	5.24	0.00	0.02	5.24	0.06	0.25	5.24	0.03	0.14	5.24	0.05	0.23
76	5.24	0.00	0.01	5.24	0.10	0.45	5.24	0.06	0.25	5.24	0.05	0.22
77	5.24	0.00	0.01	5.24	0.07	0.31	5.24	0.01	0.06	5.24	0.05	0.21
78	5.24	0.00	0.00	5.24	0.11	0.50	5.24	0.03	0.16	5.24	0.05	0.22
79	5.24	0.00	0.01	5.24	0.10	0.45	5.24	0.05	0.24	5.24	0.05	0.20
80	5.24	0.00	0.02	5.24	0.06	0.26	5.24	0.03	0.13	5.24	0.05	0.22
81	5.24	0.08	0.35	5.24	0.04	0.20	5.24	0.00	0.00	5.24	0.04	0.18
82	5.24	0.08	0.36	5.24	0.05	0.21	5.24	0.01	0.04	5.24	0.04	0.16
83	5.24	0.05	0.24	5.24	0.04	0.17	5.24	0.04	0.18	5.24	0.01	0.04
84	5.24	0.03	0.14	5.24	0.03	0.11	5.24	0.01	0.02	5.24	0.03	0.12
85	5.24	0.03	0.12	5.24	0.02	0.10	5.24	0.00	0.00	5.24	0.02	0.11
86	5.24	0.03	0.15	5.24	0.02	0.10	5.24	0.00	0.01	5.24	0.03	0.15
87	5.24	0.05	0.22	5.24	0.02	0.10	5.24	0.02	0.11	5.24	0.03	0.13
88	5.24	0.04	0.18	5.24	0.05	0.21	5.24	0.04	0.20	5.24	0.05	0.21
89	5.24	0.07	0.30	5.24	0.02	0.10	5.24	0.00	0.00	5.24	0.06	0.26
90	5.24	0.04	0.19	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.04	0.19
91	5.24	0.07	0.30	5.24	0.03	0.15	5.24	0.00	0.00	5.24	0.06	0.26
92	5.24	0.06	0.26	5.24	0.04	0.20	5.24	0.07	0.30	5.24	0.04	0.19
93	5.24	0.14	0.62	5.24	0.13	0.60	5.24	0.09	0.40	5.24	0.05	0.24
94	5.24	0.06	0.27	5.24	0.15	0.66	5.24	0.12	0.53	5.24	0.02	0.10
95	5.24	0.00	0.02	5.24	0.10	0.47	5.24	0.05	0.22	5.24	0.00	0.00
96	5.24	0.06	0.26	5.24	0.15	0.68	5.24	0.12	0.56	5.24	0.02	0.10
97	5.24	0.13	0.58	5.24	0.13	0.59	5.24	0.11	0.48	5.24	0.06	0.25
98	5.24	0.10	0.43	5.24	0.10	0.47	5.24	0.06	0.29	5.24	0.04	0.16
99	5.24	0.03	0.14	5.24	0.12	0.53	5.24	0.08	0.34	5.24	0.01	0.06
100	5.24	0.01	0.03	5.24	0.08	0.38	5.24	0.03	0.15	5.24	0.00	0.00
101	5.24	0.03	0.14	5.24	0.12	0.54	5.24	0.08	0.34	5.24	0.02	0.07
102	5.24	0.09	0.42	5.24	0.11	0.51	5.24	0.05	0.24	5.24	0.04	0.17
103	5.24	0.07	0.31	5.24	0.08	0.37	5.24	0.00	0.00	5.24	0.02	0.09
104	5.24	0.01	0.03	5.24	0.07	0.29	5.24	0.02	0.08	5.24	0.00	0.00
105	5.24	0.01	0.02	5.24	0.07	0.29	5.24	0.01	0.02	5.24	0.00	0.00
106	5.24	0.00	0.02	5.24	0.07	0.30	5.24	0.02	0.09	5.24	0.00	0.00
107	5.24	0.09	0.40	5.24	0.09	0.40	5.24	0.00	0.00	5.24	0.03	0.15
108	5.24	0.06	0.29	5.24	0.01	0.03	5.24	0.00	0.00	5.24	0.04	0.17
109	5.24	0.06	0.28	5.24	0.04	0.18	5.24	0.00	0.02	5.24	0.04	0.18
110	5.24	0.04	0.20	5.24	0.09	0.41	5.24	0.01	0.05	5.24	0.01	0.05
111	5.24	0.11	0.51	5.24	0.09	0.41	5.24	0.03	0.15	5.24	0.10	0.45
112	5.24	0.11	0.52	5.24	0.03	0.15	5.24	0.01	0.03	5.24	0.10	0.47
113	5.24	0.08	0.35	5.24	0.04	0.17	5.24	0.00	0.00	5.24	0.06	0.25
114	5.24	0.09	0.43	5.24	0.06	0.28	5.24	0.02	0.10	5.24	0.07	0.30
115	5.24	0.08	0.37	5.24	0.09	0.40	5.24	0.03	0.15	5.24	0.06	0.29
116	5.24	0.05	0.22	5.24	0.10	0.45	5.24	0.03	0.14	5.24	0.02	0.10
117	5.24	0.03	0.13	5.24	0.02	0.10	5.24	0.03	0.13	5.24	0.02	0.08
118	5.24	0.03	0.14	5.24	0.05	0.24	5.24	0.01	0.07	5.24	0.03	0.14
119	5.24	0.03	0.14	5.24	0.03	0.14	5.24	0.01	0.05	5.24	0.02	0.08
120	5.24	0.11	0.48	5.24	0.11	0.51	5.24	0.05	0.20	5.24	0.07	0.30
121	5.24	0.03	0.14	5.24	0.04	0.17	5.24	0.02	0.08	5.24	0.05	0.23
122	5.24	0.03	0.13	5.24	0.03	0.12	5.24	0.00	0.00	5.24	0.04	0.16
123	5.24	0.03	0.14	5.24	0.03	0.12	5.24	0.00	0.00	5.24	0.03	0.14
124	5.24	0.04	0.19	5.24	0.03	0.13	5.24	0.00	0.00	5.24	0.03	0.13
125	5.24	0.05	0.23	5.24	0.06	0.25	5.24	0.00	0.02	5.24	0.05	0.21
126	5.24	0.08	0.37	5.24	0.09	0.42	5.24	0.01	0.05	5.24	0.04	0.20
127	5.24	0.08	0.36	5.24	0.06	0.25	5.24	0.00	0.01	5.24	0.07	0.32

L' ARMATURA È OVUNQUE > DELLA QUANTI TÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERI FICATO (Rd > Ed)

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X v1-2-3
39	SLU SI SMA Y v1-2-3

GUSCI	AREE ARMATURA (cm2 al metro)												τx	τy	τt
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
1	5.24	0.02	0.07	5.24	0.11	0.51	5.24	0.12	0.53	5.24	0.12	0.55			
2	5.24	0.11	0.51	5.24	0.09	0.40	5.24	0.09	0.39	5.24	0.10	0.44			
3	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.13	0.58	5.24	0.15	0.69			
4	5.24	0.15	0.68	5.24	0.00	0.00	5.24	0.08	0.34	5.24	0.12	0.52			
5	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.12	0.54	5.24	0.13	0.57			
6	5.24	0.16	0.71	5.24	0.01	0.02	5.24	0.06	0.26	5.24	0.07	0.33			
7	5.24	0.00	0.01	5.24	0.03	0.13	5.24	0.13	0.56	5.24	0.10	0.45			
8	5.24	0.17	0.75	5.24	0.04	0.19	5.24	0.08	0.37	5.24	0.08	0.35			
9	5.24	0.03	0.15	5.24	0.08	0.35	5.24	0.10	0.47	5.24	0.06	0.28			
10	5.24	0.12	0.54	5.24	0.07	0.31	5.24	0.07	0.32	5.24	0.06	0.26			
11	5.24	0.03	0.14	5.24	0.17	0.75	5.24	0.04	0.20	5.24	0.00	0.00			
12	5.24	0.06	0.29	5.24	0.11	0.50	5.24	0.05	0.23	5.24	0.00	0.01			
13	5.24	0.00	0.00	5.24	0.09	0.39	5.24	0.08	0.36	5.24	0.11	0.47			
14	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.14	0.62	5.24	0.15	0.69			
15	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.15	0.66	5.24	0.14	0.62			
16	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.14	0.62	5.24	0.10	0.45			
17	5.24	0.00	0.00	5.24	0.06	0.28	5.24	0.09	0.39	5.24	0.03	0.16			
18	5.24	0.02	0.09	5.24	0.19	0.86	5.24	0.03	0.11	5.24	0.00	0.00			
19	5.24	0.03	0.11	5.24	0.11	0.51	5.24	0.11	0.51	5.24	0.13	0.58			
20	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.13	0.56	5.24	0.15	0.69			
21	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.12	0.54	5.24	0.13	0.57			
22	5.24	0.01	0.05	5.24	0.03	0.11	5.24	0.12	0.54	5.24	0.10	0.44			
23	5.24	0.03	0.14	5.24	0.08	0.35	5.24	0.10	0.44	5.24	0.06	0.26			
24	5.24	0.03	0.13	5.24	0.17	0.77	5.24	0.04	0.17	5.24	0.00	0.00			
25	5.24	0.13	0.58	5.24	0.08	0.37	5.24	0.07	0.31	5.24	0.11	0.47			
26	5.24	0.16	0.71	5.24	0.01	0.06	5.24	0.05	0.22	5.24	0.10	0.45			
27	5.24	0.15	0.69	5.24	0.00	0.00	5.24	0.01	0.07	5.24	0.08	0.35			
28	5.24	0.15	0.68	5.24	0.03	0.13	5.24	0.05	0.21	5.24	0.07	0.31			
29	5.24	0.11	0.50	5.24	0.07	0.30	5.24	0.05	0.22	5.24	0.04	0.18			
30	5.24	0.07	0.31	5.24	0.12	0.56	5.24	0.04	0.17	5.24	0.00	0.00			
31	5.24	0.04	0.19	5.24	0.16	0.73	5.24	0.01	0.05	5.24	0.00	0.00			
32	5.24	0.04	0.18	5.24	0.11	0.48	5.24	0.03	0.15	5.24	0.00	0.00			
33	5.24	0.04	0.17	5.24	0.08	0.35	5.24	0.05	0.22	5.24	0.06	0.25			
34	5.24	0.07	0.32	5.24	0.06	0.26	5.24	0.01	0.06	5.24	0.02	0.09			
35	5.24	0.04	0.17	5.24	0.05	0.22	5.24	0.05	0.23	5.24	0.10	0.43			
36	5.24	0.11	0.48	5.24	0.03	0.12	5.24	0.00	0.01	5.24	0.05	0.23			
37	5.24	0.04	0.16	5.24	0.20	0.92	5.24	0.00	0.02	5.24	0.00	0.00			
38	5.24	0.04	0.18	5.24	0.09	0.40	5.24	0.04	0.18	5.24	0.05	0.24			
39	5.24	0.01	0.06	5.24	0.04	0.20	5.24	0.06	0.25	5.24	0.10	0.46			
40	5.24	0.04	0.19	5.24	0.17	0.76	5.24	0.01	0.06	5.24	0.00	0.00			
41	5.24	0.04	0.16	5.24	0.08	0.36	5.24	0.05	0.23	5.24	0.06	0.27			
42	5.24	0.03	0.15	5.24	0.05	0.24	5.24	0.05	0.23	5.24	0.09	0.43			
43	5.24	0.04	0.20	5.24	0.10	0.46	5.24	0.01	0.07	5.24	0.00	0.00			
44	5.24	0.08	0.34	5.24	0.06	0.28	5.24	0.03	0.13	5.24	0.04	0.17			
45	5.24	0.08	0.35	5.24	0.06	0.27	5.24	0.02	0.09	5.24	0.04	0.18			
46	5.24	0.08	0.36	5.24	0.02	0.11	5.24	0.01	0.05	5.24	0.05	0.23			
47	5.24	0.01	0.03	5.24	0.02	0.10	5.24	0.05	0.24	5.24	0.07	0.33			
48	5.24	0.00	0.00	5.24	0.01	0.04	5.24	0.05	0.23	5.24	0.09	0.42			
49	5.24	0.01	0.06	5.24	0.02	0.10	5.24	0.05	0.24	5.24	0.08	0.34			
50	5.24	0.12	0.54	5.24	0.01	0.05	5.24	0.00	0.00	5.24	0.04	0.19			
51	5.24	0.01	0.02	5.24	0.05	0.24	5.24	0.06	0.28	5.24	0.12	0.54			
52	5.24	0.08	0.36	5.24	0.05	0.22	5.24	0.05	0.20	5.24	0.09	0.42			
53	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.07	0.29	5.24	0.13	0.60			
54	5.24	0.07	0.32	5.24	0.00	0.00	5.24	0.02	0.11	5.24	0.08	0.35			
55	5.24	0.00	0.00	5.24	0.02	0.09	5.24	0.05	0.24	5.24	0.09	0.41			
56	5.24	0.08	0.36	5.24	0.01	0.06	5.24	0.03	0.13	5.24	0.07	0.31			
57	5.24	0.01	0.05	5.24	0.17	0.78	5.24	0.02	0.11	5.24	0.00	0.00			
58	5.24	0.06	0.25	5.24	0.10	0.44	5.24	0.01	0.03	5.24	0.00	0.00			
59	5.24	0.00	0.00	5.24	0.03	0.13	5.24	0.04	0.20	5.24	0.12	0.52			
60	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.06	0.25	5.24	0.14	0.63			
61	5.24	0.00	0.00	5.24	0.02	0.07	5.24	0.05	0.22	5.24	0.10	0.44			
62	5.24	0.01	0.07	5.24	0.21	0.97	5.24	0.02	0.08	5.24	0.00	0.00			
63	5.24	0.00	0.02	5.24	0.05	0.23	5.24	0.06	0.27	5.24	0.11	0.52			
64	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.06	0.27	5.24	0.13	0.57			
65	5.24	0.01	0.05	5.24	0.04	0.16	5.24	0.05	0.23	5.24	0.09	0.39			
66	5.24	0.02	0.10	5.24	0.18	0.81	5.24	0.03	0.12	5.24	0.00	0.00			
67	5.24	0.08	0.36	5.24	0.05	0.22	5.24	0.05	0.21	5.24	0.09	0.40			
68	5.24	0.08	0.35	5.24	0.00	0.00	5.24	0.02	0.11	5.24	0.07	0.33			

69	5.24	0.07	0.33	5.24	0.03	0.15	5.24	0.04	0.18	5.24	0.06	0.27
70	5.24	0.04	0.19	5.24	0.11	0.48	5.24	0.02	0.11	5.24	0.01	0.03
71	5.24	0.05	0.20	5.24	0.05	0.22	5.24	0.00	0.02	5.24	0.02	0.10
72	5.24	0.02	0.10	5.24	0.06	0.25	5.24	0.01	0.03	5.24	0.00	0.00
73	5.24	0.08	0.38	5.24	0.04	0.18	5.24	0.00	0.00	5.24	0.05	0.24
74	5.24	0.11	0.51	5.24	0.05	0.23	5.24	0.00	0.00	5.24	0.03	0.12
75	5.24	0.00	0.01	5.24	0.04	0.18	5.24	0.02	0.10	5.24	0.04	0.16
76	5.24	0.00	0.00	5.24	0.08	0.38	5.24	0.04	0.18	5.24	0.03	0.14
77	5.24	0.00	0.02	5.24	0.05	0.23	5.24	0.01	0.04	5.24	0.03	0.15
78	5.24	0.00	0.00	5.24	0.09	0.42	5.24	0.03	0.11	5.24	0.03	0.12
79	5.24	0.00	0.00	5.24	0.08	0.38	5.24	0.04	0.17	5.24	0.03	0.12
80	5.24	0.00	0.02	5.24	0.04	0.19	5.24	0.02	0.09	5.24	0.03	0.15
81	5.24	0.06	0.26	5.24	0.03	0.15	5.24	0.00	0.00	5.24	0.03	0.14
82	5.24	0.06	0.28	5.24	0.04	0.19	5.24	0.01	0.03	5.24	0.02	0.11
83	5.24	0.05	0.22	5.24	0.03	0.16	5.24	0.04	0.17	5.24	0.01	0.05
84	5.24	0.03	0.13	5.24	0.03	0.13	5.24	0.01	0.03	5.24	0.02	0.07
85	5.24	0.02	0.09	5.24	0.02	0.09	5.24	0.00	0.00	5.24	0.01	0.07
86	5.24	0.03	0.13	5.24	0.03	0.12	5.24	0.01	0.03	5.24	0.02	0.10
87	5.24	0.04	0.16	5.24	0.03	0.12	5.24	0.04	0.19	5.24	0.02	0.08
88	5.24	0.02	0.11	5.24	0.03	0.15	5.24	0.03	0.12	5.24	0.03	0.12
89	5.24	0.04	0.20	5.24	0.02	0.09	5.24	0.00	0.00	5.24	0.03	0.14
90	5.24	0.03	0.14	5.24	0.01	0.02	5.24	0.00	0.00	5.24	0.02	0.10
91	5.24	0.04	0.19	5.24	0.02	0.11	5.24	0.00	0.00	5.24	0.03	0.15
92	5.24	0.04	0.16	5.24	0.04	0.16	5.24	0.05	0.20	5.24	0.03	0.13
93	5.24	0.10	0.46	5.24	0.10	0.46	5.24	0.06	0.29	5.24	0.04	0.19
94	5.24	0.05	0.21	5.24	0.11	0.50	5.24	0.09	0.39	5.24	0.01	0.06
95	5.24	0.00	0.00	5.24	0.08	0.36	5.24	0.03	0.16	5.24	0.00	0.00
96	5.24	0.04	0.19	5.24	0.11	0.51	5.24	0.09	0.41	5.24	0.02	0.07
97	5.24	0.09	0.42	5.24	0.10	0.44	5.24	0.08	0.38	5.24	0.04	0.20
98	5.24	0.07	0.33	5.24	0.08	0.35	5.24	0.05	0.23	5.24	0.03	0.13
99	5.24	0.02	0.10	5.24	0.09	0.40	5.24	0.06	0.26	5.24	0.01	0.04
100	5.24	0.00	0.00	5.24	0.06	0.28	5.24	0.02	0.10	5.24	0.00	0.00
101	5.24	0.02	0.10	5.24	0.09	0.40	5.24	0.06	0.26	5.24	0.01	0.04
102	5.24	0.07	0.32	5.24	0.09	0.39	5.24	0.04	0.19	5.24	0.03	0.14
103	5.24	0.05	0.23	5.24	0.06	0.28	5.24	0.00	0.02	5.24	0.02	0.08
104	5.24	0.00	0.01	5.24	0.05	0.22	5.24	0.01	0.05	5.24	0.00	0.00
105	5.24	0.00	0.02	5.24	0.05	0.21	5.24	0.00	0.01	5.24	0.00	0.00
106	5.24	0.00	0.00	5.24	0.05	0.23	5.24	0.01	0.06	5.24	0.00	0.01
107	5.24	0.07	0.29	5.24	0.07	0.31	5.24	0.01	0.03	5.24	0.03	0.13
108	5.24	0.05	0.23	5.24	0.00	0.02	5.24	0.00	0.00	5.24	0.03	0.13
109	5.24	0.05	0.22	5.24	0.03	0.14	5.24	0.00	0.00	5.24	0.03	0.15
110	5.24	0.04	0.18	5.24	0.07	0.30	5.24	0.01	0.05	5.24	0.02	0.08
111	5.24	0.09	0.38	5.24	0.07	0.30	5.24	0.03	0.14	5.24	0.08	0.37
112	5.24	0.09	0.40	5.24	0.03	0.12	5.24	0.01	0.04	5.24	0.08	0.36
113	5.24	0.06	0.26	5.24	0.03	0.13	5.24	0.00	0.00	5.24	0.04	0.18
114	5.24	0.07	0.33	5.24	0.05	0.20	5.24	0.01	0.06	5.24	0.05	0.22
115	5.24	0.07	0.30	5.24	0.07	0.30	5.24	0.03	0.13	5.24	0.05	0.24
116	5.24	0.04	0.20	5.24	0.07	0.33	5.24	0.03	0.14	5.24	0.03	0.12
117	5.24	0.03	0.14	5.24	0.03	0.12	5.24	0.03	0.12	5.24	0.01	0.05
118	5.24	0.02	0.08	5.24	0.04	0.17	5.24	0.01	0.03	5.24	0.02	0.07
119	5.24	0.03	0.15	5.24	0.02	0.09	5.24	0.01	0.06	5.24	0.01	0.03
120	5.24	0.08	0.35	5.24	0.08	0.38	5.24	0.04	0.18	5.24	0.05	0.24
121	5.24	0.02	0.09	5.24	0.03	0.12	5.24	0.01	0.06	5.24	0.03	0.14
122	5.24	0.02	0.09	5.24	0.02	0.10	5.24	0.00	0.00	5.24	0.02	0.10
123	5.24	0.03	0.12	5.24	0.03	0.12	5.24	0.00	0.00	5.24	0.02	0.09
124	5.24	0.03	0.14	5.24	0.02	0.10	5.24	0.02	0.11	5.24	0.02	0.07
125	5.24	0.03	0.15	5.24	0.04	0.18	5.24	0.00	0.01	5.24	0.03	0.13
126	5.24	0.06	0.28	5.24	0.07	0.30	5.24	0.01	0.05	5.24	0.04	0.16
127	5.24	0.06	0.27	5.24	0.04	0.19	5.24	0.00	0.02	5.24	0.06	0.26

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

MACROGUSCI 0 pl atea

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
9	RARA 1 (RARA)
10	RARA 2 (RARA)
11	RARA 3 (RARA)
13	RARA 5 (RARA)
14	RARA 6 (RARA)
15	RARA 7 (RARA)
16	RARA 8 (RARA)
17	FREQUENTE 1 (FREQUENTE)
18	FREQUENTE 2 (FREQUENTE)
19	QUASI PERMANENTE (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 5 cm
 copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm² al metro)
 Afc = area effettiva compressa (cm² al metro)
 Mom = momento flettente [daNcm/cm]
 Nor = sforzo normale [daN]
 σ_c = tensione calcestruzzo [daN/cm²]
 valore max per combinazione rara = 149.4 daN/cm²

quasi permanente = 112 daN/cm2
 σ_f = tensione acciai [daN/cm2]
 valore max per combinazione rara = 3600 daN/cm2
 wkF = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
 wkP = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm
 <-

ARMATURA INFERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE					
	Af	Afc	Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
1	5.24	5.24	161	0.	1.44	94.	13	0.	0.001	8	0.	0.07	0.001
2	5.24	5.24	1457	0.	12.97	851.	1045	0.	0.070	1037	0.	9.23	0.069
3	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
4	5.24	5.24	1567	0.	13.95	916.	769	0.	0.051	763	0.	6.80	0.051
5	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
6	5.24	5.24	1197	0.	10.66	700.	444	0.	0.030	446	0.	3.97	0.030
7	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
8	5.24	5.24	1766	0.	15.72	1032.	830	0.	0.055	829	0.	7.38	0.055
9	5.24	5.24	6	0.	0.05	3.	35	0.	0.002	39	0.	0.34	0.003
10	5.24	5.24	1512	0.	13.46	884.	682	0.	0.045	702	0.	6.25	0.047
11	5.24	5.24	386	0.	3.44	226.	266	0.	0.018	261	0.	2.32	0.017
12	5.24	5.24	815	0.	7.25	476.	337	0.	0.022	356	0.	3.17	0.024
13	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
14	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
15	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
16	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
17	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
18	5.24	5.24	0.	0.	0.00	0.	7	0.	0.000	7	0.	0.07	0.000
19	5.24	5.24	183	0.	1.63	107.	104	0.	0.007	96	0.	0.86	0.006
20	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
21	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
22	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
23	5.24	5.24	0.	0.	0.00	0.	119	0.	0.008	121	0.	1.08	0.008
24	5.24	5.24	339	0.	3.02	198.	285	0.	0.019	279	0.	2.49	0.019
25	5.24	5.24	1544	0.	13.75	902.	1203	0.	0.080	1189	0.	10.58	0.079
26	5.24	5.24	1593	0.	14.18	931.	1084	0.	0.072	1075	0.	9.57	0.072
27	5.24	5.24	1088	0.	9.68	636.	799	0.	0.053	793	0.	7.06	0.053
28	5.24	5.24	1517	0.	13.51	887.	1043	0.	0.069	1033	0.	9.19	0.069
29	5.24	5.24	1348	0.	12.00	788.	829	0.	0.055	819	0.	7.29	0.054
30	5.24	5.24	805	0.	7.16	470.	463	0.	0.031	455	0.	4.05	0.030
31	5.24	5.24	449	0.	4.00	262.	181	0.	0.012	187	0.	1.66	0.012
32	5.24	5.24	277	0.	2.46	162.	126	0.	0.008	120	0.	1.07	0.008
33	5.24	5.24	0.	0.	0.00	0.	192	0.	0.013	191	0.	1.70	0.013
34	5.24	5.24	895	0.	7.97	523.	542	0.	0.036	535	0.	4.76	0.036
35	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
36	5.24	5.24	978	0.	8.71	572.	845	0.	0.056	841	0.	7.49	0.056
37	5.24	5.24	355	0.	3.16	208.	213	0.	0.014	214	0.	1.91	0.014
38	5.24	5.24	0.	0.	0.00	0.	28	0.	0.002	32	0.	0.28	0.002
39	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
40	5.24	5.24	430	0.	3.83	252.	272	0.	0.018	267	0.	2.38	0.018
41	5.24	5.24	29	0.	0.25	17.	261	0.	0.017	260	0.	2.31	0.017
42	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
43	5.24	5.24	371	0.	3.30	217.	191	0.	0.013	186	0.	1.66	0.012
44	5.24	5.24	918	0.	8.17	536.	508	0.	0.034	504	0.	4.48	0.034
45	5.24	5.24	658	0.	5.85	384.	544	0.	0.036	540	0.	4.81	0.036
46	5.24	5.24	661	0.	5.89	387.	504	0.	0.033	497	0.	4.43	0.033
47	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
48	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
49	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
50	5.24	5.24	1116	0.	9.93	652.	875	0.	0.058	886	0.	7.89	0.059
51	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
52	5.24	5.24	823	0.	7.33	481.	664	0.	0.044	648	0.	5.77	0.043
53	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
54	5.24	5.24	419	0.	3.73	245.	338	0.	0.022	335	0.	2.98	0.022
55	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
56	5.24	5.24	638	0.	5.68	373.	617	0.	0.041	612	0.	5.44	0.041
57	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
58	5.24	5.24	563	0.	5.02	329.	433	0.	0.029	423	0.	3.76	0.028
59	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
60	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
61	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
62	5.24	5.24	47	0.	0.42	28.	8	0.	0.001	11	0.	0.10	0.001
63	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
64	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
65	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
66	5.24	5.24	205	0.	1.83	120.	197	0.	0.013	189	0.	1.68	0.013
67	5.24	5.24	844	0.	7.51	493.	630	0.	0.042	620	0.	5.52	0.041
68	5.24	5.24	512	0.	4.56	299.	259	0.	0.017	259	0.	2.30	0.017
69	5.24	5.24	766	0.	6.82	448.	529	0.	0.035	527	0.	4.69	0.035
70	5.24	5.24	593	0.	5.28	347.	416	0.	0.028	409	0.	3.64	0.027
71	5.24	5.24	478	0.	4.25	279.	203	0.	0.014	196	0.	1.75	0.013
72	5.24	5.24	218	0.	1.94	127.	92	0.	0.006	78	0.	0.70	0.005
73	5.24	5.24	654	0.	5.83	382.	494	0.	0.033	490	0.	4.37	0.033
74	5.24	5.24	1004	0.	8.94	587.	671	0.	0.045	677	0.	6.03	0.045
75	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
76	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
77	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
78	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
79	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
80	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
81	5.24	5.24	410	0.	3.65	240.	397	0.	0.026	389	0.	3.47	0.026

82	5.24	5.24	497	0.	4.43	291.	453	0.	0.030	449	0.	4.00	0.030
83	5.24	5.24	570	0.	5.08	333.	333	0.	0.022	326	0.	2.90	0.022
84	5.24	5.24	428	0.	3.81	250.	302	0.	0.020	293	0.	2.61	0.020
85	5.24	5.24	239	0.	2.13	140.	141	0.	0.009	139	0.	1.23	0.009
86	5.24	5.24	417	0.	3.71	243.	279	0.	0.019	270	0.	2.40	0.018
87	5.24	5.24	521	0.	4.64	304.	207	0.	0.014	213	0.	1.89	0.014
88	5.24	5.24	259	0.	2.31	152.	98	0.	0.007	102	0.	0.91	0.007
89	5.24	5.24	509	0.	4.53	297.	256	0.	0.017	264	0.	2.35	0.018
90	5.24	5.24	372	0.	3.31	217.	242	0.	0.016	242	0.	2.16	0.016
91	5.24	5.24	533	0.	4.74	311.	293	0.	0.020	301	0.	2.68	0.020
92	5.24	5.24	272	0.	2.42	159.	106	0.	0.007	107	0.	0.95	0.007
93	5.24	5.24	1427	0.	12.71	834.	1206	0.	0.080	1187	0.	10.57	0.079
94	5.24	5.24	562	0.	5.00	328.	434	0.	0.029	422	0.	3.75	0.028
95	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
96	5.24	5.24	546	0.	4.86	319.	397	0.	0.026	387	0.	3.45	0.026
97	5.24	5.24	1341	0.	11.94	784.	1089	0.	0.072	1080	0.	9.61	0.072
98	5.24	5.24	909	0.	8.10	532.	748	0.	0.050	735	0.	6.54	0.049
99	5.24	5.24	212	0.	1.89	124.	184	0.	0.012	174	0.	1.55	0.012
100	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
101	5.24	5.24	266	0.	2.36	155.	187	0.	0.012	175	0.	1.56	0.012
102	5.24	5.24	897	0.	7.98	524.	759	0.	0.050	737	0.	6.56	0.049
103	5.24	5.24	326	0.	2.90	191.	364	0.	0.024	352	0.	3.14	0.023
104	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
105	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
106	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
107	5.24	5.24	446	0.	3.97	261.	361	0.	0.024	351	0.	3.13	0.023
108	5.24	5.24	547	0.	4.87	319.	437	0.	0.029	415	0.	3.70	0.028
109	5.24	5.24	490	0.	4.36	286.	385	0.	0.026	363	0.	3.23	0.024
110	5.24	5.24	378	0.	3.37	221.	280	0.	0.019	257	0.	2.29	0.017
111	5.24	5.24	924	0.	8.23	540.	828	0.	0.055	802	0.	7.14	0.053
112	5.24	5.24	998	0.	8.88	583.	865	0.	0.058	831	0.	7.40	0.055
113	5.24	5.24	615	0.	5.47	359.	569	0.	0.038	557	0.	4.96	0.037
114	5.24	5.24	816	0.	7.26	477.	700	0.	0.047	670	0.	5.97	0.045
115	5.24	5.24	724	0.	6.45	423.	573	0.	0.038	535	0.	4.76	0.036
116	5.24	5.24	454	0.	4.04	265.	329	0.	0.022	298	0.	2.66	0.020
117	5.24	5.24	320	0.	2.85	187.	216	0.	0.014	190	0.	1.69	0.013
118	5.24	5.24	228	0.	2.03	133.	73	0.	0.005	72	0.	0.64	0.005
119	5.24	5.24	301	0.	2.68	176.	215	0.	0.014	194	0.	1.73	0.013
120	5.24	5.24	815	0.	7.26	477.	741	0.	0.049	721	0.	6.42	0.048
121	5.24	5.24	62	0.	0.55	36.	44	0.	0.003	43	0.	0.38	0.003
122	5.24	5.24	257	0.	2.29	150.	147	0.	0.010	147	0.	1.31	0.010
123	5.24	5.24	288	0.	2.56	168.	250	0.	0.017	237	0.	2.11	0.016
124	5.24	5.24	428	0.	3.81	250.	311	0.	0.021	302	0.	2.69	0.020
125	5.24	5.24	498	0.	4.43	291.	326	0.	0.022	314	0.	2.80	0.021
126	5.24	5.24	613	0.	5.46	358.	525	0.	0.035	507	0.	4.51	0.034
127	5.24	5.24	614	0.	5.47	359.	514	0.	0.034	494	0.	4.40	0.033

ARMATURA INFERIORE VERTICALE

GUSCI	COMBINAZIONE RARA		COMB. FREQUENTE			COMB. QUASI PERMANENTE							
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
1	5.24	5.24	16	0.	0.14	9.	50	0.	0.003	129	0.	1.15	0.009
2	5.24	5.24	578	0.	5.14	338.	497	0.	0.033	522	0.	4.65	0.035
3	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
4	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
5	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
6	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
7	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
8	5.24	5.24	295	0.	2.62	172.	331	0.	0.022	333	0.	2.97	0.022
9	5.24	5.24	630	0.	5.61	368.	662	0.	0.044	665	0.	5.92	0.044
10	5.24	5.24	885	0.	7.88	517.	739	0.	0.049	732	0.	6.52	0.049
11	5.24	5.24	2278	0.	20.28	1332.	1481	0.	0.099	1474	0.	13.13	0.098
12	5.24	5.24	1359	0.	12.10	794.	947	0.	0.063	936	0.	8.33	0.062
13	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
14	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
15	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
16	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
17	5.24	5.24	0.	0.	0.00	0.	253	0.	0.017	260	0.	2.32	0.017
18	5.24	5.24	2341	0.	20.84	1368.	1544	0.	0.103	1541	0.	13.72	0.103
19	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	3	0.	0.03	0.000
20	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
21	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
22	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
23	5.24	5.24	592	0.	5.27	346.	676	0.	0.045	679	0.	6.04	0.045
24	5.24	5.24	2344	0.	20.87	1370.	1479	0.	0.098	1473	0.	13.11	0.098
25	5.24	5.24	361	0.	3.21	211.	246	0.	0.016	290	0.	2.58	0.019
26	5.24	5.24	167	0.	1.49	98.	0.	0.	0.000	0.	0.	0.00	0.000
27	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
28	5.24	5.24	158	0.	1.41	92.	273	0.	0.018	274	0.	2.44	0.018
29	5.24	5.24	727	0.	6.47	425.	638	0.	0.042	638	0.	5.68	0.042
30	5.24	5.24	1622	0.	14.44	948.	1067	0.	0.071	1062	0.	9.46	0.071
31	5.24	5.24	2090	0.	18.61	1222.	1250	0.	0.083	1252	0.	11.15	0.083
32	5.24	5.24	1150	0.	10.24	672.	881	0.	0.059	882	0.	7.85	0.059
33	5.24	5.24	972	0.	8.65	568.	533	0.	0.035	538	0.	4.79	0.036
34	5.24	5.24	616	0.	5.48	360.	285	0.	0.019	290	0.	2.58	0.019
35	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
36	5.24	5.24	0.	0.	0.00	0.	18	0.	0.001	20	0.	0.17	0.001
37	5.24	5.24	2575	0.	22.92	1505.	1560	0.	0.104	1559	0.	13.88	0.104
38	5.24	5.24	1139	0.	10.14	666.	446	0.	0.030	446	0.	3.97	0.030
39	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
40	5.24	5.24	2284	0.	20.33	1335.	1304	0.	0.087	1300	0.	11.57	0.086

41	5.24	5.24	1027	0.	9.15	600.	648	0.	0.043	654	0.	5.83	0.044
42	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
43	5.24	5.24	1026	0.	9.13	600.	647	0.	0.043	643	0.	5.72	0.043
44	5.24	5.24	756	0.	6.73	442.	571	0.	0.038	575	0.	5.12	0.038
45	5.24	5.24	0.	0.	0.00	0.	229	0.	0.015	233	0.	2.08	0.016
46	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
47	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
48	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
49	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
50	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
51	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
52	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
53	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
54	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
55	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
56	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
57	5.24	5.24	2105	0.	18.74	1230.	1409	0.	0.094	1407	0.	12.52	0.094
58	5.24	5.24	1095	0.	9.75	640.	817	0.	0.054	814	0.	7.24	0.054
59	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
60	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
61	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
62	5.24	5.24	2514	0.	22.38	1469.	1587	0.	0.106	1587	0.	14.13	0.106
63	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
64	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
65	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
66	5.24	5.24	2253	0.	20.06	1317.	1497	0.	0.100	1495	0.	13.31	0.099
67	5.24	5.24	40	0.	0.36	24.	0.	0.	0.000	20	0.	0.18	0.001
68	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
69	5.24	5.24	120	0.	1.07	70.	174	0.	0.012	174	0.	1.55	0.012
70	5.24	5.24	1269	0.	11.29	741.	894	0.	0.059	889	0.	7.91	0.059
71	5.24	5.24	562	0.	5.00	328.	434	0.	0.029	428	0.	3.81	0.028
72	5.24	5.24	606	0.	5.39	354.	414	0.	0.028	410	0.	3.65	0.027
73	5.24	5.24	68	0.	0.60	40.	41	0.	0.003	47	0.	0.42	0.003
74	5.24	5.24	473	0.	4.21	276.	249	0.	0.017	227	0.	2.02	0.015
75	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
76	5.24	5.24	548	0.	4.88	320.	462	0.	0.031	389	0.	3.46	0.026
77	5.24	5.24	0.	0.	0.00	0.	43	0.	0.003	25	0.	0.23	0.002
78	5.24	5.24	678	0.	6.04	396.	575	0.	0.038	485	0.	4.31	0.032
79	5.24	5.24	547	0.	4.87	320.	461	0.	0.031	390	0.	3.47	0.026
80	5.24	5.24	0.	0.	0.00	0.	23	0.	0.002	15	0.	0.13	0.001
81	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
82	5.24	5.24	156	0.	1.38	91.	116	0.	0.008	91	0.	0.81	0.006
83	5.24	5.24	366	0.	3.26	214.	240	0.	0.016	228	0.	2.03	0.015
84	5.24	5.24	243	0.	2.16	142.	124	0.	0.008	98	0.	0.87	0.006
85	5.24	5.24	134	0.	1.20	79.	88	0.	0.006	64	0.	0.57	0.004
86	5.24	5.24	121	0.	1.08	71.	90	0.	0.006	80	0.	0.71	0.005
87	5.24	5.24	224	0.	2.00	131.	118	0.	0.008	88	0.	0.79	0.006
88	5.24	5.24	380	0.	3.39	222.	242	0.	0.016	244	0.	2.17	0.016
89	5.24	5.24	85	0.	0.76	50.	98	0.	0.007	99	0.	0.88	0.007
90	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
91	5.24	5.24	175	0.	1.56	103.	184	0.	0.012	184	0.	1.64	0.012
92	5.24	5.24	415	0.	3.69	242.	305	0.	0.020	306	0.	2.73	0.020
93	5.24	5.24	1068	0.	9.51	624.	1018	0.	0.068	986	0.	8.78	0.066
94	5.24	5.24	1289	0.	11.48	754.	1219	0.	0.081	1186	0.	10.56	0.079
95	5.24	5.24	887	0.	7.90	518.	855	0.	0.057	836	0.	7.44	0.056
96	5.24	5.24	1352	0.	12.03	790.	1266	0.	0.084	1236	0.	11.01	0.082
97	5.24	5.24	1091	0.	9.71	638.	1011	0.	0.067	987	0.	8.79	0.066
98	5.24	5.24	885	0.	7.88	517.	781	0.	0.052	754	0.	6.71	0.050
99	5.24	5.24	1068	0.	9.51	624.	959	0.	0.064	920	0.	8.19	0.061
100	5.24	5.24	711	0.	6.33	416.	662	0.	0.044	638	0.	5.68	0.042
101	5.24	5.24	1060	0.	9.44	620.	978	0.	0.065	937	0.	8.34	0.062
102	5.24	5.24	912	0.	8.12	533.	856	0.	0.057	818	0.	7.29	0.054
103	5.24	5.24	591	0.	5.26	345.	563	0.	0.037	539	0.	4.79	0.036
104	5.24	5.24	464	0.	4.13	271.	449	0.	0.030	435	0.	3.87	0.029
105	5.24	5.24	455	0.	4.05	266.	407	0.	0.027	403	0.	3.58	0.027
106	5.24	5.24	469	0.	4.18	274.	452	0.	0.030	439	0.	3.90	0.029
107	5.24	5.24	630	0.	5.61	368.	604	0.	0.040	581	0.	5.17	0.039
108	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
109	5.24	5.24	242	0.	2.15	141.	222	0.	0.015	219	0.	1.95	0.015
110	5.24	5.24	880	0.	7.83	514.	650	0.	0.043	644	0.	5.73	0.043
111	5.24	5.24	640	0.	5.69	374.	540	0.	0.036	545	0.	4.85	0.036
112	5.24	5.24	321	0.	2.86	187.	126	0.	0.008	114	0.	1.02	0.008
113	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
114	5.24	5.24	546	0.	4.86	319.	487	0.	0.032	485	0.	4.32	0.032
115	5.24	5.24	867	0.	7.72	507.	708	0.	0.047	697	0.	6.20	0.046
116	5.24	5.24	972	0.	8.65	568.	717	0.	0.048	704	0.	6.26	0.047
117	5.24	5.24	226	0.	2.01	132.	124	0.	0.008	90	0.	0.81	0.006
118	5.24	5.24	430	0.	3.83	252.	263	0.	0.018	266	0.	2.37	0.018
119	5.24	5.24	233	0.	2.07	136.	152	0.	0.010	129	0.	1.15	0.009
120	5.24	5.24	883	0.	7.86	516.	817	0.	0.054	798	0.	7.10	0.053
121	5.24	5.24	246	0.	2.19	144.	190	0.	0.013	187	0.	1.66	0.012
122	5.24	5.24	0.	0.	0.00	0.	152	0.	0.010	127	0.	1.13	0.008
123	5.24	5.24	69	0.	0.61	40.	139	0.	0.009	97	0.	0.87	0.006
124	5.24	5.24	226	0.	2.02	132.	148	0.	0.010	117	0.	1.04	0.008
125	5.24	5.24	500	0.	4.45	292.	318	0.	0.021	318	0.	2.83	0.021
126	5.24	5.24	727	0.	6.47	425.	642	0.	0.043	622	0.	5.54	0.041
127	5.24	5.24	233	0.	2.07	136.	164	0.	0.011	175	0.	1.55	0.012

ARMATURA SUPERIORE ORIZZONTALE

COMBINAZIONE RARA

COMB. FREQUENTE

COMB. QUASI PERMANENTE

GUSCI	Af	Afc	Mom	Nor	σC	σF	Mom	Nor	WkF	Mom	Nor	σC	WkP
1	5.24	5.24	1532	0.	13.64	895.	1321	0.	0.088	1311	0.	11.67	0.087
2	5.24	5.24	675	0.	6.01	394.	749	0.	0.050	737	0.	6.56	0.049
3	5.24	5.24	2029	0.	18.07	1186.	1575	0.	0.105	1564	0.	13.93	0.104
4	5.24	5.24	0.	0.	0.00	0.	198	0.	0.013	194	0.	1.73	0.013
5	5.24	5.24	1706	0.	15.18	997.	1463	0.	0.097	1454	0.	12.94	0.097
6	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
7	5.24	5.24	1898	0.	16.90	1109.	1422	0.	0.095	1410	0.	12.55	0.094
8	5.24	5.24	0.	0.	0.00	0.	411	0.	0.027	408	0.	3.63	0.027
9	5.24	5.24	1377	0.	12.26	805.	880	0.	0.059	869	0.	7.74	0.058
10	5.24	5.24	153	0.	1.36	89.	577	0.	0.038	556	0.	4.95	0.037
11	5.24	5.24	293	0.	2.61	172.	103	0.	0.007	96	0.	0.85	0.006
12	5.24	5.24	311	0.	2.77	182.	390	0.	0.026	360	0.	3.21	0.024
13	5.24	5.24	781	0.	6.95	457.	709	0.	0.047	707	0.	6.29	0.047
14	5.24	5.24	1877	0.	16.71	1097.	1480	0.	0.098	1471	0.	13.09	0.098
15	5.24	5.24	2338	0.	20.81	1366.	1624	0.	0.108	1612	0.	14.35	0.107
16	5.24	5.24	1956	0.	17.41	1143.	1192	0.	0.079	1180	0.	10.50	0.078
17	5.24	5.24	869	0.	7.74	508.	497	0.	0.033	489	0.	4.35	0.033
18	5.24	5.24	27	0.	0.24	16.	5	0.	0.000	3	0.	0.03	0.000
19	5.24	5.24	1474	0.	13.12	861.	1208	0.	0.080	1200	0.	10.69	0.080
20	5.24	5.24	1988	0.	17.70	1162.	1410	0.	0.094	1401	0.	12.47	0.093
21	5.24	5.24	1702	0.	15.15	994.	1138	0.	0.076	1132	0.	10.08	0.075
22	5.24	5.24	1827	0.	16.27	1068.	1106	0.	0.074	1097	0.	9.76	0.073
23	5.24	5.24	1311	0.	11.67	766.	668	0.	0.044	659	0.	5.87	0.044
24	5.24	5.24	252	0.	2.24	147.	8	0.	0.001	3	0.	0.03	0.000
25	5.24	5.24	566	0.	5.04	331.	462	0.	0.031	450	0.	4.01	0.030
26	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
27	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
28	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
29	5.24	5.24	243	0.	2.17	142.	206	0.	0.014	208	0.	1.85	0.014
30	5.24	5.24	409	0.	3.65	239.	213	0.	0.014	206	0.	1.84	0.014
31	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
32	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
33	5.24	5.24	127	0.	1.13	74.	2	0.	0.000	3	0.	0.02	0.000
34	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
35	5.24	5.24	677	0.	6.03	396.	300	0.	0.020	301	0.	2.68	0.020
36	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
37	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
38	5.24	5.24	154	0.	1.37	90.	0.	0.	0.000	0.	0.	0.00	0.000
39	5.24	5.24	820	0.	7.30	479.	337	0.	0.022	331	0.	2.95	0.022
40	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
41	5.24	5.24	122	0.	1.09	71.	8	0.	0.001	10	0.	0.09	0.001
42	5.24	5.24	699	0.	6.22	408.	339	0.	0.023	341	0.	3.04	0.023
43	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
44	5.24	5.24	147	0.	1.31	86.	100	0.	0.007	100	0.	0.89	0.007
45	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
46	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
47	5.24	5.24	659	0.	5.87	385.	393	0.	0.026	378	0.	3.36	0.025
48	5.24	5.24	578	0.	5.15	338.	359	0.	0.024	355	0.	3.16	0.024
49	5.24	5.24	679	0.	6.05	397.	394	0.	0.026	380	0.	3.38	0.025
50	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
51	5.24	5.24	809	0.	7.20	473.	748	0.	0.050	730	0.	6.50	0.049
52	5.24	5.24	299	0.	2.66	175.	216	0.	0.014	201	0.	1.79	0.013
53	5.24	5.24	889	0.	7.91	520.	698	0.	0.046	689	0.	6.14	0.046
54	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
55	5.24	5.24	749	0.	6.67	438.	501	0.	0.033	497	0.	4.42	0.033
56	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
57	5.24	5.24	193	0.	1.72	113.	107	0.	0.007	105	0.	0.93	0.007
58	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
59	5.24	5.24	438	0.	3.90	256.	422	0.	0.028	413	0.	3.68	0.027
60	5.24	5.24	859	0.	7.64	502.	705	0.	0.047	693	0.	6.17	0.046
61	5.24	5.24	566	0.	5.04	331.	461	0.	0.031	454	0.	4.04	0.030
62	5.24	5.24	23	0.	0.21	13.	44	0.	0.003	42	0.	0.37	0.003
63	5.24	5.24	802	0.	7.14	469.	729	0.	0.049	711	0.	6.33	0.047
64	5.24	5.24	808	0.	7.19	472.	608	0.	0.040	600	0.	5.34	0.040
65	5.24	5.24	667	0.	5.94	390.	559	0.	0.037	554	0.	4.93	0.037
66	5.24	5.24	53	0.	0.47	31.	90	0.	0.006	84	0.	0.75	0.006
67	5.24	5.24	241	0.	2.15	141.	240	0.	0.016	223	0.	1.98	0.015
68	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
69	5.24	5.24	5	0.	0.05	3.	153	0.	0.010	153	0.	1.36	0.010
70	5.24	5.24	173	0.	1.54	101.	222	0.	0.015	215	0.	1.92	0.014
71	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
72	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
73	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
74	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
75	5.24	5.24	208	0.	1.85	122.	169	0.	0.011	170	0.	1.52	0.011
76	5.24	5.24	409	0.	3.64	239.	384	0.	0.026	373	0.	3.32	0.025
77	5.24	5.24	46	0.	0.41	27.	25	0.	0.002	27	0.	0.24	0.002
78	5.24	5.24	217	0.	1.93	127.	172	0.	0.011	171	0.	1.52	0.011
79	5.24	5.24	363	0.	3.24	212.	335	0.	0.022	324	0.	2.89	0.022
80	5.24	5.24	152	0.	1.35	89.	116	0.	0.008	116	0.	1.03	0.008
81	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
82	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
83	5.24	5.24	166	0.	1.47	97.	113	0.	0.008	108	0.	0.96	0.007
84	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
85	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
86	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
87	5.24	5.24	130	0.	1.15	76.	139	0.	0.009	112	0.	1.00	0.007
88	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
89	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
90	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000

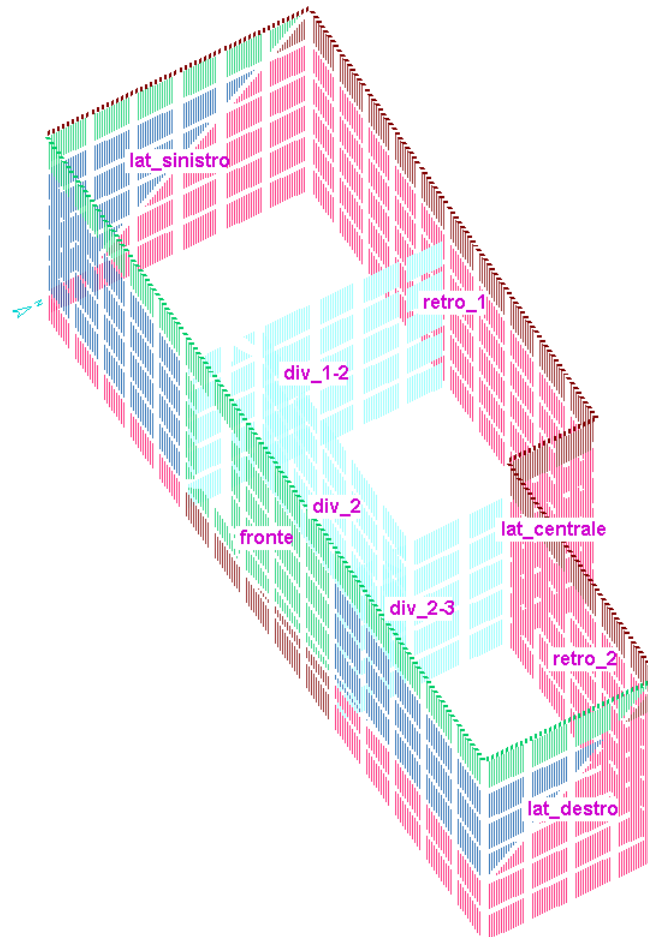
91	5.24	5.24	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
92	5.24	5.24	0.	0.	0.00	0.	0.	0.000	0.	0.	0.00	0.000
93	5.24	5.24	754	0.	6.71	441.	699	0.0046	681	0.	6.06	0.045
94	5.24	5.24	1133	0.	10.09	662.	1018	0.0068	1012	0.	9.01	0.067
95	5.24	5.24	260	0.	2.31	152.	312	0.0021	315	0.	2.80	0.021
96	5.24	5.24	1198	0.	10.67	700.	1119	0.0074	1110	0.	9.88	0.074
97	5.24	5.24	914	0.	8.14	534.	922	0.0061	907	0.	8.07	0.060
98	5.24	5.24	450	0.	4.00	263.	445	0.0030	419	0.	3.73	0.028
99	5.24	5.24	691	0.	6.15	404.	712	0.0047	687	0.	6.12	0.046
100	5.24	5.24	166	0.	1.48	97.	240	0.0016	230	0.	2.05	0.015
101	5.24	5.24	663	0.	5.91	388.	701	0.0047	677	0.	6.03	0.045
102	5.24	5.24	437	0.	3.89	256.	399	0.0027	375	0.	3.34	0.025
103	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
104	5.24	5.24	127	0.	1.13	74.	110	0.0007	107	0.	0.95	0.007
105	5.24	5.24	7	0.	0.06	4.	7	0.0000	6	0.	0.06	0.000
106	5.24	5.24	180	0.	1.60	105.	164	0.0011	162	0.	1.44	0.011
107	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
108	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
109	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
110	5.24	5.24	0.	0.	0.00	0.	18	0.0001	17	0.	0.15	0.001
111	5.24	5.24	231	0.	2.05	135.	187	0.0012	171	0.	1.52	0.011
112	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
113	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
114	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
115	5.24	5.24	220	0.	1.95	128.	217	0.0014	214	0.	1.90	0.014
116	5.24	5.24	330	0.	2.93	193.	278	0.0018	263	0.	2.34	0.017
117	5.24	5.24	317	0.	2.82	185.	254	0.0017	235	0.	2.09	0.016
118	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
119	5.24	5.24	40	0.	0.35	23.	64	0.0004	43	0.	0.38	0.003
120	5.24	5.24	358	0.	3.19	209.	315	0.0021	296	0.	2.63	0.020
121	5.24	5.24	29	0.	0.26	17.	0.	0.0000	0.	0.	0.00	0.000
122	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
123	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
124	5.24	5.24	0.	0.	0.00	0.	33	0.0002	24	0.	0.22	0.002
125	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
126	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000
127	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000

ARMATURA SUPERI ORE VERTI CALE

GUSCI	COMBINAZIONE RARA						COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	AfC	Mom	Nor	σC	σF	Mom	Nor	WkF	Mom	Nor	σC	WkP
1	5.24	5.24	1381	0.	12.30	807.	1284	0.	0.085	1220	0.	10.86	0.081
2	5.24	5.24	1172	0.	10.44	685.	1113	0.	0.074	1083	0.	9.64	0.072
3	5.24	5.24	2303	0.	20.51	1346.	1934	0.	0.129	1924	0.	17.13	0.128
4	5.24	5.24	1364	0.	12.14	797.	1160	0.	0.077	1149	0.	10.23	0.076
5	5.24	5.24	1727	0.	15.38	1009.	1442	0.	0.096	1434	0.	12.77	0.095
6	5.24	5.24	540	0.	4.81	316.	646	0.	0.043	648	0.	5.77	0.043
7	5.24	5.24	1525	0.	13.58	891.	1048	0.	0.070	1040	0.	9.26	0.069
8	5.24	5.24	856	0.	7.62	500.	754	0.	0.050	751	0.	6.68	0.050
9	5.24	5.24	782	0.	6.96	457.	286	0.	0.019	276	0.	2.45	0.018
10	5.24	5.24	770	0.	6.85	450.	514	0.	0.034	502	0.	4.47	0.033
11	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
12	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
13	5.24	5.24	935	0.	8.32	546.	811	0.	0.054	706	0.	6.29	0.047
14	5.24	5.24	2213	0.	19.70	1293.	2016	0.	0.134	2008	0.	17.88	0.134
15	5.24	5.24	2241	0.	19.95	1310.	1660	0.	0.110	1649	0.	14.68	0.110
16	5.24	5.24	1482	0.	13.19	866.	805	0.	0.054	794	0.	7.07	0.053
17	5.24	5.24	168	0.	1.50	98.	0.	0.0000	0.	0.	0.00	0.000	
18	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
19	5.24	5.24	1486	0.	13.23	868.	1366	0.	0.091	1282	0.	11.42	0.085
20	5.24	5.24	2277	0.	20.27	1330.	1893	0.	0.126	1883	0.	16.77	0.125
21	5.24	5.24	1745	0.	15.53	1019.	1364	0.	0.091	1357	0.	12.08	0.090
22	5.24	5.24	1504	0.	13.39	879.	906	0.	0.060	897	0.	7.99	0.060
23	5.24	5.24	683	0.	6.08	399.	143	0.	0.010	134	0.	1.19	0.009
24	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
25	5.24	5.24	1289	0.	11.47	753.	1167	0.	0.078	1129	0.	10.05	0.075
26	5.24	5.24	1089	0.	9.70	637.	763	0.	0.051	761	0.	6.77	0.051
27	5.24	5.24	732	0.	6.52	428.	600	0.	0.040	597	0.	5.32	0.040
28	5.24	5.24	577	0.	5.14	337.	410	0.	0.027	408	0.	3.63	0.027
29	5.24	5.24	409	0.	3.64	239.	148	0.	0.010	142	0.	1.27	0.009
30	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
31	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
32	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
33	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
34	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
35	5.24	5.24	1316	0.	11.72	769.	510	0.	0.034	503	0.	4.48	0.033
36	5.24	5.24	394	0.	3.50	230.	53	0.	0.004	50	0.	0.45	0.003
37	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
38	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
39	5.24	5.24	1667	0.	14.84	974.	550	0.	0.037	540	0.	4.81	0.036
40	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
41	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
42	5.24	5.24	1294	0.	11.52	756.	520	0.	0.035	512	0.	4.56	0.034
43	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
44	5.24	5.24	0.	0.	0.00	0.	0.	0.0000	0.	0.	0.00	0.000	
45	5.24	5.24	186	0.	1.65	108.	0.	0.0000	0.	0.	0.00	0.000	
46	5.24	5.24	431	0.	3.84	252.	451	0.	0.030	436	0.	3.88	0.029
47	5.24	5.24	839	0.	7.47	491.	856	0.	0.057	814	0.	7.25	0.054
48	5.24	5.24	1046	0.	9.31	611.	981	0.	0.065	923	0.	8.22	0.061
49	5.24	5.24	807	0.	7.18	472.	843	0.	0.056	798	0.	7.10	0.053

50	5.24	5.24	309	0.	2.75	180.	383	0.	0.025	366	0.	3.26	0.024
51	5.24	5.24	1608	0.	14.32	940.	1455	0.	0.097	1351	0.	12.03	0.090
52	5.24	5.24	1045	0.	9.30	611.	960	0.	0.064	909	0.	8.09	0.060
53	5.24	5.24	1966	0.	17.50	1149.	1506	0.	0.100	1496	0.	13.32	0.100
54	5.24	5.24	786	0.	6.99	459.	595	0.	0.040	592	0.	5.27	0.039
55	5.24	5.24	1335	0.	11.88	780.	806	0.	0.054	796	0.	7.09	0.053
56	5.24	5.24	934	0.	8.31	546.	539	0.	0.036	533	0.	4.75	0.035
57	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
58	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
59	5.24	5.24	1442	0.	12.84	843.	1316	0.	0.088	1199	0.	10.67	0.080
60	5.24	5.24	2226	0.	19.82	1301.	1769	0.	0.118	1759	0.	15.66	0.117
61	5.24	5.24	1232	0.	10.96	720.	711	0.	0.047	701	0.	6.24	0.047
62	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
63	5.24	5.24	1552	0.	13.82	907.	1422	0.	0.095	1328	0.	11.83	0.088
64	5.24	5.24	1807	0.	16.09	1056.	1383	0.	0.092	1376	0.	12.25	0.092
65	5.24	5.24	1327	0.	11.81	775.	847	0.	0.056	838	0.	7.46	0.056
66	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
67	5.24	5.24	999	0.	8.89	584.	884	0.	0.059	837	0.	7.45	0.056
68	5.24	5.24	686	0.	6.10	401.	538	0.	0.036	536	0.	4.77	0.036
69	5.24	5.24	681	0.	6.06	398.	467	0.	0.031	461	0.	4.11	0.031
70	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
71	5.24	5.24	0.	0.	0.00	0.	14	0.	0.001	13	0.	0.11	0.001
72	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
73	5.24	5.24	374	0.	3.33	219.	325	0.	0.022	320	0.	2.85	0.021
74	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
75	5.24	5.24	232	0.	2.07	136.	56	0.	0.004	67	0.	0.59	0.004
76	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
77	5.24	5.24	124	0.	1.10	72.	0.	0.	0.000	0.	0.	0.00	0.000
78	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
79	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
80	5.24	5.24	209	0.	1.86	122.	37	0.	0.002	48	0.	0.43	0.003
81	5.24	5.24	217	0.	1.93	127.	205	0.	0.014	197	0.	1.76	0.013
82	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
83	5.24	5.24	80	0.	0.71	47.	1	0.	0.000	0.	0.	0.00	0.000
84	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
85	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
86	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
87	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
88	5.24	5.24	303	0.	2.69	177.	101	0.	0.007	104	0.	0.93	0.007
89	5.24	5.24	513	0.	4.57	300.	184	0.	0.012	187	0.	1.67	0.012
90	5.24	5.24	329	0.	2.93	192.	108	0.	0.007	110	0.	0.98	0.007
91	5.24	5.24	511	0.	4.55	299.	200	0.	0.013	203	0.	1.81	0.013
92	5.24	5.24	335	0.	2.98	195.	132	0.	0.009	132	0.	1.18	0.009
93	5.24	5.24	360	0.	3.20	210.	314	0.	0.021	302	0.	2.69	0.020
94	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
95	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
96	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
97	5.24	5.24	470	0.	4.18	275.	440	0.	0.029	427	0.	3.80	0.028
98	5.24	5.24	294	0.	2.62	172.	248	0.	0.017	225	0.	2.00	0.015
99	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
100	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
101	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
102	5.24	5.24	214	0.	1.90	125.	164	0.	0.011	142	0.	1.26	0.009
103	5.24	5.24	50	0.	0.45	29.	29	0.	0.002	9	0.	0.08	0.001
104	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
105	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
106	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
107	5.24	5.24	166	0.	1.48	97.	148	0.	0.010	135	0.	1.20	0.009
108	5.24	5.24	274	0.	2.44	160.	236	0.	0.016	235	0.	2.09	0.016
109	5.24	5.24	190	0.	1.69	111.	160	0.	0.011	159	0.	1.41	0.011
110	5.24	5.24	0.	0.	0.00	0.	0.	0.	0.000	0.	0.	0.00	0.000
111	5.24	5.24	983	0.	8.75	574.	931	0.	0.062	908	0.	8.08	0.060
112	5.24	5.24	630	0.	5.61	368.	674	0.	0.045	660	0.	5.87	0.044
113	5.24	5.24	114	0.	1.02	67.	195	0.	0.013	199	0.	1.77	0.013
114	5.24	5.24	268	0.	2.39	157.	562	0.	0.037	562	0.	5.00	0.037
115	5.24	5.24	632	0.	5.63	370.	516	0.	0.034	503	0.	4.48	0.033
116	5.24	5.24	88	0.	0.78	51.	18	0.	0.001	0.	0.	0.00	0.000
117	5.24	5.24	27	0.	0.24	16.	0.	0.	0.000	0.	0.	0.00	0.000
118	5.24	5.24	147	0.	1.31	86.	34	0.	0.002	36	0.	0.32	0.002
119	5.24	5.24	56	0.	0.50	33.	0.	0.	0.000	0.	0.	0.00	0.000
120	5.24	5.24	585	0.	5.21	342.	548	0.	0.036	531	0.	4.73	0.035
121	5.24	5.24	439	0.	3.91	257.	0.	0.	0.000	8	0.	0.07	0.001
122	5.24	5.24	236	0.	2.10	138.	0.	0.	0.000	0.	0.	0.00	0.000
123	5.24	5.24	279	0.	2.48	163.	0.	0.	0.000	0.	0.	0.00	0.000
124	5.24	5.24	153	0.	1.36	90.	0.	0.	0.000	0.	0.	0.00	0.000
125	5.24	5.24	251	0.	2.24	147.	0.	0.	0.000	1	0.	0.01	0.000
126	5.24	5.24	379	0.	3.37	221.	318	0.	0.021	292	0.	2.60	0.019
127	5.24	5.24	720	0.	6.41	421.	588	0.	0.039	546	0.	4.86	0.036

10.3 VERIFICA MURI



MACROGUSCIO di v_1-2

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: -->

Nome	Descrizione
1	SLU SENZA SI SMA 1
2	SLU SENZA SI SMA 2
3	SLU SENZA SI SMA 3
4	SLU SENZA SI SMA 4
5	SLU SENZA SI SMA 5
6	SLU SENZA SI SMA 6
7	SLU SENZA SI SMA 7
8	SLU SENZA SI SMA 8
22	SLU SI SMAX P vuoto
23	SLU SI SMAY P vuoto

DATI:

tensione di snervamento acciaio (fyk):	4500	daN/cm ²
coefficiente sicurezza acciaio	: 1.15	
deformazione ultima acciaio	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento	(k): 1	
resistenza cilindrica cls	(fck): 249	daN/cm ²
coefficiente sicurezza cls	: 1.5	
coefficiente riduttivo	(al fa): 0.85	
copri ferro inferiore (asse armatura):	5	cm
copri ferro superiore (asse armatura):	5	cm
moltiplicatore sollecitazioni	: 1	

LEGENDA:

spess = spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm

Af = area disposta al lembo teso, in cm2 al metro
 Afc = area disposta al lembo compresso, in cm2 al metro
 Mom = momento flettente [daNm/cm]
 Nor = sforzo normale [daN]
 epsC = deformazione cls [per mille]
 epsF = deformazione acciaio [per mille]

<-

L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciaio alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)									tx	ty	tz
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF
338	5.24	0.00	1.01	5.24	0.00	1.36	5.24	0.00	0.92	5.24	0.00	1.37
339	5.24	0.30	1.26	5.24	0.00	1.02	5.24	0.24	1.14	5.24	0.00	1.02
340	5.24	0.47	1.14	5.24	0.00	0.45	5.24	0.38	0.91	5.24	0.00	0.49
341	5.24	0.36	0.81	5.24	0.09	0.21	5.24	0.26	0.56	5.24	0.01	0.09
342	5.24	0.22	0.47	5.24	0.08	0.17	5.24	0.07	0.09	5.24	0.07	0.15
343	5.24	0.00	0.55	5.24	0.02	-0.02	5.24	0.00	0.31	5.24	0.04	0.04
344	5.24	0.00	0.80	5.24	0.05	0.10	5.24	0.00	0.35	5.24	0.01	-0.01
345	5.24	0.04	0.68	5.24	0.01	0.00	5.24	0.00	0.21	5.24	0.01	-0.01
346	5.24	0.00	0.62	5.24	0.02	0.01	5.24	0.00	0.24	5.24	0.01	-0.01
348	5.24	0.00	0.63	5.24	0.03	0.05	5.24	0.00	0.39	5.24	0.12	0.26
349	5.24	0.14	1.01	5.24	0.03	0.16	5.24	0.00	0.31	5.24	0.02	0.15
350	5.24	0.28	0.91	5.24	0.01	0.03	5.24	0.00	0.13	5.24	0.04	0.09
351	5.24	0.26	0.80	5.24	0.01	0.01	5.24	0.00	0.07	5.24	0.02	0.10
353	5.24	0.00	0.99	5.24	0.13	0.87	5.24	0.00	0.98	5.24	0.16	0.87
354	5.24	0.00	1.11	5.24	0.29	1.57	5.24	0.00	1.14	5.24	0.38	1.69
355	5.24	0.05	1.14	5.24	0.00	1.05	5.24	0.11	1.19	5.24	0.02	1.12
356	5.24	0.03	1.30	5.24	0.00	0.70	5.24	0.09	1.38	5.24	0.04	0.85
357	5.24	0.14	0.97	5.24	0.00	0.75	5.24	0.22	1.10	5.24	0.00	0.81
358	5.24	0.00	0.88	5.24	0.00	0.47	5.24	0.27	1.41	5.24	0.00	0.57
359	5.24	0.17	0.60	5.24	0.00	0.32	5.24	0.24	0.78	5.24	0.00	0.44
360	5.24	0.00	0.66	5.24	0.00	0.27	5.24	0.23	1.12	5.24	0.00	0.38
361	5.24	0.00	0.12	5.24	0.00	0.11	5.24	0.16	0.55	5.24	0.00	0.14
362	5.24	0.00	0.45	5.24	0.00	0.23	5.24	0.06	0.96	5.24	0.00	0.34
363	5.24	0.00	1.13	5.24	0.26	1.79	5.24	0.00	1.20	5.24	0.29	1.83
364	5.24	0.10	1.00	5.24	0.00	1.16	5.24	0.12	1.06	5.24	0.00	1.24
365	5.24	0.23	0.70	5.24	0.00	0.78	5.24	0.23	0.72	5.24	0.00	0.78
366	5.24	0.21	0.50	5.24	0.00	0.31	5.24	0.21	0.48	5.24	0.00	0.44
367	5.24	0.07	0.12	5.24	0.00	0.09	5.24	0.11	0.21	5.24	0.00	0.07
605	5.24	0.07	0.97	5.24	0.05	0.12	5.24	0.00	0.32	5.24	0.00	0.00
606	5.24	0.00	0.49	5.24	0.00	0.03	5.24	0.00	0.30	5.24	0.00	0.02
607	5.24	0.00	0.56	5.24	0.00	0.12	5.24	0.00	0.33	5.24	0.00	0.06
608	5.24	0.18	0.88	5.24	0.05	0.18	5.24	0.00	0.32	5.24	0.00	0.07

L'ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vrcd = compressione cls d'anima
 Vrsd = trazione armatura trasversale
 Vrd,s = scorrimento in zona di dissipativa

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vrcd [daN]	Vrsd [daN]	al fas	Vrd,s [daN]
20.0	10600	55.50	55.50	98426	304178	173742	-	-
60.0	10600	55.50	55.50	91035	303509	173742	-	-
100.0	10600	55.50	55.50	91035	303509	173742	-	-
140.0	10600	55.50	55.50	91035	303509	173742	-	-
180.0	10600	55.50	55.50	69199	302331	173742	-	-
220.0	10600	55.50	55.50	69199	302331	173742	-	-
260.0	10600	55.50	55.50	47734	301407	173742	-	-
300.0	10600	55.50	55.50	47734	301407	173742	-	-
340.0	10600	55.50	55.50	28440	300543	173742	-	-
380.0	10600	55.50	55.50	28440	300543	173742	-	-
420.0	10600	55.50	55.50	28440	300543	173742	-	-
455.0	10600	55.50	55.50	23799	300285	173742	-	-

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X P v1-2-3

39 SLU SISMA Y v1-2-3

GUSCI	AREE ARMATURA (cm2 al metro)												τx	τy	τt
	INF. ORI ZZ.			INF. VERTIC.			SUP. ORI ZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
338	5.24	0.00	0.76	5.24	0.00	0.98	5.24	0.00	0.71	5.24	0.00	0.99			
339	5.24	0.22	0.99	5.24	0.00	0.72	5.24	0.19	0.93	5.24	0.00	0.69			
340	5.24	0.37	0.92	5.24	0.00	0.35	5.24	0.32	0.79	5.24	0.00	0.37			
341	5.24	0.29	0.69	5.24	0.00	0.12	5.24	0.23	0.53	5.24	0.00	0.09			
342	5.24	0.18	0.40	5.24	0.05	0.11	5.24	0.10	0.21	5.24	0.00	0.00			
343	5.24	0.00	0.46	5.24	0.01	-0.01	5.24	0.00	0.29	5.24	0.04	0.08			
344	5.24	0.00	0.68	5.24	0.04	0.10	5.24	0.00	0.33	5.24	0.01	-0.01			
345	5.24	0.04	0.55	5.24	0.04	0.07	5.24	0.00	0.21	5.24	0.01	-0.01			
346	5.24	0.01	0.51	5.24	0.02	0.03	5.24	0.00	0.20	5.24	0.01	-0.01			
348	5.24	0.00	0.55	5.24	0.02	0.09	5.24	0.00	0.36	5.24	0.07	0.21			
349	5.24	0.08	0.86	5.24	0.04	0.16	5.24	0.00	0.28	5.24	0.03	0.11			
350	5.24	0.26	0.80	5.24	0.04	0.07	5.24	0.00	0.13	5.24	0.02	0.03			
351	5.24	0.22	0.73	5.24	0.02	0.02	5.24	0.00	0.07	5.24	0.01	-0.01			
353	5.24	0.00	0.76	5.24	0.13	0.68	5.24	0.00	0.80	5.24	0.12	0.67			
354	5.24	0.00	0.81	5.24	0.19	1.18	5.24	0.00	0.83	5.24	0.24	1.27			
355	5.24	0.04	0.86	5.24	0.01	0.76	5.24	0.07	0.91	5.24	0.03	0.80			
356	5.24	0.00	0.98	5.24	0.03	0.53	5.24	0.01	1.02	5.24	0.05	0.62			
357	5.24	0.14	0.79	5.24	0.00	0.56	5.24	0.18	0.86	5.24	0.00	0.59			
358	5.24	0.00	0.69	5.24	0.02	0.35	5.24	0.17	1.07	5.24	0.03	0.33			
359	5.24	0.13	0.51	5.24	0.00	0.28	5.24	0.18	0.66	5.24	0.00	0.25			
360	5.24	0.00	0.46	5.24	0.00	0.18	5.24	0.14	0.88	5.24	0.00	0.19			
361	5.24	0.06	0.23	5.24	0.00	0.07	5.24	0.15	0.45	5.24	0.00	0.10			
362	5.24	0.00	0.31	5.24	0.00	0.16	5.24	0.00	0.65	5.24	0.00	0.14			
363	5.24	0.00	0.84	5.24	0.06	1.33	5.24	0.00	0.85	5.24	0.09	1.37			
364	5.24	0.09	0.79	5.24	0.00	0.84	5.24	0.10	0.82	5.24	0.00	0.89			
365	5.24	0.19	0.59	5.24	0.00	0.58	5.24	0.18	0.59	5.24	0.00	0.58			
366	5.24	0.18	0.43	5.24	0.00	0.24	5.24	0.17	0.41	5.24	0.00	0.25			
367	5.24	0.06	0.13	5.24	0.00	0.05	5.24	0.10	0.24	5.24	0.00	0.06			
605	5.24	0.06	0.83	5.24	0.04	0.08	5.24	0.00	0.25	5.24	0.00	0.00	0.4	0.3	0.5
606	5.24	0.00	0.39	5.24	0.00	0.01	5.24	0.00	0.23	5.24	0.00	0.00	0.5	0.1	0.5
607	5.24	0.00	0.45	5.24	0.01	0.06	5.24	0.00	0.24	5.24	0.00	0.03			
608	5.24	0.15	0.76	5.24	0.03	0.14	5.24	0.00	0.25	5.24	0.00	0.05			

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vrcd = compressione cls d' anima
Vrsd = trazione armatura trasversale
Vrd,s = scorrimento in zona di dissipativa

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vrcd [daN]	Vrsd [daN]	al fas	Vrd,s [daN]
20.0	10600	55.50	55.50	76914	303386	173742	-	-
60.0	10600	55.50	55.50	70831	303125	173742	-	-
100.0	10600	55.50	55.50	70831	303125	173742	-	-
140.0	10600	55.50	55.50	70831	303125	173742	-	-
180.0	10600	55.50	55.50	53171	302246	173742	-	-
220.0	10600	55.50	55.50	53171	302246	173742	-	-
260.0	10600	55.50	55.50	34262	301304	173742	-	-
300.0	10600	55.50	55.50	34262	301304	173742	-	-
340.0	10600	55.50	55.50	20117	300457	173742	-	-
380.0	10600	55.50	55.50	20117	300457	173742	-	-
420.0	10600	55.50	55.50	20117	300457	173742	-	-
455.0	10600	55.50	55.50	16689	300203	173742	-	-

MACROGUSCIO di v_1-2

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
9	RARA 1 (RARA)
10	RARA 2 (RARA)
11	RARA 3 (RARA)
13	RARA 5 (RARA)
14	RARA 6 (RARA)
15	RARA 7 (RARA)
16	RARA 8 (RARA)
17	FREQUENTE 1 (FREQUENTE)
18	FREQUENTE 2 (FREQUENTE)
19	QUASI PERMANENTE (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 5 cm
copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm2 al metro)
Afc = area effettiva compressa (cm2 al metro)
Mom = momento flettente [daNcm/cm]
Nor = sforzo normale [daN]
σc = tensione calcestruzzo [daN/cm2]

valore max per combinazione rara = 149.4 daN/cm2
 quasi permanente = 112 daN/cm2
 σ_f = tensioni acciai o [daN/cm2]
 valore max per combinazione rara = 3600 daN/cm2
 wkF = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
 wkP = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm

ARMATURA INFERIORE ORIZZONTALE

GUSCI			COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
338	5.24	5.24	443	71	15.80	1384.	44	71	0.100	41	69	0.00	0.098
339	5.24	5.24	745	30	27.89	1352.	107	43	0.076	100	38	0.00	0.068
340	5.24	5.24	805	-19	28.46	915.	141	4	0.016	135	-3	4.76	0.008
341	5.24	5.24	774	-34	26.44	720.	155	-18	0.002	146	-23	3.70	0.000
342	5.24	5.24	558	-41	17.83	360.	156	-35	0.000	145	-37	3.77	0.000
343	5.24	5.24	78	22	2.05	349.	80	20	0.036	71	19	2.03	0.033
344	5.24	5.24	294	37	10.86	804.	269	33	0.068	245	29	9.07	0.061
345	5.24	5.24	374	23	14.08	763.	340	20	0.054	307	17	11.54	0.048
346	5.24	5.24	339	25	12.76	739.	304	20	0.051	275	17	10.36	0.045
348	5.24	5.24	81	32	0.00	463.	79	33	0.057	66	32	0.00	0.053
349	5.24	5.24	504	24	18.93	950.	453	24	0.069	403	22	15.16	0.062
350	5.24	5.24	703	6	25.77	1032.	631	5	0.056	560	3	20.50	0.048
351	5.24	5.24	673	10	24.82	1033.	604	6	0.055	535	4	19.61	0.047
353	5.24	5.24	0.	77	0.00	734.	0.	90	0.116	0.	88	0.00	0.113
354	5.24	5.24	0.	103	0.00	979.	14	104	0.137	11	104	0.00	0.137
355	5.24	5.24	0.	75	0.00	716.	0.	86	0.111	0.	83	0.00	0.107
356	5.24	5.24	0.	71	0.00	680.	0.	93	0.120	0.	88	0.00	0.113
357	5.24	5.24	0.	38	0.00	366.	0.	54	0.070	0.	49	0.00	0.063
358	5.24	5.24	0.	44	0.00	416.	0.	67	0.086	0.	62	0.00	0.080
359	5.24	5.24	0.	15	0.00	140.	0.	26	0.034	0.	22	0.00	0.028
360	5.24	5.24	0.	19	0.00	178.	0.	41	0.053	0.	37	0.00	0.048
361	5.24	5.24	0.	8	0.00	80.	0.	11	0.014	0.	8	0.00	0.010
362	5.24	5.24	0.	10	0.00	96.	0.	36	0.046	0.	33	0.00	0.042
363	5.24	5.24	0.	100	0.00	959.	28	98	0.132	26	98	0.00	0.132
364	5.24	5.24	0.	60	0.00	575.	46	67	0.096	42	64	0.00	0.090
365	5.24	5.24	0.	12	0.00	118.	27	33	0.048	26	28	0.00	0.040
366	5.24	5.24	468	-22	15.90	424.	2	4	0.006	5	-1	0.13	0.000
367	5.24	5.24	301	-32	8.75	113.	0.	-15	0.000	0.	-18	0.82	0.000
605	5.24	5.24	625	50	23.53	1400.	560	44	0.105	495	41	18.62	0.096
606	5.24	5.24	208	41	7.00	735.	86	34	0.060	82	32	0.00	0.057
607	5.24	5.24	272	44	9.68	848.	243	37	0.071	220	35	7.85	0.067
608	5.24	5.24	641	25	23.98	1152.	574	21	0.073	508	18	18.99	0.065

ARMATURA INFERIORE VERTICALE

GUSCI			COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
338	5.24	5.24	312	101	0.00	1559.	0.	86	0.111	0.	88	0.00	0.113
339	5.24	5.24	331	74	10.54	1261.	17	68	0.091	18	70	0.00	0.093
340	5.24	5.24	185	19	6.90	456.	29	39	0.056	27	37	0.00	0.053
341	5.24	5.24	146	-6	4.99	138.	23	3	0.006	22	-1	0.77	0.001
342	5.24	5.24	78	-14	1.95	3.	20	-12	0.000	19	-12	0.84	0.000
343	5.24	5.24	0.	-25	1.18	-18.	0.	-27	0.000	0.	-29	1.34	0.000
344	5.24	5.24	101	-27	2.66	-8.	85	-23	0.000	78	-24	2.20	0.000
345	5.24	5.24	94	-34	2.89	-13.	85	-36	0.000	76	-36	2.72	0.000
346	5.24	5.24	111	-13	3.15	35.	87	-15	0.000	79	-16	1.97	0.000
348	5.24	5.24	0.	-24	1.10	-17.	0.	-22	0.000	0.	-24	1.13	0.000
349	5.24	5.24	109	-17	2.79	11.	122	-19	0.000	111	-19	2.79	0.000
350	5.24	5.24	113	-27	2.87	-7.	113	-24	0.000	101	-23	2.51	0.000
351	5.24	5.24	96	-17	2.41	5.	82	-19	0.000	72	-20	1.95	0.000
353	5.24	5.24	0.	-1	0.03	0.	139	18	0.036	110	15	4.03	0.030
354	5.24	5.24	0.	56	0.00	538.	27	58	0.081	12	58	0.00	0.077
355	5.24	5.24	0.	59	0.00	568.	0.	56	0.072	0.	56	0.00	0.072
356	5.24	5.24	0.	24	0.00	230.	0.	26	0.034	0.	26	0.00	0.033
357	5.24	5.24	0.	50	0.00	476.	0.	44	0.056	0.	44	0.00	0.057
358	5.24	5.24	0.	25	0.00	243.	0.	22	0.028	0.	22	0.00	0.028
359	5.24	5.24	0.	35	0.00	335.	0.	30	0.038	0.	30	0.00	0.039
360	5.24	5.24	0.	19	0.00	178.	0.	16	0.021	0.	17	0.00	0.022
361	5.24	5.24	4	14	0.00	142.	0.	11	0.015	0.	11	0.00	0.015
362	5.24	5.24	0.	8	0.00	72.	0.	9	0.012	0.	9	0.00	0.012
363	5.24	5.24	586	102	20.50	1915.	41	97	0.132	34	97	0.00	0.132
364	5.24	5.24	0.	81	0.00	778.	30	75	0.103	26	77	0.00	0.104
365	5.24	5.24	0.	55	0.00	527.	2	53	0.069	3	54	0.00	0.070
366	5.24	5.24	0.	21	0.00	201.	0.	31	0.040	0.	30	0.00	0.039
367	5.24	5.24	19	2	0.70	45.	0.	4	0.005	0.	3	0.00	0.004
605	5.24	5.24	54	-1	1.90	59.	72	-4	0.003	63	-5	2.02	0.002
606	5.24	5.24	70	1	2.57	106.	62	-1	0.004	56	-1	2.00	0.004
607	5.24	5.24	60	5	2.26	134.	57	3	0.009	51	3	1.92	0.008
608	5.24	5.24	125	7	4.69	245.	115	5	0.016	102	5	3.83	0.014

ARMATURA SUPERIORE ORIZZONTALE

GUSCI			COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
338	5.24	5.24	55	71	0.00	783.	0.	71	0.091	0.	69	0.00	0.090
339	5.24	5.24	0.	30	0.00	289.	0.	43	0.056	0.	38	0.00	0.050
340	5.24	5.24	0.	-19	0.88	-13.	0.	4	0.005	0.	-3	0.15	0.000
341	5.24	5.24	0.	-34	1.58	-24.	0.	-18	0.000	0.	-23	1.08	0.000
342	5.24	5.24	0.	-41	1.91	-29.	0.	-35	0.000	0.	-37	1.72	0.000

343	5.24	5.24	0.	22	0.00	210.	0.	20	0.026	0.	19	0.00	0.024
344	5.24	5.24	0.	37	0.00	351.	0.	33	0.042	0.	29	0.00	0.038
345	5.24	5.24	0.	23	0.00	219.	0.	20	0.026	0.	17	0.00	0.022
346	5.24	5.24	0.	25	0.00	241.	0.	20	0.025	0.	17	0.00	0.022
348	5.24	5.24	0.	32	0.00	309.	0.	33	0.043	0.	32	0.00	0.041
349	5.24	5.24	0.	24	0.00	227.	0.	24	0.031	0.	22	0.00	0.028
350	5.24	5.24	0.	6	0.00	56.	0.	5	0.006	0.	3	0.00	0.004
351	5.24	5.24	0.	10	0.00	94.	0.	6	0.008	0.	4	0.00	0.005
353	5.24	5.24	277	77	7.42	1223.	95	90	0.134	85	88	0.00	0.129
354	5.24	5.24	296	103	0.00	1544.	43	104	0.143	45	104	0.00	0.143
355	5.24	5.24	683	75	25.45	1753.	110	86	0.132	101	83	0.00	0.126
356	5.24	5.24	547	71	20.11	1527.	289	93	0.172	256	88	0.00	0.160
357	5.24	5.24	766	38	28.76	1467.	150	54	0.097	135	49	0.00	0.088
358	5.24	5.24	566	44	21.29	1250.	365	67	0.125	325	62	11.08	0.115
359	5.24	5.24	632	15	23.43	1028.	165	26	0.050	147	22	5.31	0.042
360	5.24	5.24	646	19	24.06	1090.	377	41	0.088	338	37	12.58	0.079
361	5.24	5.24	439	8	16.25	695.	170	11	0.029	151	8	5.69	0.023
362	5.24	5.24	530	10	19.61	838.	342	36	0.077	308	33	11.50	0.070
363	5.24	5.24	409	100	12.24	1661.	29	98	0.132	29	98	0.00	0.132
364	5.24	5.24	634	60	23.77	1525.	44	67	0.095	39	64	0.00	0.090
365	5.24	5.24	99	12	3.65	270.	27	33	0.048	22	28	0.00	0.040
366	5.24	5.24	0.	-22	1.01	-15.	13	4	0.008	8	-1	0.25	0.000
367	5.24	5.24	0.	-32	1.49	-22.	13	-15	0.000	8	-18	0.71	0.000
605	5.24	5.24	0.	50	0.00	477.	0.	44	0.056	0.	41	0.00	0.053
606	5.24	5.24	0.	41	0.00	392.	0.	34	0.044	0.	32	0.00	0.042
607	5.24	5.24	0.	44	0.00	416.	0.	37	0.047	0.	35	0.00	0.045
608	5.24	5.24	0.	25	0.00	240.	0.	21	0.027	0.	18	0.00	0.024

ARMATURA SUPERIORE VERTICALE

GUSCI	COMBI NAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE					
	AF	AFc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
338	5.24	5.24	0.	101	0.00	963.	6	86	0.112	7	88	0.00	0.114
339	5.24	5.24	0.	74	0.00	704.	0.	68	0.088	0.	70	0.00	0.090
340	5.24	5.24	0.	19	0.00	178.	0.	39	0.050	0.	37	0.00	0.048
341	5.24	5.24	0.	-6	0.29	-4.	0.	3	0.003	0.	-1	0.04	0.000
342	5.24	5.24	0.	-14	0.64	-10.	0.	-12	0.000	0.	-12	0.57	0.000
343	5.24	5.24	83	-25	0.01	-26.	79	-27	0.000	77	-29	0.24	0.000
344	5.24	5.24	0.	-27	1.24	-19.	0.	-23	0.000	0.	-24	1.09	0.000
345	5.24	5.24	0.	-34	1.56	-23.	0.	-36	0.000	0.	-36	1.65	0.000
346	5.24	5.24	0.	-13	0.59	-9.	0.	-15	0.000	0.	-16	0.73	0.000
348	5.24	5.24	185	-24	5.05	43.	180	-22	0.002	173	-24	4.57	0.001
349	5.24	5.24	0.	-17	0.80	-12.	18	-19	0.000	15	-19	0.68	0.000
350	5.24	5.24	0.	-27	1.27	-19.	0.	-24	0.000	0.	-23	1.08	0.000
351	5.24	5.24	0.	-17	0.77	-12.	0.	-19	0.000	0.	-20	0.93	0.000
353	5.24	5.24	476	-1	17.31	651.	210	18	0.041	202	15	7.59	0.037
354	5.24	5.24	596	56	22.36	1430.	0.	58	0.075	0.	58	0.00	0.074
355	5.24	5.24	566	59	21.13	1424.	47	56	0.081	44	56	0.00	0.081
356	5.24	5.24	334	24	12.57	720.	159	26	0.050	140	26	4.84	0.048
357	5.24	5.24	426	50	15.80	1127.	74	44	0.070	66	44	0.00	0.069
358	5.24	5.24	219	25	8.12	578.	145	22	0.042	128	22	4.51	0.042
359	5.24	5.24	166	35	5.45	612.	56	30	0.049	49	30	0.00	0.048
360	5.24	5.24	114	19	4.04	360.	67	16	0.029	61	17	1.63	0.029
361	5.24	5.24	20	14	0.00	172.	23	11	0.019	21	11	0.00	0.019
362	5.24	5.24	105	8	3.96	226.	61	9	0.018	55	9	1.93	0.017
363	5.24	5.24	0.	102	0.00	971.	34	97	0.131	39	97	0.00	0.133
364	5.24	5.24	161	81	0.00	1086.	51	75	0.107	45	77	0.00	0.108
365	5.24	5.24	145	55	0.00	803.	44	53	0.077	37	54	0.00	0.076
366	5.24	5.24	60	21	0.00	315.	19	31	0.044	15	30	0.00	0.041
367	5.24	5.24	1	2	0.00	19.	4	4	0.006	3	3	0.00	0.004
605	5.24	5.24	0.	-1	0.07	-1.	0.	-4	0.000	0.	-5	0.22	0.000
606	5.24	5.24	0.	1	0.00	9.	0.	-1	0.000	0.	-1	0.05	0.000
607	5.24	5.24	0.	5	0.00	45.	0.	3	0.004	0.	3	0.00	0.003
608	5.24	5.24	0.	7	0.00	65.	0.	5	0.007	0.	5	0.00	0.006

MACROGUSCI 0 di v_2-3

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU SENZA SI SMA 1
2	SLU SENZA SI SMA 2
3	SLU SENZA SI SMA 3
4	SLU SENZA SI SMA 4
5	SLU SENZA SI SMA 5
6	SLU SENZA SI SMA 6
7	SLU SENZA SI SMA 7
8	SLU SENZA SI SMA 8
22	SLU SI SMAX P vuoto
23	SLU SI SMAY P vuoto

DATI:

tensione di snervamento acciaio (fyk):	4500	daN/cm2
coefficiente sicurezza acciaio	: 1.15	
deformazione ultima acciaio	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento	(k): 1	
resistenza cilindrica cls	(fck): 249	daN/cm2

coefficiente sicurezza cls : 1.5
 coefficiente riduttivo (alfa): 0.85
 copri ferro inferiore (asse armatura): 5 cm
 copri ferro superiore (asse armatura): 5 cm
 moltiplicatore sollecitazioni : 1

LEGENDA:

spess = spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
 Af = area disposta al lembo teso, in cm2 al metro
 Afc = area disposta al lembo compresso, in cm2 al metro
 Mom = momento flettente [daNm/cm]
 Nor = sforzo normale [daN]
 epsC = deformazione cls [per mille]
 epsF = deformazione acciaio [per mille]

<-

L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciaio alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)												tx	ty	tz
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
393	5.24	0.00	0.88	5.24	0.00	0.83	5.24	0.00	0.81	5.24	0.00	0.95			
394	5.24	0.00	1.03	5.24	0.00	0.80	5.24	0.00	0.64	5.24	0.00	0.69			
395	5.24	0.07	0.82	5.24	0.00	0.53	5.24	0.00	0.46	5.24	0.00	0.38			
396	5.24	0.15	0.52	5.24	0.00	0.35	5.24	0.00	0.24	5.24	0.00	0.25			
397	5.24	0.19	0.44	5.24	0.00	0.15	5.24	0.01	-0.01	5.24	0.00	0.11			
398	5.24	0.05	0.66	5.24	0.00	0.17	5.24	0.00	0.21	5.24	0.00	0.13			
399	5.24	0.00	0.87	5.24	0.00	0.31	5.24	0.00	0.40	5.24	0.00	0.21			
400	5.24	0.00	1.13	5.24	0.00	0.51	5.24	0.00	0.64	5.24	0.00	0.36			
401	5.24	0.00	1.26	5.24	0.00	0.65	5.24	0.00	0.92	5.24	0.00	0.58			
402	5.24	0.00	1.01	5.24	0.00	0.65	5.24	0.00	0.91	5.24	0.00	0.71			
525	5.24	0.00	0.42	5.24	0.02	0.06	5.24	0.00	0.54	5.24	0.01	0.06			
527	5.24	0.00	0.36	5.24	0.00	0.04	5.24	0.00	0.69	5.24	0.00	0.05			
528	5.24	0.00	0.15	5.24	0.01	0.02	5.24	0.02	0.46	5.24	0.00	0.03			
530	5.24	0.00	0.56	5.24	0.02	0.30	5.24	0.00	0.78	5.24	0.00	0.25			
531	5.24	0.00	0.43	5.24	0.00	0.30	5.24	0.08	1.14	5.24	0.00	0.32			
532	5.24	0.00	0.27	5.24	0.00	0.14	5.24	0.22	1.04	5.24	0.00	0.21			
533	5.24	0.00	0.09	5.24	0.00	0.11	5.24	0.28	0.87	5.24	0.00	0.12			
592	5.24	0.00	0.46	5.24	0.00	0.16	5.24	0.00	0.64	5.24	0.00	0.10	0.7	0.1	0.7
593	5.24	0.00	0.46	5.24	0.00	0.02	5.24	0.00	0.70	5.24	0.00	0.03	0.4	0.2	0.5
594	5.24	0.00	0.41	5.24	0.00	0.13	5.24	0.00	0.71	5.24	0.00	0.09	0.1	0.3	0.3
613	5.24	0.00	0.19	5.24	0.01	0.02	5.24	0.00	0.28	5.24	0.00	0.00	1.0	0.4	1.0
614	5.24	0.00	0.20	5.24	0.01	0.02	5.24	0.00	0.47	5.24	0.02	0.05			
615	5.24	0.00	0.22	5.24	0.00	0.03	5.24	0.22	0.84	5.24	0.02	0.11			
616	5.24	0.00	0.21	5.24	0.00	0.04	5.24	0.13	0.89	5.24	0.00	0.12	0.8	0.3	0.9

L'ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vrcd = compressione cls d'anima
 Vrsd = trazione armatura trasversale
 Vrd,s = scorrimento in zona di dissipativa

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vrcd [daN]	Vrsd [daN]	al fas	Vrd,s [daN]
20.0	7000	36.65	36.65	64280	200590	114735	-	-
60.0	7000	36.65	36.65	57768	199985	114735	-	-
100.0	7000	36.65	36.65	57768	199985	114735	-	-
140.0	7000	36.65	36.65	57768	199985	114735	-	-
180.0	7000	36.65	36.65	41288	199169	114735	-	-
220.0	7000	36.65	36.65	42683	199062	114735	-	-
260.0	7000	36.65	36.65	26398	198421	114735	-	-
300.0	7000	36.65	36.65	26398	198421	114735	-	-
340.0	7000	36.65	36.65	13940	198016	114735	-	-
380.0	7000	36.65	36.65	13940	198016	114735	-	-
420.0	7000	36.65	36.65	13940	198016	114735	-	-
455.0	7000	36.65	36.65	11679	197993	114735	-	-

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X v1-2-3

GUSCI	AREE ARMATURA (cm2 al metro)												tx	ty	tz
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
393	5.24	0.00	0.64	5.24	0.00	0.59	5.24	0.00	0.61	5.24	0.00	0.62			
394	5.24	0.00	0.76	5.24	0.00	0.54	5.24	0.00	0.56	5.24	0.00	0.48			
395	5.24	0.04	0.62	5.24	0.00	0.37	5.24	0.00	0.35	5.24	0.00	0.28			
396	5.24	0.10	0.39	5.24	0.00	0.26	5.24	0.00	0.18	5.24	0.00	0.19			
397	5.24	0.10	0.27	5.24	0.01	0.11	5.24	0.00	0.01	5.24	0.00	0.08			
398	5.24	0.04	0.54	5.24	0.00	0.13	5.24	0.00	0.17	5.24	0.00	0.09			
399	5.24	0.00	0.70	5.24	0.00	0.24	5.24	0.00	0.32	5.24	0.00	0.17			
400	5.24	0.00	0.88	5.24	0.00	0.38	5.24	0.00	0.47	5.24	0.00	0.26			
401	5.24	0.00	0.97	5.24	0.00	0.47	5.24	0.00	0.70	5.24	0.00	0.41			
402	5.24	0.00	0.78	5.24	0.00	0.45	5.24	0.00	0.69	5.24	0.00	0.54			
525	5.24	0.00	0.34	5.24	0.02	0.08	5.24	0.00	0.43	5.24	0.01	0.05			
527	5.24	0.00	0.29	5.24	0.00	0.03	5.24	0.00	0.55	5.24	0.00	0.08			
528	5.24	0.00	0.12	5.24	0.01	-0.01	5.24	0.01	0.37	5.24	0.02	0.03			
530	5.24	0.00	0.43	5.24	0.03	0.23	5.24	0.00	0.58	5.24	0.00	0.17			
531	5.24	0.00	0.36	5.24	0.00	0.24	5.24	0.01	0.91	5.24	0.00	0.26			
532	5.24	0.00	0.23	5.24	0.00	0.10	5.24	0.14	0.85	5.24	0.00	0.19			
533	5.24	0.00	0.09	5.24	0.00	0.04	5.24	0.21	0.72	5.24	0.03	0.11			
592	5.24	0.00	0.37	5.24	0.00	0.13	5.24	0.00	0.51	5.24	0.00	0.10	0.4	0.1	0.4
593	5.24	0.00	0.37	5.24	0.00	0.04	5.24	0.00	0.57	5.24	0.00	0.07	0.3	0.1	0.3
594	5.24	0.00	0.33	5.24	0.00	0.12	5.24	0.00	0.57	5.24	0.00	0.12	0.1	0.2	0.2
613	5.24	0.00	0.17	5.24	0.00	0.00	5.24	0.00	0.21	5.24	0.00	0.00	0.7	0.3	0.8
614	5.24	0.00	0.16	5.24	0.00	0.02	5.24	0.00	0.38	5.24	0.00	0.05			
615	5.24	0.00	0.17	5.24	0.00	0.03	5.24	0.16	0.68	5.24	0.00	0.05			
616	5.24	0.00	0.16	5.24	0.00	0.03	5.24	0.10	0.71	5.24	0.00	0.05	0.5	0.2	0.6

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vr_{cd} = compressione cls d' anima
 Vr_{sd} = trazione armatura trasversale
 Vr_{d,s} = scorrimento in zona di dissipativa

Quota [cm]	Sezione [cm ²]	Af long. [cm ²]	Af trasv. [cm ²]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	7000	36.65	36.65	49951	200440	114735	-	-
60.0	7000	36.65	36.65	44940	200065	114735	-	-
100.0	7000	36.65	36.65	44940	200065	114735	-	-
140.0	7000	36.65	36.65	44940	200065	114735	-	-
180.0	7000	36.65	36.65	32288	199328	114735	-	-
220.0	7000	36.65	36.65	33269	199206	114735	-	-
260.0	7000	36.65	36.65	19583	198579	114735	-	-
300.0	7000	36.65	36.65	19583	198579	114735	-	-
340.0	7000	36.65	36.65	10152	198104	114735	-	-
380.0	7000	36.65	36.65	10152	198104	114735	-	-
420.0	7000	36.65	36.65	10152	198104	114735	-	-
455.0	7000	36.65	36.65	8417	198006	114735	-	-

MACROGUSCI 0 di v₂-3

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
9	RARA 1 (RARA)
10	RARA 2 (RARA)
11	RARA 3 (RARA)
13	RARA 5 (RARA)
14	RARA 6 (RARA)
15	RARA 7 (RARA)
16	RARA 8 (RARA)
17	FREQUENTE 1 (FREQUENTE)
18	FREQUENTE 2 (FREQUENTE)
19	QUASI PERMANENTE (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 5 cm
 copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm² al metro)

Afc = area effettiva compressa (cm² al metro)

Mom = momento flettente [daNcm/cm]

Nor = sforzo normale [daN]

σ_c = tensione calcestruzzo [daN/cm²]
 valore max per combinazione rara = 149.4 daN/cm²
 quasi permanente = 112 daN/cm²

σ_f = tensione acciai [daN/cm²]
 valore max per combinazione rara = 3600 daN/cm²

w_{kF} = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
 w_{kP} = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm

<-

ARMATURA INFERIORE ORIZZONTALE

GUSCI	Af	Afc	COMBI NAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
393	5.24	5.24	12	96	0.00	940.	24	98	0.131	24	98	0.00	0.131
394	5.24	5.24	333	49	12.06	990.	186	78	0.135	186	78	0.00	0.135
395	5.24	5.24	532	2	19.42	756.	271	45	0.086	271	45	9.60	0.086
396	5.24	5.24	543	-16	19.01	581.	283	19	0.048	283	19	10.65	0.048
397	5.24	5.24	447	-28	14.64	331.	233	-7	0.014	233	-7	8.15	0.013
398	5.24	5.24	407	26	15.32	841.	351	23	0.060	312	20	11.76	0.053
399	5.24	5.24	439	47	16.36	1117.	378	43	0.091	335	39	12.44	0.081
400	5.24	5.24	454	79	15.89	1485.	405	73	0.137	362	68	12.39	0.126
401	5.24	5.24	288	95	0.00	1454.	290	100	0.182	262	95	0.00	0.170
402	5.24	5.24	69	102	0.00	1104.	101	103	0.152	93	100	0.00	0.146
525	5.24	5.24	0.	24	0.00	226.	0.	37	0.048	0.	33	0.00	0.042
527	5.24	5.24	0.	34	0.00	326.	0.	32	0.041	0.	29	0.00	0.037
528	5.24	5.24	0.	16	0.00	155.	0.	13	0.017	0.	11	0.00	0.014
530	5.24	5.24	0.	46	0.00	437.	0.	65	0.084	0.	62	0.00	0.080
531	5.24	5.24	0.	38	0.00	365.	0.	53	0.068	0.	49	0.00	0.064
532	5.24	5.24	0.	4	0.00	38.	0.	22	0.028	0.	20	0.00	0.026
533	5.24	5.24	0.	-8	0.35	-5.	0.	5	0.006	0.	3	0.00	0.004
592	5.24	5.24	0.	48	0.00	463.	0.	59	0.076	0.	54	0.00	0.070
593	5.24	5.24	0.	56	0.00	533.	0.	59	0.075	0.	53	0.00	0.069
594	5.24	5.24	0.	47	0.00	445.	0.	50	0.064	0.	45	0.00	0.059
613	5.24	5.24	149	14	5.59	354.	84	22	0.039	82	20	2.43	0.036
614	5.24	5.24	0.	27	0.00	254.	0.	23	0.030	0.	21	0.00	0.028
615	5.24	5.24	0.	-11	0.49	-7.	0.	9	0.011	0.	6	0.00	0.008
616	5.24	5.24	0.	3	0.00	31.	0.	25	0.032	0.	22	0.00	0.028

ARMATURA INFERIORE VERTICALE

GUSCI	Af	Afc	COMBI NAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
393	5.24	5.24	0.	81	0.00	773.	0.	78	0.100	0.	78	0.00	0.101
394	5.24	5.24	170	70	0.00	990.	85	71	0.108	84	71	0.00	0.108
395	5.24	5.24	118	50	0.00	703.	88	51	0.082	88	51	0.00	0.082
396	5.24	5.24	119	32	3.29	512.	68	31	0.052	67	31	0.00	0.052
397	5.24	5.24	85	2	3.16	140.	49	9	0.016	49	8	1.73	0.016
398	5.24	5.24	69	12	2.43	224.	56	12	0.023	51	13	1.52	0.022
399	5.24	5.24	102	24	3.12	408.	84	25	0.048	77	26	0.00	0.047
400	5.24	5.24	144	40	3.82	638.	131	38	0.067	121	39	0.00	0.072
401	5.24	5.24	167	50	4.02	778.	128	53	0.092	119	53	0.00	0.090
402	5.24	5.24	10	39	0.00	390.	2	58	0.075	4	56	0.00	0.073
525	5.24	5.24	127	-13	3.72	50.	76	-10	0.001	73	-12	1.86	0.000
527	5.24	5.24	0.	-14	0.64	-10.	0.	-8	0.000	0.	-8	0.35	0.000
528	5.24	5.24	0.	-16	0.76	-11.	0.	-17	0.000	0.	-18	0.82	0.000
530	5.24	5.24	106	1	3.89	156.	99	6	0.016	93	4	3.49	0.013
531	5.24	5.24	0.	9	0.00	89.	0.	9	0.012	0.	9	0.00	0.011
532	5.24	5.24	0.	1	0.00	7.	0.	-1	0.000	0.	0.	0.01	0.000
533	5.24	5.24	0.	0.	0.02	0.	0.	-6	0.000	0.	-5	0.22	0.000
592	5.24	5.24	99	-3	3.47	105.	43	7	0.014	37	6	1.32	0.011
593	5.24	5.24	0.	-3	0.13	-2.	0.	-3	0.000	0.	-3	0.16	0.000
594	5.24	5.24	84	-3	2.89	82.	35	7	0.012	31	5	1.09	0.010
613	5.24	5.24	1	-4	0.20	-3.	0.	-2	0.000	0.	-3	0.13	0.000
614	5.24	5.24	0.	0.	0.00	2.	0.	0.	0.000	0.	-1	0.03	0.000
615	5.24	5.24	0.	0.	0.00	2.	0.	2	0.002	0.	1	0.00	0.002
616	5.24	5.24	0.	2	0.00	18.	0.	4	0.005	0.	4	0.00	0.005

ARMATURA SUPERIORE ORIZZONTALE

GUSCI	Af	Afc	COMBI NAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
393	5.24	5.24	15	96	0.00	946.	0.	98	0.126	0.	98	0.00	0.126
394	5.24	5.24	0.	49	0.00	467.	0.	78	0.101	0.	78	0.00	0.101
395	5.24	5.24	0.	2	0.00	20.	0.	45	0.058	0.	45	0.00	0.058
396	5.24	5.24	0.	-16	0.76	-11.	0.	19	0.024	0.	19	0.00	0.024
397	5.24	5.24	0.	-28	1.32	-20.	0.	-7	0.000	0.	-7	0.33	0.000
398	5.24	5.24	0.	26	0.00	248.	0.	23	0.030	0.	20	0.00	0.026
399	5.24	5.24	0.	47	0.00	452.	0.	43	0.056	0.	39	0.00	0.050
400	5.24	5.24	0.	79	0.00	753.	0.	73	0.094	0.	68	0.00	0.087
401	5.24	5.24	0.	95	0.00	905.	0.	100	0.129	0.	95	0.00	0.122
402	5.24	5.24	0.	102	0.00	973.	0.	103	0.133	0.	100	0.00	0.129
525	5.24	5.24	65	24	0.00	349.	53	37	0.058	48	33	0.00	0.051
527	5.24	5.24	328	34	12.24	821.	288	32	0.067	257	29	9.57	0.061
528	5.24	5.24	272	16	10.23	549.	225	13	0.036	200	11	7.52	0.031
530	5.24	5.24	99	46	0.00	626.	85	65	0.100	76	62	0.00	0.095
531	5.24	5.24	508	38	19.13	1112.	431	53	0.108	391	49	14.42	0.101
532	5.24	5.24	732	4	26.77	1052.	620	22	0.079	565	20	21.10	0.072
533	5.24	5.24	723	-8	26.00	918.	628	5	0.055	573	3	20.97	0.049
592	5.24	5.24	162	48	3.87	754.	136	59	0.101	122	54	0.00	0.092
593	5.24	5.24	217	56	6.24	909.	202	59	0.103	182	53	4.52	0.093
594	5.24	5.24	273	47	9.58	883.	245	50	0.092	219	45	7.23	0.083
613	5.24	5.24	0.	14	0.00	132.	0.	22	0.029	0.	20	0.00	0.026
614	5.24	5.24	222	27	8.23	594.	188	23	0.048	169	21	6.21	0.043
615	5.24	5.24	722	-11	25.84	887.	634	9	0.061	582	6	21.37	0.053
616	5.24	5.24	690	3	25.23	987.	602	25	0.081	553	22	20.70	0.073

ARMATURA SUPERIORE VERTICALE

GUSCI	Af	Afc	COMBI NAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP

393	5.24	5.24	64	81	0.00	896.	93	78	0.118	90	78	0.00	0.118
394	5.24	5.24	0.	70	0.00	665.	0.	71	0.092	0.	71	0.00	0.092
395	5.24	5.24	0.	50	0.00	477.	0.	51	0.065	0.	51	0.00	0.066
396	5.24	5.24	0.	32	0.00	304.	0.	31	0.040	0.	31	0.00	0.040
397	5.24	5.24	0.	2	0.00	20.	0.	9	0.011	0.	8	0.00	0.011
398	5.24	5.24	0.	12	0.00	112.	0.	12	0.016	0.	13	0.00	0.016
399	5.24	5.24	0.	24	0.00	233.	0.	25	0.033	0.	26	0.00	0.033
400	5.24	5.24	0.	40	0.00	384.	0.	38	0.049	0.	39	0.00	0.050
401	5.24	5.24	0.	50	0.00	478.	0.	53	0.068	0.	53	0.00	0.068
402	5.24	5.24	47	39	0.00	461.	39	58	0.082	43	56	0.00	0.081
525	5.24	5.24	0.	-13	0.61	-9.	0.	-10	0.000	0.	-12	0.55	0.000
527	5.24	5.24	74	-14	1.85	2.	83	-8	0.002	75	-8	2.23	0.001
528	5.24	5.24	22	-16	0.45	-14.	50	-17	0.000	45	-18	0.17	0.000
530	5.24	5.24	0.	1	0.00	9.	0.	6	0.008	0.	4	0.00	0.006
531	5.24	5.24	125	9	4.71	272.	104	9	0.021	96	9	3.59	0.020
532	5.24	5.24	98	1	3.59	143.	79	-1	0.006	72	0.	2.61	0.005
533	5.24	5.24	111	0.	4.04	150.	107	-6	0.005	98	-5	3.31	0.004
592	5.24	5.24	0.	-3	0.14	-2.	0.	7	0.010	0.	6	0.00	0.007
593	5.24	5.24	106	-3	3.74	117.	81	-3	0.005	75	-3	2.54	0.004
594	5.24	5.24	0.	-3	0.15	-2.	23	7	0.011	23	5	0.75	0.009
613	5.24	5.24	25	-4	0.62	2.	29	-2	0.001	23	-3	0.64	0.000
614	5.24	5.24	78	0.	2.85	110.	67	0.	0.005	62	-1	2.24	0.004
615	5.24	5.24	128	0.	4.66	179.	121	2	0.012	110	1	4.06	0.011
616	5.24	5.24	70	2	2.60	117.	70	4	0.011	63	4	2.38	0.011

MACROGUSCI 0 di v_2

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU SENZA SI SMA 1
2	SLU SENZA SI SMA 2
3	SLU SENZA SI SMA 3
4	SLU SENZA SI SMA 4
5	SLU SENZA SI SMA 5
6	SLU SENZA SI SMA 6
7	SLU SENZA SI SMA 7
8	SLU SENZA SI SMA 8
22	SLU SISMAX P vuoto
23	SLU SISMAX P vuoto

DATI:

tensione di snervamento acciaio (fyk):	4500	daN/cm2
coefficiente sicurezza acciaio	: 1.15	
deformazione ultima acciaio	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento (k):	1	
resistenza cilindrica cls (fck):	249	daN/cm2
coefficiente sicurezza cls	: 1.5	
coefficiente riduttivo (alfa):	0.85	
copri ferro inferiore (asse armatura):	5	cm
copri ferro superiore (asse armatura):	5	cm
moltilplicatore sollecitazioni	: 1	

LEGENDA:

spess	= spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
Af	= area disposta al lembo teso, in cm2 al metro
Afc	= area disposta al lembo compresso, in cm2 al metro
Mom	= momento flettente [daNcm/cm]
Nor	= sforzo normale [daN]
epsC	= deformazione cls [per mille]
epsF	= deformazione acciaio [per mille]

<-

L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciaio alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)												τx	τy	τt
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
368	5.24	0.33	1.04	5.24	0.04	0.24	5.24	0.00	0.16	5.24	0.00	0.06			
369	5.24	0.41	1.29	5.24	0.03	0.25	5.24	0.00	0.20	5.24	0.00	0.14			
370	5.24	0.44	1.39	5.24	0.07	0.17	5.24	0.00	0.34	5.24	0.15	0.39			
371	5.24	0.44	1.31	5.24	0.11	0.24	5.24	0.12	0.61	5.24	0.30	0.75			
372	5.24	0.22	0.76	5.24	0.39	1.02	5.24	0.00	0.23	5.24	0.11	0.27			
373	5.24	0.20	0.82	5.24	0.39	0.93	5.24	0.00	0.26	5.24	0.11	0.24			
374	5.24	0.46	1.48	5.24	0.01	-0.01	5.24	0.01	0.48	5.24	0.29	0.69			
375	5.24	0.52	1.64	5.24	0.08	0.18	5.24	0.00	0.19	5.24	0.17	0.42			
376	5.24	0.42	1.45	5.24	0.03	0.24	5.24	0.00	0.21	5.24	0.04	0.22			
377	5.24	0.31	1.08	5.24	0.03	0.21	5.24	0.00	0.21	5.24	0.00	0.06			
378	5.24	0.14	0.39	5.24	0.73	1.81	5.24	0.22	0.56	5.24	0.15	0.34			
379	5.24	0.01	0.07	5.24	0.02	-0.01	5.24	0.33	0.92	5.24	0.40	0.93			
380	5.24	0.00	0.10	5.24	0.01	-0.01	5.24	0.29	0.98	5.24	0.34	0.81			
381	5.24	0.00	0.14	5.24	0.00	0.00	5.24	0.24	0.91	5.24	0.16	0.40			

383	5.24	0.07	0.20	5.24	0.80	1.94	5.24	0.05	0.24	5.24	0.02	-0.02			
384	5.24	0.00	0.07	5.24	0.02	-0.01	5.24	0.30	0.93	5.24	0.34	0.79			
385	5.24	0.00	0.08	5.24	0.01	-0.01	5.24	0.37	1.12	5.24	0.35	0.84			
386	5.24	0.00	0.10	5.24	0.00	0.00	5.24	0.37	1.13	5.24	0.19	0.47			
387	5.24	0.00	0.27	5.24	0.00	0.01	5.24	0.30	1.20	5.24	0.01	0.01			
388	5.24	0.05	0.45	5.24	0.72	1.80	5.24	0.16	0.65	5.24	0.14	0.34			
389	5.24	0.00	0.07	5.24	0.02	0.01	5.24	0.31	0.99	5.24	0.39	0.94			
390	5.24	0.00	0.09	5.24	0.01	-0.01	5.24	0.31	1.03	5.24	0.33	0.82			
391	5.24	0.00	0.12	5.24	0.00	0.02	5.24	0.25	0.93	5.24	0.15	0.39			
392	5.24	0.00	0.25	5.24	0.01	0.11	5.24	0.15	0.97	5.24	0.00	0.06			
627	5.24	0.00	0.27	5.24	0.00	0.07	5.24	0.00	0.39	5.24	0.00	0.06	0.7	0.0	0.7
628	5.24	0.00	0.31	5.24	0.00	0.05	5.24	0.16	1.03	5.24	0.01	0.07			

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vr_{cd} = compressione cls d' anima
Vr_{sd} = trazione armatura trasversale
Vr_{d,s} = scorrimento in zona di dissipativa

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	10400	54.45	54.45	46801	298530	170464	-	-
60.0	10400	54.45	54.45	40718	298144	170464	-	-
100.0	10400	54.45	54.45	40718	298144	170464	-	-
140.0	10400	54.45	54.45	40718	298144	170464	-	-
180.0	10400	54.45	54.45	29671	297032	170464	-	-
220.0	10400	54.45	54.45	29671	297032	170464	-	-
260.0	10400	54.45	54.45	21762	295583	170464	-	-
300.0	10400	54.45	54.45	21762	295583	170464	-	-
340.0	10400	54.45	54.45	13787	294368	170464	-	-
380.0	10400	54.45	54.45	13787	294368	170464	-	-
420.0	10400	54.45	54.45	13787	294368	170464	-	-
455.0	10400	54.45	54.45	9099	293903	170464	-	-

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X v1-2-3
39	SLU SI SMA Y v1-2-3

GUSCI	AREE ARMATURA (cm2 al metro)												τ _x	τ _y	τ _t
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
368	5.24	0.27	0.85	5.24	0.02	0.16	5.24	0.00	0.13	5.24	0.00	0.04			
369	5.24	0.32	1.03	5.24	0.02	0.19	5.24	0.00	0.16	5.24	0.00	0.11			
370	5.24	0.34	1.10	5.24	0.05	0.14	5.24	0.00	0.25	5.24	0.12	0.32			
371	5.24	0.35	1.02	5.24	0.08	0.20	5.24	0.11	0.45	5.24	0.23	0.59			
372	5.24	0.18	0.57	5.24	0.31	0.80	5.24	0.00	0.18	5.24	0.03	0.22			
373	5.24	0.20	0.60	5.24	0.32	0.78	5.24	0.04	0.14	5.24	0.09	0.20			
374	5.24	0.34	1.14	5.24	0.04	0.06	5.24	0.00	0.39	5.24	0.24	0.60			
375	5.24	0.38	1.27	5.24	0.01	0.00	5.24	0.00	0.15	5.24	0.13	0.32			
376	5.24	0.31	1.14	5.24	0.02	0.15	5.24	0.00	0.15	5.24	0.02	0.08			
377	5.24	0.25	0.88	5.24	0.00	0.05	5.24	0.00	0.11	5.24	0.00	0.06			
378	5.24	0.06	0.30	5.24	0.58	1.46	5.24	0.16	0.41	5.24	0.04	0.10			
379	5.24	0.01	0.08	5.24	0.01	-0.01	5.24	0.26	0.74	5.24	0.31	0.73			
380	5.24	0.00	0.09	5.24	0.01	-0.01	5.24	0.22	0.80	5.24	0.27	0.64			
381	5.24	0.00	0.11	5.24	0.00	0.00	5.24	0.19	0.76	5.24	0.12	0.31			
383	5.24	0.01	0.19	5.24	0.62	1.53	5.24	0.01	0.21	5.24	0.02	-0.02			
384	5.24	0.00	0.07	5.24	0.02	-0.02	5.24	0.22	0.74	5.24	0.27	0.61			
385	5.24	0.00	0.07	5.24	0.01	-0.01	5.24	0.28	0.91	5.24	0.27	0.65			
386	5.24	0.00	0.08	5.24	0.00	0.00	5.24	0.28	0.91	5.24	0.15	0.37			
387	5.24	0.00	0.21	5.24	0.00	0.00	5.24	0.23	0.96	5.24	0.01	0.02			
388	5.24	0.00	0.39	5.24	0.56	1.42	5.24	0.07	0.54	5.24	0.05	0.11			
389	5.24	0.00	0.10	5.24	0.01	-0.01	5.24	0.23	0.80	5.24	0.30	0.73			
390	5.24	0.00	0.08	5.24	0.01	-0.01	5.24	0.24	0.82	5.24	0.26	0.64			
391	5.24	0.00	0.11	5.24	0.00	0.02	5.24	0.19	0.75	5.24	0.12	0.30			
392	5.24	0.00	0.20	5.24	0.00	0.03	5.24	0.11	0.78	5.24	0.00	0.05			
627	5.24	0.00	0.21	5.24	0.00	0.02	5.24	0.00	0.25	5.24	0.00	0.04	0.4	0.0	0.4
628	5.24	0.00	0.23	5.24	0.00	0.04	5.24	0.11	0.83	5.24	0.01	0.05			

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vrcd = compressione cls d' anima
Vrsd = trazione armatura trasversale
Vrd,s = scorrimento in zona di sspiativa

Quota [cm]	Sezione [cm ²]	Af long. [cm ²]	Af trasv. [cm ²]	Taglio [daN]	Vrcd [daN]	Vrsd [daN]	al fas	Vrd, s [daN]
20.0	10400	54.45	54.45	33450	297247	170464	-	-
60.0	10400	54.45	54.45	28680	296952	170464	-	-
100.0	10400	54.45	54.45	28680	296952	170464	-	-
140.0	10400	54.45	54.45	28680	296952	170464	-	-
180.0	10400	54.45	54.45	20467	296178	170464	-	-
220.0	10400	54.45	54.45	20467	296178	170464	-	-
260.0	10400	54.45	54.45	15675	295167	170464	-	-
300.0	10400	54.45	54.45	15675	295167	170464	-	-
340.0	10400	54.45	54.45	10113	294204	170464	-	-
380.0	10400	54.45	54.45	10113	294204	170464	-	-
420.0	10400	54.45	54.45	10113	294204	170464	-	-
455.0	10400	54.45	54.45	6772	293813	170464	-	-

MACROGUSCI 0 di v_2

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
9	RARA 1 (RARA)
10	RARA 2 (RARA)
11	RARA 3 (RARA)
13	RARA 5 (RARA)
14	RARA 6 (RARA)
15	RARA 7 (RARA)
16	RARA 8 (RARA)
17	FREQUENTE 1 (FREQUENTE)
18	FREQUENTE 2 (FREQUENTE)
19	QUASI PERMANENTE (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 5 cm
copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm² al metro)
Afc = area effettiva compressa (cm² al metro)
Mom = momento flettente [daNcm/cm]
Nor = sforzo normale [daN]
σc = tensione calcestruzzo [daN/cm²]
valore max per combinazione rara = 149.4 daN/cm²
quasi permanente = 112 daN/cm²
σf = tensione acciaio [daN/cm²]
valore max per combinazione rara = 3600 daN/cm²
wkF = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
wkP = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm

<-

ARMATURA INFERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA						COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
368	5.24	5.24	708	7	26.01	1051.	623	14	0.067	548	13	20.35	0.061
369	5.24	5.24	773	16	28.65	1240.	672	15	0.073	591	15	21.96	0.067
370	5.24	5.24	747	19	27.75	1235.	638	6	0.058	562	8	20.69	0.054
371	5.24	5.24	847	1	30.84	1176.	747	-4	0.055	660	-2	23.95	0.050
372	5.24	5.24	415	-2	14.99	547.	381	1	0.031	338	1	12.36	0.028
373	5.24	5.24	439	0.	15.97	605.	381	-8	0.024	337	-9	11.88	0.020
374	5.24	5.24	938	19	34.73	1492.	744	-11	0.050	661	-10	23.63	0.045
375	5.24	5.24	894	27	33.32	1525.	627	3	0.053	557	4	20.43	0.049
376	5.24	5.24	902	30	33.66	1564.	642	17	0.074	569	18	21.21	0.069
377	5.24	5.24	817	17	30.26	1306.	629	17	0.073	558	17	20.82	0.068
378	5.24	5.24	290	0.	10.55	401.	264	-4	0.018	236	-4	8.45	0.016
379	5.24	5.24	0.	0.	0.01	0.	0.	0.	0.000	0.	-10	0.45	0.000
380	5.24	5.24	0.	-6	0.26	-4.	0.	-6	0.000	0.	-5	0.23	0.000
381	5.24	5.24	0.	3	0.00	33.	0.	6	0.008	0.	6	0.00	0.008
383	5.24	5.24	41	-2	1.39	38.	27	-12	0.000	24	-11	0.86	0.000
384	5.24	5.24	0.	0.	0.00	0.	0.	-11	0.000	0.	-9	0.43	0.000
385	5.24	5.24	0.	-8	0.36	-5.	0.	-7	0.000	0.	-5	0.25	0.000
386	5.24	5.24	0.	3	0.00	25.	0.	3	0.004	0.	4	0.00	0.005
387	5.24	5.24	0.	23	0.00	224.	0.	22	0.029	0.	22	0.00	0.029
388	5.24	5.24	290	-9	10.15	311.	263	-4	0.018	235	-3	8.42	0.016
389	5.24	5.24	0.	-8	0.36	-5.	0.	-7	0.000	0.	-6	0.26	0.000
390	5.24	5.24	0.	-4	0.16	-2.	0.	-3	0.000	0.	-1	0.07	0.000
391	5.24	5.24	0.	9	0.00	85.	0.	8	0.010	0.	9	0.00	0.011
392	5.24	5.24	0.	20	0.00	195.	0.	22	0.028	0.	22	0.00	0.028
627	5.24	5.24	0.	23	0.00	218.	0.	28	0.036	0.	28	0.00	0.036
628	5.24	5.24	0.	19	0.00	183.	0.	25	0.032	0.	25	0.00	0.032

ARMATURA INFERIORE VERTICALE

GUSCI	COMBINAZIONE RARA						COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP

368	5.24	5.24	152	2	5.59	229.	136	3	0.015	119	3	4.45	0.014
369	5.24	5.24	154	5	5.75	270.	134	3	0.015	117	4	4.36	0.014
370	5.24	5.24	0.	-2	0.11	-2.	0.	-8	0.000	0.	-7	0.31	0.000
371	5.24	5.24	218	-18	6.83	127.	207	-19	0.005	184	-18	5.48	0.004
372	5.24	5.24	855	-32	29.57	854.	778	-24	0.045	699	-24	24.29	0.038
373	5.24	5.24	851	-33	29.36	837.	768	-38	0.035	687	-39	22.86	0.028
374	5.24	5.24	205	-38	5.10	4.	210	-31	0.001	186	-31	4.70	0.000
375	5.24	5.24	15	-10	0.68	-6.	0.	-14	0.000	0.	-13	0.61	0.000
376	5.24	5.24	118	4	4.38	200.	72	2	0.009	63	2	2.34	0.008
377	5.24	5.24	111	5	4.17	204.	91	4	0.013	80	4	3.01	0.012
378	5.24	5.24	1316	-19	47.07	1613.	1182	-35	0.069	1055	-35	36.73	0.059
379	5.24	5.24	0.	-30	1.38	-21.	0.	-30	0.000	0.	-30	1.39	0.000
380	5.24	5.24	0.	-18	0.85	-13.	0.	-19	0.000	0.	-19	0.90	0.000
381	5.24	5.24	0.	-6	0.29	-4.	0.	-6	0.000	0.	-6	0.28	0.000
383	5.24	5.24	1265	-46	43.80	1270.	1129	-72	0.042	1007	-72	32.39	0.033
384	5.24	5.24	0.	-49	2.26	-34.	0.	-47	0.000	0.	-46	2.15	0.000
385	5.24	5.24	0.	-28	1.32	-20.	0.	-27	0.000	0.	-27	1.26	0.000
386	5.24	5.24	0.	-12	0.58	-9.	0.	-12	0.000	0.	-12	0.55	0.000
387	5.24	5.24	0.	-3	0.14	-2.	0.	-3	0.000	0.	-3	0.13	0.000
388	5.24	5.24	1308	-40	45.74	1392.	1176	-38	0.066	1051	-37	36.43	0.057
389	5.24	5.24	0.	-28	1.29	-19.	0.	-27	0.000	0.	-27	1.23	0.000
390	5.24	5.24	0.	-13	0.61	-9.	0.	-15	0.000	0.	-15	0.69	0.000
391	5.24	5.24	0.	-4	0.18	-3.	0.	-4	0.000	0.	-4	0.18	0.000
392	5.24	5.24	0.	1	0.00	5.	0.	1	0.001	0.	1	0.00	0.001
627	5.24	5.24	126	0.	4.58	175.	107	2	0.011	94	2	3.48	0.010
628	5.24	5.24	0.	-1	0.03	-1.	0.	0.	0.000	0.	0.	0.01	0.000

ARMATURA SUPERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA		COMB. FREQUENTE				COMB. QUASI PERMANENTE						
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
368	5.24	5.24	0.	7	0.00	66.	0.	14	0.018	0.	13	0.00	0.017
369	5.24	5.24	0.	16	0.00	156.	0.	15	0.019	0.	15	0.00	0.019
370	5.24	5.24	0.	19	0.00	184.	0.	6	0.008	0.	8	0.00	0.010
371	5.24	5.24	0.	1	0.00	6.	0.	-4	0.000	0.	-2	0.09	0.000
372	5.24	5.24	0.	-2	0.11	-2.	0.	1	0.001	0.	1	0.00	0.002
373	5.24	5.24	0.	0.	0.01	0.	0.	-8	0.000	0.	-9	0.40	0.000
374	5.24	5.24	0.	19	0.00	178.	2	-11	0.000	5	-10	0.39	0.000
375	5.24	5.24	0.	27	0.00	261.	0.	3	0.004	0.	4	0.00	0.005
376	5.24	5.24	0.	30	0.00	286.	0.	17	0.022	0.	18	0.00	0.023
377	5.24	5.24	0.	17	0.00	161.	0.	17	0.022	0.	17	0.00	0.023
378	5.24	5.24	124	0.	4.51	172.	114	-4	0.006	99	-4	3.43	0.005
379	5.24	5.24	875	0.	31.85	1207.	786	0.	0.061	698	-10	25.01	0.048
380	5.24	5.24	796	-6	28.73	1039.	715	-6	0.052	636	-5	22.96	0.046
381	5.24	5.24	673	3	24.63	966.	604	6	0.055	536	6	19.72	0.051
383	5.24	5.24	0.	-2	0.08	-1.	0.	-12	0.000	0.	-11	0.52	0.000
384	5.24	5.24	683	0.	24.86	943.	611	-11	0.040	542	-9	19.33	0.036
385	5.24	5.24	1016	-8	36.66	1321.	913	-7	0.066	811	-5	29.32	0.059
386	5.24	5.24	1000	3	36.50	1408.	900	3	0.074	801	4	29.27	0.067
387	5.24	5.24	895	23	33.27	1485.	806	22	0.094	718	22	26.76	0.087
388	5.24	5.24	130	-9	4.22	92.	116	-4	0.007	101	-3	3.54	0.006
389	5.24	5.24	869	-8	31.29	1118.	781	-7	0.056	694	-6	25.03	0.050
390	5.24	5.24	823	-4	29.80	1099.	742	-3	0.056	661	-1	24.00	0.050
391	5.24	5.24	630	9	23.22	964.	564	8	0.055	503	9	18.58	0.051
392	5.24	5.24	572	20	21.39	1008.	510	22	0.070	456	22	17.10	0.065
627	5.24	5.24	244	23	9.16	583.	215	28	0.057	190	28	6.87	0.055
628	5.24	5.24	653	19	24.30	1105.	586	25	0.080	521	25	19.56	0.075

ARMATURA SUPERIORE VERTICALE

GUSCI	COMBINAZIONE RARA		COMB. FREQUENTE				COMB. QUASI PERMANENTE						
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
368	5.24	5.24	0.	2	0.00	18.	0.	3	0.004	0.	3	0.00	0.004
369	5.24	5.24	0.	5	0.00	51.	0.	3	0.004	0.	4	0.00	0.005
370	5.24	5.24	85	-2	2.98	92.	85	-8	0.002	79	-7	2.44	0.002
371	5.24	5.24	480	-18	16.62	482.	470	-19	0.024	427	-18	14.62	0.021
372	5.24	5.24	0.	-32	1.47	-22.	0.	-24	0.000	0.	-24	1.12	0.000
373	5.24	5.24	0.	-33	1.52	-23.	0.	-38	0.000	0.	-39	1.80	0.000
374	5.24	5.24	374	-38	11.02	151.	502	-31	0.020	451	-31	14.64	0.016
375	5.24	5.24	66	-10	1.69	7.	91	-14	0.000	82	-13	2.09	0.000
376	5.24	5.24	0.	4	0.00	34.	0.	2	0.003	0.	2	0.00	0.003
377	5.24	5.24	0.	5	0.00	45.	0.	4	0.005	0.	4	0.00	0.006
378	5.24	5.24	0.	-19	0.90	-14.	0.	-35	0.000	0.	-35	1.62	0.000
379	5.24	5.24	939	-30	32.76	988.	844	-30	0.046	751	-30	25.84	0.039
380	5.24	5.24	753	-18	26.60	850.	680	-19	0.040	606	-19	21.15	0.034
381	5.24	5.24	344	-6	12.23	409.	309	-6	0.020	276	-6	9.76	0.017
383	5.24	5.24	0.	-46	2.15	-32.	0.	-72	0.000	0.	-72	3.33	0.000
384	5.24	5.24	729	-49	23.70	517.	654	-47	0.022	580	-46	18.24	0.017
385	5.24	5.24	861	-28	29.99	895.	776	-27	0.042	691	-27	23.79	0.036
386	5.24	5.24	413	-12	14.46	441.	373	-12	0.021	333	-12	11.55	0.018
387	5.24	5.24	85	-3	2.96	87.	77	-3	0.004	70	-3	2.39	0.004
388	5.24	5.24	0.	-40	1.86	-28.	0.	-38	0.000	0.	-37	1.73	0.000
389	5.24	5.24	937	-28	32.82	1006.	843	-27	0.048	749	-27	25.97	0.041
390	5.24	5.24	744	-13	26.50	890.	679	-15	0.042	606	-15	21.37	0.037
391	5.24	5.24	338	-4	12.15	426.	303	-4	0.021	270	-4	9.68	0.018
392	5.24	5.24	110	1	4.02	158.	97	1	0.009	87	1	3.18	0.008
627	5.24	5.24	115	0.	4.18	160.	102	2	0.010	90	2	3.33	0.010
628	5.24	5.24	112	-1	4.04	147.	101	0.	0.008	89	0.	3.24	0.007

MACROGUSCI O fronte

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU SENZA SISMA 1
2	SLU SENZA SISMA 2
3	SLU SENZA SISMA 3
4	SLU SENZA SISMA 4
5	SLU SENZA SISMA 5
6	SLU SENZA SISMA 6
7	SLU SENZA SISMA 7
8	SLU SENZA SISMA 8
22	SLU SISMAX P vuoto
23	SLU SISMAX P vuoto

DATI:

tensione di snervamento acciaio (fyk):	4500	daN/cm2
coefficiente sicurezza acciaio	: 1.15	
deformazione ultima acciaio	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento (k)	: 1	
resistenza cilindrica cls (fck):	249	daN/cm2
coefficiente sicurezza cls	: 1.5	
coefficiente riduttivo (alfa)	: 0.85	
copri ferro inferiore (asse armatura):	5	cm
copri ferro superiore (asse armatura):	5	cm
moltiplicatore sollecitazioni	: 1	

LEGENDA:

spess = spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
 Af = area disposta al lembo teso, in cm2 al metro
 Afc = area disposta al lembo compresso, in cm2 al metro
 Mom = momento flettente [daNcm/cm]
 Nor = sforzo normale [daN]
 epsC = deformazione cls [per mille]
 epsF = deformazione acciaio [per mille]

<-

L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciaio alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)												tx	ty	tz
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
208	5.24	0.00	0.60	5.24	0.01	0.28	5.24	0.00	0.39	5.24	0.03	0.28			
209	5.24	0.00	0.71	5.24	0.00	0.19	5.24	0.00	0.39	5.24	0.04	0.32			
210	5.24	0.00	0.72	5.24	0.00	0.11	5.24	0.00	0.38	5.24	0.08	0.30			
211	5.24	0.00	0.82	5.24	0.02	0.13	5.24	0.00	0.53	5.24	0.14	0.48			
212	5.24	0.06	0.56	5.24	0.16	0.53	5.24	0.00	0.39	5.24	0.07	0.18			
243	5.24	0.13	0.48	5.24	0.16	0.45	5.24	0.08	0.30	5.24	0.04	0.06			
244	5.24	0.03	0.37	5.24	0.08	0.22	5.24	0.00	0.16	5.24	0.03	0.05			
247	5.24	0.10	0.52	5.24	0.01	-0.01	5.24	0.00	0.11	5.24	0.06	0.14			
248	5.24	0.10	0.37	5.24	0.01	-0.01	5.24	0.00	0.01	5.24	0.01	0.01			
249	5.24	0.06	0.54	5.24	0.01	-0.01	5.24	0.00	0.23	5.24	0.07	0.23			
250	5.24	0.10	0.38	5.24	0.01	0.00	5.24	0.00	0.02	5.24	0.01	0.02			
251	5.24	0.00	0.49	5.24	0.04	0.14	5.24	0.00	0.34	5.24	0.08	0.26			
252	5.24	0.07	0.36	5.24	0.02	0.05	5.24	0.00	0.04	5.24	0.02	0.06			
253	5.24	0.05	0.17	5.24	0.23	0.66	5.24	0.11	0.39	5.24	0.05	0.08			
255	5.24	0.00	0.09	5.24	0.01	-0.01	5.24	0.10	0.59	5.24	0.17	0.51			
256	5.24	0.00	0.13	5.24	0.01	-0.01	5.24	0.05	0.61	5.24	0.12	0.38			
257	5.24	0.00	0.18	5.24	0.03	0.09	5.24	0.01	0.56	5.24	0.08	0.27			
258	5.24	0.00	0.01	5.24	0.22	0.64	5.24	0.06	0.26	5.24	0.05	0.09			
259	5.24	0.00	0.10	5.24	0.02	0.00	5.24	0.07	0.62	5.24	0.17	0.51			
260	5.24	0.00	0.15	5.24	0.01	-0.01	5.24	0.08	0.74	5.24	0.18	0.58			
261	5.24	0.00	0.18	5.24	0.01	-0.01	5.24	0.05	0.71	5.24	0.12	0.39			
262	5.24	0.00	0.22	5.24	0.00	0.00	5.24	0.00	0.58	5.24	0.06	0.18			
263	5.24	0.05	0.17	5.24	0.23	0.71	5.24	0.07	0.43	5.24	0.08	0.19			
264	5.24	0.00	0.15	5.24	0.01	-0.01	5.24	0.07	0.68	5.24	0.18	0.57			
265	5.24	0.00	0.21	5.24	0.01	-0.01	5.24	0.02	0.70	5.24	0.17	0.54			
266	5.24	0.00	0.24	5.24	0.00	0.00	5.24	0.00	0.71	5.24	0.12	0.39			
267	5.24	0.00	0.26	5.24	0.03	0.12	5.24	0.00	0.65	5.24	0.08	0.27			
269	5.24	0.11	0.65	5.24	0.02	-0.02	5.24	0.01	0.38	5.24	0.06	0.13			
270	5.24	0.06	0.86	5.24	0.01	-0.01	5.24	0.00	0.37	5.24	0.09	0.23			
272	5.24	0.01	0.92	5.24	0.01	0.02	5.24	0.00	0.27	5.24	0.03	0.05			
274	5.24	0.01	0.80	5.24	0.01	0.02	5.24	0.00	0.23	5.24	0.02	0.04			
276	5.24	0.01	0.58	5.24	0.04	0.11	5.24	0.00	0.20	5.24	0.02	0.04			
278	5.24	0.04	0.17	5.24	0.03	-0.03	5.24	0.10	0.54	5.24	0.08	0.12			
279	5.24	0.00	0.19	5.24	0.02	-0.02	5.24	0.05	0.75	5.24	0.07	0.15			
280	5.24	0.00	0.20	5.24	0.02	-0.02	5.24	0.00	0.70	5.24	0.08	0.19			
281	5.24	0.00	0.18	5.24	0.01	-0.01	5.24	0.00	0.64	5.24	0.06	0.14			
282	5.24	0.00	0.20	5.24	0.01	-0.01	5.24	0.00	0.50	5.24	0.02	0.01			
283	5.24	0.00	0.06	5.24	0.03	-0.03	5.24	0.07	0.41	5.24	0.09	0.13			
284	5.24	0.00	0.16	5.24	0.03	-0.03	5.24	0.06	0.79	5.24	0.11	0.23			
285	5.24	0.00	0.17	5.24	0.02	-0.02	5.24	0.08	0.83	5.24	0.07	0.15			
286	5.24	0.00	0.13	5.24	0.02	-0.02	5.24	0.08	0.71	5.24	0.03	0.02			
287	5.24	0.00	0.09	5.24	0.02	-0.01	5.24	0.03	0.49	5.24	0.02	0.00			

288	5.24	0.00	0.17	5.24	0.11	0.25	5.24	0.08	0.53	5.24	0.07	0.11			
289	5.24	0.00	0.14	5.24	0.02	-0.02	5.24	0.07	0.73	5.24	0.17	0.47			
290	5.24	0.00	0.14	5.24	0.02	-0.02	5.24	0.07	0.71	5.24	0.09	0.23			
291	5.24	0.00	0.08	5.24	0.02	-0.01	5.24	0.11	0.63	5.24	0.02	-0.01			
292	5.24	0.00	0.02	5.24	0.02	0.02	5.24	0.11	0.47	5.24	0.01	-0.01			
293	5.24	0.08	0.54	5.24	0.11	0.32	5.24	0.01	0.41	5.24	0.08	0.21			
294	5.24	0.08	0.63	5.24	0.01	-0.01	5.24	0.00	0.42	5.24	0.13	0.36			
295	5.24	0.04	0.44	5.24	0.01	-0.01	5.24	0.00	0.20	5.24	0.03	0.05			
296	5.24	0.10	0.42	5.24	0.02	0.01	5.24	0.06	0.27	5.24	0.02	-0.01			
297	5.24	0.08	0.30	5.24	0.03	0.03	5.24	0.08	0.30	5.24	0.01	-0.01			
298	5.24	0.08	0.27	5.24	0.06	0.13	5.24	0.02	0.06	5.24	0.03	0.05			
303	5.24	0.02	0.08	5.24	0.02	-0.02	5.24	0.00	0.00	5.24	0.03	0.03			
308	5.24	0.00	0.01	5.24	0.02	-0.02	5.24	0.00	0.00	5.24	0.04	0.05			
310	5.24	0.01	0.02	5.24	0.02	0.01	5.24	0.00	0.00	5.24	0.02	-0.02			
311	5.24	0.00	0.07	5.24	0.02	0.00	5.24	0.00	0.05	5.24	0.01	-0.01			
312	5.24	0.00	0.09	5.24	0.01	0.01	5.24	0.00	0.06	5.24	0.01	-0.01			
313	5.24	0.02	0.08	5.24	0.02	-0.02	5.24	0.00	0.00	5.24	0.03	0.03			
315	5.24	0.05	0.17	5.24	0.01	-0.01	5.24	0.00	0.00	5.24	0.01	-0.01			
316	5.24	0.03	0.17	5.24	0.01	0.01	5.24	0.00	0.03	5.24	0.01	-0.01			
317	5.24	0.00	0.18	5.24	0.01	0.02	5.24	0.00	0.05	5.24	0.01	-0.01			
502	5.24	0.00	0.45	5.24	0.06	0.24	5.24	0.00	0.31	5.24	0.06	0.23			
503	5.24	0.00	0.35	5.24	0.05	0.19	5.24	0.00	0.53	5.24	0.05	0.19			
504	5.24	0.00	0.23	5.24	0.02	0.06	5.24	0.00	0.41	5.24	0.02	0.08			
505	5.24	0.00	0.32	5.24	0.03	0.16	5.24	0.00	0.49	5.24	0.05	0.21			
506	5.24	0.00	0.40	5.24	0.04	0.14	5.24	0.00	0.37	5.24	0.06	0.22			
507	5.24	0.06	0.20	5.24	0.02	0.03	5.24	0.07	0.25	5.24	0.01	0.01			
508	5.24	0.01	0.10	5.24	0.02	0.03	5.24	0.07	0.27	5.24	0.02	0.01			
509	5.24	0.00	0.07	5.24	0.02	0.01	5.24	0.00	0.25	5.24	0.01	0.01			
510	5.24	0.00	0.23	5.24	0.01	0.01	5.24	0.00	0.35	5.24	0.01	-0.01			
511	5.24	0.04	0.36	5.24	0.04	0.12	5.24	0.01	0.19	5.24	0.01	0.02			
512	5.24	0.04	0.28	5.24	0.02	0.04	5.24	0.00	0.09	5.24	0.02	0.07			
513	5.24	0.00	0.13	5.24	0.01	0.01	5.24	0.00	0.06	5.24	0.01	-0.01			
514	5.24	0.00	0.08	5.24	0.01	0.00	5.24	0.00	0.05	5.24	0.01	-0.01			
515	5.24	0.00	0.18	5.24	0.01	0.01	5.24	0.00	0.16	5.24	0.00	0.01			
516	5.24	0.03	0.29	5.24	0.02	0.03	5.24	0.00	0.14	5.24	0.02	0.06			
547	5.24	0.10	0.35	5.24	0.01	-0.01	5.24	0.00	0.00	5.24	0.01	0.00	0.4	0.0	0.4
548	5.24	0.02	0.05	5.24	0.02	0.01	5.24	0.00	0.00	5.24	0.01	-0.01	0.1	0.1	0.2
549	5.24	0.08	0.30	5.24	0.01	-0.01	5.24	0.00	0.00	5.24	0.02	0.01			
550	5.24	0.06	0.22	5.24	0.02	0.01	5.24	0.01	0.04	5.24	0.02	-0.01			
551	5.24	0.08	0.28	5.24	0.03	0.04	5.24	0.01	0.08	5.24	0.02	-0.02			
552	5.24	0.01	0.05	5.24	0.03	0.01	5.24	0.00	0.00	5.24	0.02	-0.02			
553	5.24	0.00	0.03	5.24	0.02	0.00	5.24	0.00	0.03	5.24	0.01	-0.01			
554	5.24	0.00	0.14	5.24	0.01	0.00	5.24	0.00	0.13	5.24	0.01	-0.01			
555	5.24	0.04	0.15	5.24	0.02	0.02	5.24	0.00	0.02	5.24	0.01	-0.01			
556	5.24	0.10	0.36	5.24	0.01	0.01	5.24	0.00	0.02	5.24	0.05	0.13			
578	5.24	0.00	0.06	5.24	0.02	-0.01	5.24	0.09	0.55	5.24	0.15	0.43	0.2	0.4	0.4
579	5.24	0.01	0.03	5.24	0.03	0.03	5.24	0.00	0.00	5.24	0.02	-0.02	0.0	0.1	0.1
580	5.24	0.00	0.05	5.24	0.02	-0.01	5.24	0.13	0.58	5.24	0.18	0.50			
581	5.24	0.16	0.57	5.24	0.02	-0.02	5.24	0.09	0.32	5.24	0.12	0.33			
582	5.24	0.16	0.64	5.24	0.02	0.03	5.24	0.07	0.31	5.24	0.12	0.33			
583	5.24	0.01	0.05	5.24	0.03	0.02	5.24	0.00	0.00	5.24	0.02	-0.02			
584	5.24	0.09	0.38	5.24	0.02	0.03	5.24	0.00	0.02	5.24	0.04	0.10			
585	5.24	0.04	0.14	5.24	0.03	0.05	5.24	0.00	0.00	5.24	0.01	-0.01			
586	5.24	0.11	0.38	5.24	0.02	0.05	5.24	0.00	0.00	5.24	0.03	0.05			
587	5.24	0.05	0.17	5.24	0.02	0.02	5.24	0.00	0.00	5.24	0.01	-0.01			
588	5.24	0.04	0.26	5.24	0.02	0.02	5.24	0.00	0.10	5.24	0.01	-0.01	0.2	0.5	0.5
589	5.24	0.02	0.20	5.24	0.02	0.03	5.24	0.00	0.03	5.24	0.01	0.00	0.1	0.3	0.3
590	5.24	0.00	0.20	5.24	0.01	0.02	5.24	0.00	0.15	5.24	0.01	0.02	0.4	0.3	0.5
591	5.24	0.00	0.17	5.24	0.00	0.02	5.24	0.00	0.15	5.24	0.00	0.03	0.2	0.2	0.3

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vr_{cd} = compressione cls d' anima
 Vr_{sd} = trazione armatura trasversale
 Vr_{d,s} = scorrimento in zona di dissipativa

Quota [cm]	Sezione [cm ²]	Af long. [cm ²]	Af trasv. [cm ²]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	45600	159.17	159.17	58609	1309662	498278	-	-
60.0	45600	159.17	159.17	54634	1307765	498278	-	-
100.0	45600	159.17	159.17	56510	1307771	498278	-	-
140.0	45600	159.17	159.17	69324	1304448	498278	-	-
180.0	42600	148.70	148.70	54893	1218970	465497	-	-
220.0	42600	148.70	148.70	52526	1219310	465497	-	-
260.0	42600	148.70	148.70	52422	1217132	465497	-	-
300.0	42600	148.70	148.70	52422	1217132	465497	-	-
340.0	42600	148.70	148.70	56954	1215075	465497	-	-
380.0	42600	148.70	148.70	56954	1215075	465497	-	-
420.0	42600	148.70	148.70	56954	1215075	465497	-	-
460.0	45600	159.17	159.17	54411	1297978	498278	-	-
500.0	45600	159.17	159.17	56912	1298264	498278	-	-
540.0	45600	159.17	159.17	66179	1297653	498278	-	-
565.0	45600	159.17	159.17	66179	1297653	498278	-	-

CASI DI CARICO: ->
 Nome Descrizi one
 26 SLU SI SMA X P v1

- 27 SLU SI SMA Y P v1
- 28 SLU SI SMA X P v2
- 29 SLU SI SMA Y P v2
- 30 SLU SI SMA X P v3
- 31 SLU SI SMA Y P v3
- 32 SLU SI SMA X P v1-2
- 33 SLU SI SMA Y P v1-2
- 34 SLU SI SMA X P v1-3
- 35 SLU SI SMA Y P v1-3
- 36 SLU SI SMA X P v2-3
- 37 SLU SI SMA Y P v2-3
- 38 SLU SI SMA X v1-2-3
- 39 SLU SI SMA Y v1-2-3

GUSCI	AREE ARMATURA (cm2 al metro)												τx	τy	τt
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
208	5.24	0.00	0.48	5.24	0.00	0.23	5.24	0.00	0.31	5.24	0.01	0.25			
209	5.24	0.00	0.58	5.24	0.00	0.18	5.24	0.00	0.29	5.24	0.01	0.28			
210	5.24	0.00	0.60	5.24	0.00	0.10	5.24	0.00	0.28	5.24	0.05	0.27			
211	5.24	0.00	0.67	5.24	0.02	0.11	5.24	0.00	0.41	5.24	0.11	0.37			
212	5.24	0.03	0.47	5.24	0.13	0.43	5.24	0.00	0.31	5.24	0.05	0.16			
243	5.24	0.11	0.38	5.24	0.13	0.37	5.24	0.07	0.25	5.24	0.06	0.15			
244	5.24	0.00	0.33	5.24	0.06	0.18	5.24	0.00	0.15	5.24	0.04	0.10			
247	5.24	0.07	0.44	5.24	0.01	-0.01	5.24	0.00	0.10	5.24	0.06	0.18			
248	5.24	0.06	0.34	5.24	0.02	0.05	5.24	0.00	0.03	5.24	0.01	-0.01			
249	5.24	0.03	0.46	5.24	0.02	0.04	5.24	0.00	0.20	5.24	0.06	0.20			
250	5.24	0.05	0.35	5.24	0.03	0.06	5.24	0.00	0.05	5.24	0.01	-0.01			
251	5.24	0.00	0.42	5.24	0.03	0.12	5.24	0.00	0.30	5.24	0.06	0.22			
252	5.24	0.03	0.32	5.24	0.03	0.08	5.24	0.00	0.06	5.24	0.02	0.06			
253	5.24	0.04	0.13	5.24	0.18	0.56	5.24	0.09	0.31	5.24	0.02	-0.02			
255	5.24	0.00	0.08	5.24	0.01	-0.01	5.24	0.07	0.47	5.24	0.13	0.41			
256	5.24	0.00	0.12	5.24	0.01	-0.01	5.24	0.02	0.50	5.24	0.10	0.31			
257	5.24	0.00	0.17	5.24	0.01	0.04	5.24	0.00	0.47	5.24	0.07	0.23			
258	5.24	0.00	0.02	5.24	0.17	0.53	5.24	0.03	0.16	5.24	0.01	-0.01			
259	5.24	0.00	0.08	5.24	0.01	-0.01	5.24	0.05	0.49	5.24	0.14	0.40			
260	5.24	0.00	0.12	5.24	0.01	-0.01	5.24	0.06	0.60	5.24	0.15	0.46			
261	5.24	0.00	0.16	5.24	0.01	-0.01	5.24	0.03	0.58	5.24	0.10	0.31			
262	5.24	0.00	0.19	5.24	0.00	0.00	5.24	0.00	0.48	5.24	0.05	0.16			
263	5.24	0.01	0.17	5.24	0.18	0.59	5.24	0.05	0.35	5.24	0.04	0.10			
264	5.24	0.00	0.13	5.24	0.01	-0.01	5.24	0.04	0.55	5.24	0.14	0.45			
265	5.24	0.00	0.18	5.24	0.01	-0.01	5.24	0.00	0.56	5.24	0.13	0.43			
266	5.24	0.00	0.21	5.24	0.00	0.00	5.24	0.00	0.57	5.24	0.09	0.32			
267	5.24	0.00	0.21	5.24	0.02	0.10	5.24	0.00	0.53	5.24	0.05	0.23			
269	5.24	0.08	0.53	5.24	0.09	0.24	5.24	0.00	0.32	5.24	0.06	0.11			
270	5.24	0.03	0.70	5.24	0.02	0.02	5.24	0.00	0.32	5.24	0.10	0.31			
272	5.24	0.00	0.78	5.24	0.01	-0.01	5.24	0.00	0.24	5.24	0.02	0.05			
274	5.24	0.00	0.69	5.24	0.02	0.07	5.24	0.00	0.21	5.24	0.05	0.14			
276	5.24	0.00	0.49	5.24	0.04	0.15	5.24	0.00	0.19	5.24	0.04	0.12			
278	5.24	0.02	0.15	5.24	0.13	0.32	5.24	0.08	0.45	5.24	0.06	0.09			
279	5.24	0.00	0.15	5.24	0.02	-0.02	5.24	0.03	0.61	5.24	0.16	0.40			
280	5.24	0.00	0.17	5.24	0.02	-0.02	5.24	0.00	0.58	5.24	0.11	0.28			
281	5.24	0.00	0.16	5.24	0.01	-0.01	5.24	0.00	0.54	5.24	0.07	0.20			
282	5.24	0.00	0.19	5.24	0.04	0.11	5.24	0.00	0.44	5.24	0.05	0.13			
283	5.24	0.00	0.05	5.24	0.12	0.28	5.24	0.02	0.29	5.24	0.03	-0.02			
284	5.24	0.00	0.13	5.24	0.02	-0.02	5.24	0.04	0.64	5.24	0.16	0.40			
285	5.24	0.00	0.13	5.24	0.02	-0.02	5.24	0.06	0.68	5.24	0.14	0.37			
286	5.24	0.00	0.10	5.24	0.01	-0.01	5.24	0.05	0.59	5.24	0.05	0.11			
287	5.24	0.00	0.09	5.24	0.01	-0.01	5.24	0.02	0.42	5.24	0.03	0.05			
288	5.24	0.00	0.13	5.24	0.13	0.36	5.24	0.06	0.43	5.24	0.05	0.08			
289	5.24	0.00	0.11	5.24	0.02	-0.02	5.24	0.05	0.59	5.24	0.15	0.42			
290	5.24	0.00	0.11	5.24	0.02	-0.02	5.24	0.06	0.58	5.24	0.11	0.29			
291	5.24	0.00	0.07	5.24	0.02	-0.02	5.24	0.08	0.53	5.24	0.04	0.06			
292	5.24	0.00	0.05	5.24	0.02	0.03	5.24	0.07	0.42	5.24	0.03	0.06			
293	5.24	0.06	0.44	5.24	0.10	0.29	5.24	0.01	0.33	5.24	0.07	0.19			
294	5.24	0.07	0.50	5.24	0.02	-0.01	5.24	0.00	0.35	5.24	0.12	0.33			
295	5.24	0.04	0.35	5.24	0.01	-0.01	5.24	0.00	0.18	5.24	0.04	0.06			
296	5.24	0.08	0.35	5.24	0.03	0.05	5.24	0.04	0.24	5.24	0.04	0.06			
297	5.24	0.07	0.26	5.24	0.04	0.08	5.24	0.07	0.25	5.24	0.06	0.14			
298	5.24	0.07	0.25	5.24	0.07	0.16	5.24	0.01	0.05	5.24	0.05	0.11			
303	5.24	0.02	0.06	5.24	0.02	-0.02	5.24	0.00	0.00	5.24	0.06	0.10			
308	5.24	0.00	0.00	5.24	0.02	-0.02	5.24	0.00	0.01	5.24	0.06	0.10			
310	5.24	0.01	0.03	5.24	0.04	0.07	5.24	0.00	0.00	5.24	0.02	-0.02			
311	5.24	0.00	0.09	5.24	0.04	0.06	5.24	0.00	0.05	5.24	0.02	-0.02			
312	5.24	0.00	0.10	5.24	0.03	0.05	5.24	0.00	0.07	5.24	0.01	-0.01			
313	5.24	0.02	0.07	5.24	0.02	-0.02	5.24	0.00	0.00	5.24	0.05	0.09			
315	5.24	0.03	0.15	5.24	0.04	0.07	5.24	0.00	0.02	5.24	0.01	-0.01			
316	5.24	0.00	0.17	5.24	0.03	0.06	5.24	0.00	0.05	5.24	0.01	-0.01			
317	5.24	0.00	0.17	5.24	0.03	0.05	5.24	0.00	0.06	5.24	0.01	-0.01			
502	5.24	0.00	0.36	5.24	0.03	0.21	5.24	0.00	0.26	5.24	0.04	0.20			
503	5.24	0.00	0.27	5.24	0.03	0.17	5.24	0.00	0.42	5.24	0.03	0.18			
504	5.24	0.00	0.18	5.24	0.00	0.05	5.24	0.00	0.32	5.24	0.00	0.10			
505	5.24	0.00	0.25	5.24	0.00	0.15	5.24	0.00	0.40	5.24	0.02	0.20			
506	5.24	0.00	0.35	5.24	0.04	0.15	5.24	0.00	0.32	5.24	0.05	0.20			
507	5.24	0.05	0.18	5.24	0.04	0.07	5.24	0.06	0.22	5.24	0.06	0.15			
508	5.24	0.00	0.10	5.24	0.03	0.06	5.24	0.03	0.26	5.24	0.04	0.11			
509	5.24	0.00	0.08	5.24	0.01	0.01	5.24	0.00	0.23	5.24	0.02	0.03			
510	5.24	0.00	0.21	5.24	0.03	0.10	5.24	0.00	0.32	5.24	0.04	0.10			
511	5.24	0.02	0.32	5.24	0.04	0.13	5.24	0.00	0.18	5.24	0.04	0.12			
512	5.24	0.01	0.25	5.24	0.03	0.07	5.24	0.00	0.10	5.24	0.04	0.13			

513	5.24	0.00	0.13	5.24	0.02	0.04	5.24	0.00	0.06	5.24	0.02	0.03			
514	5.24	0.00	0.08	5.24	0.01	0.01	5.24	0.00	0.06	5.24	0.01	-0.01			
515	5.24	0.00	0.14	5.24	0.02	0.04	5.24	0.00	0.10	5.24	0.02	0.04			
516	5.24	0.03	0.25	5.24	0.03	0.07	5.24	0.00	0.09	5.24	0.03	0.08			
547	5.24	0.09	0.31	5.24	0.02	0.03	5.24	0.00	0.00	5.24	0.02	0.03	0.2	0.0	0.2
548	5.24	0.01	0.04	5.24	0.03	0.03	5.24	0.00	0.00	5.24	0.02	-0.02	0.1	0.0	0.1
549	5.24	0.07	0.26	5.24	0.03	0.04	5.24	0.00	0.00	5.24	0.02	0.02			
550	5.24	0.05	0.19	5.24	0.04	0.09	5.24	0.00	0.02	5.24	0.03	0.05			
551	5.24	0.07	0.24	5.24	0.05	0.09	5.24	0.01	0.06	5.24	0.05	0.11			
552	5.24	0.01	0.03	5.24	0.05	0.06	5.24	0.00	0.00	5.24	0.02	-0.02			
553	5.24	0.00	0.03	5.24	0.04	0.05	5.24	0.00	0.02	5.24	0.02	-0.02			
554	5.24	0.00	0.12	5.24	0.03	0.04	5.24	0.00	0.09	5.24	0.01	-0.01			
555	5.24	0.02	0.11	5.24	0.03	0.03	5.24	0.00	0.03	5.24	0.01	-0.01			
556	5.24	0.08	0.31	5.24	0.03	0.05	5.24	0.00	0.02	5.24	0.04	0.10			
578	5.24	0.00	0.05	5.24	0.01	-0.01	5.24	0.07	0.44	5.24	0.12	0.35	0.1	0.2	0.3
579	5.24	0.01	0.02	5.24	0.04	0.04	5.24	0.00	0.00	5.24	0.02	-0.02	0.0	0.0	0.0
580	5.24	0.00	0.04	5.24	0.01	-0.01	5.24	0.09	0.47	5.24	0.14	0.40			
581	5.24	0.13	0.46	5.24	0.03	0.05	5.24	0.06	0.26	5.24	0.11	0.31			
582	5.24	0.12	0.52	5.24	0.02	0.03	5.24	0.04	0.25	5.24	0.10	0.29			
583	5.24	0.01	0.03	5.24	0.04	0.05	5.24	0.00	0.00	5.24	0.02	-0.02			
584	5.24	0.06	0.35	5.24	0.04	0.09	5.24	0.00	0.05	5.24	0.04	0.08			
585	5.24	0.03	0.12	5.24	0.04	0.08	5.24	0.00	0.00	5.24	0.02	-0.02			
586	5.24	0.06	0.35	5.24	0.04	0.12	5.24	0.00	0.03	5.24	0.02	0.01			
587	5.24	0.04	0.14	5.24	0.04	0.07	5.24	0.00	0.00	5.24	0.01	-0.01			
588	5.24	0.03	0.22	5.24	0.01	-0.01	5.24	0.00	0.07	5.24	0.02	0.02	0.2	0.3	0.3
589	5.24	0.00	0.17	5.24	0.01	-0.01	5.24	0.00	0.05	5.24	0.01	0.01	0.1	0.2	0.2
590	5.24	0.00	0.15	5.24	0.01	0.02	5.24	0.00	0.10	5.24	0.01	0.02	0.3	0.2	0.3
591	5.24	0.00	0.16	5.24	0.01	0.02	5.24	0.00	0.10	5.24	0.00	0.00	0.1	0.1	0.2

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vr_{cd} = compressione cls d' anima
Vr_{sd} = trazione armatura trasversale
Vr_{d,s} = scorrimento in zona di ssi passiva

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	45600	159.17	159.17	44798	1310727	498278	-	-
60.0	45600	159.17	159.17	44190	1308954	498278	-	-
100.0	45600	159.17	159.17	45580	1309203	498278	-	-
140.0	45600	159.17	159.17	55671	1305599	498278	-	-
180.0	42600	148.70	148.70	43648	1220131	465497	-	-
220.0	42600	148.70	148.70	41665	1220121	465497	-	-
260.0	42600	148.70	148.70	41212	1218306	465497	-	-
300.0	42600	148.70	148.70	41212	1218306	465497	-	-
340.0	42600	148.70	148.70	44024	1215897	465497	-	-
380.0	42600	148.70	148.70	44024	1215897	465497	-	-
420.0	42600	148.70	148.70	44024	1215897	465497	-	-
460.0	45600	159.17	159.17	42501	1298310	498278	-	-
500.0	45600	159.17	159.17	44233	1298613	498278	-	-
540.0	45600	159.17	159.17	51404	1297764	498278	-	-
565.0	45600	159.17	159.17	51404	1297764	498278	-	-

MACROGUSCIO fronte

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
9	RARA 1 (RARA)
10	RARA 2 (RARA)
11	RARA 3 (RARA)
13	RARA 5 (RARA)
14	RARA 6 (RARA)
15	RARA 7 (RARA)
16	RARA 8 (RARA)
17	FREQUENTE 1 (FREQUENTE)
18	FREQUENTE 2 (FREQUENTE)
19	QUASI PERMANENTE (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 5 cm
copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm2 al metro)

Afc = area effettiva compressa (cm2 al metro)

Mom = momento flettente [daNcm/cm]

Nor = sforzo normale [daN]

σ_c = tensione calcestruzzo [daN/cm2]
valore max per combinazione rara = 149.4 daN/cm2
quasi permanente = 112 daN/cm2

σ_f = tensione acciai [daN/cm2]
valore max per combinazione rara = 3600 daN/cm2

w_{kF} = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
w_{kP} = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm

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ARMATURA INFERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA			COMB. FREQUENTE			COMB. QUASI PERMANENTE						
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
208	5.24	5.24	589	20	8.87	690.	525	22	0.077	462	21	6.74	0.071
209	5.24	5.24	569	25	8.37	725.	491	28	0.087	417	27	5.71	0.079
210	5.24	5.24	365	28	4.66	593.	298	33	0.087	232	31	1.35	0.078
211	5.24	5.24	686	25	10.28	818.	590	27	0.091	498	25	7.20	0.080
212	5.24	5.24	705	15	10.82	731.	637	15	0.070	559	15	8.51	0.064
243	5.24	5.24	736	-5	11.31	555.	653	-2	0.043	581	-2	8.96	0.039
244	5.24	5.24	354	5	5.46	342.	324	5	0.032	295	4	4.55	0.028
247	5.24	5.24	347	5	5.34	340.	221	-4	0.012	191	-5	2.87	0.009
248	5.24	5.24	548	-6	8.39	392.	489	-3	0.032	433	-3	6.67	0.027
249	5.24	5.24	513	11	7.86	536.	380	0.	0.027	333	-1	5.13	0.022
250	5.24	5.24	563	-2	8.67	444.	503	1	0.037	451	0.	6.97	0.032
251	5.24	5.24	498	17	7.49	586.	412	6	0.040	363	5	5.60	0.034
252	5.24	5.24	482	4	7.45	434.	439	4	0.038	395	3	6.10	0.033
253	5.24	5.24	164	-4	2.46	97.	155	-5	0.006	138	-5	2.00	0.005
255	5.24	5.24	0.	5	0.00	49.	0.	4	0.008	0.	3	0.00	0.006
256	5.24	5.24	0.	8	0.00	74.	0.	7	0.014	0.	6	0.00	0.011
257	5.24	5.24	0.	11	0.00	108.	0.	11	0.021	0.	10	0.00	0.018
258	5.24	5.24	0.	-2	0.07	-1.	0.	-3	0.000	0.	-4	0.12	0.000
259	5.24	5.24	0.	7	0.00	65.	0.	6	0.012	0.	5	0.00	0.010
260	5.24	5.24	0.	12	0.00	115.	0.	12	0.023	0.	11	0.00	0.020
261	5.24	5.24	0.	16	0.00	152.	0.	15	0.029	0.	14	0.00	0.026
262	5.24	5.24	0.	18	0.00	174.	0.	18	0.034	0.	16	0.00	0.031
263	5.24	5.24	191	3	2.95	185.	182	2	0.017	158	2	2.44	0.014
264	5.24	5.24	0.	12	0.00	114.	0.	13	0.024	0.	11	0.00	0.022
265	5.24	5.24	0.	17	0.00	165.	0.	19	0.037	0.	17	0.00	0.033
266	5.24	5.24	0.	20	0.00	192.	0.	22	0.042	0.	20	0.00	0.038
267	5.24	5.24	0.	21	0.00	196.	0.	23	0.043	0.	21	0.00	0.040
269	5.24	5.24	843	14	12.98	834.	772	12	0.075	700	11	10.78	0.068
270	5.24	5.24	915	31	13.76	1077.	803	30	0.109	703	27	10.49	0.096
272	5.24	5.24	715	31	10.53	911.	603	31	0.098	504	27	7.20	0.085
274	5.24	5.24	838	20	12.80	896.	726	21	0.088	622	18	9.43	0.076
276	5.24	5.24	669	11	10.29	666.	590	12	0.062	515	10	7.91	0.054
278	5.24	5.24	169	7	2.52	207.	159	4	0.019	137	3	2.09	0.015
279	5.24	5.24	0.	26	0.00	246.	0.	22	0.042	0.	20	0.00	0.038
280	5.24	5.24	0.	28	0.00	268.	0.	25	0.049	0.	23	0.00	0.044
281	5.24	5.24	0.	21	0.00	202.	0.	20	0.038	0.	18	0.00	0.034
282	5.24	5.24	13	13	0.00	138.	3	13	0.025	0.	11	0.00	0.022
283	5.24	5.24	0.	3	0.00	30.	0.	2	0.004	0.	1	0.00	0.002
284	5.24	5.24	0.	22	0.00	209.	0.	17	0.033	0.	16	0.00	0.030
285	5.24	5.24	0.	23	0.00	216.	0.	20	0.038	0.	18	0.00	0.034
286	5.24	5.24	0.	16	0.00	152.	0.	14	0.027	0.	13	0.00	0.025
287	5.24	5.24	0.	8	0.00	79.	0.	8	0.016	0.	7	0.00	0.013
288	5.24	5.24	83	4	1.20	111.	84	3	0.011	72	2	1.08	0.009
289	5.24	5.24	0.	17	0.00	162.	0.	14	0.026	0.	13	0.00	0.024
290	5.24	5.24	0.	15	0.00	144.	0.	14	0.026	0.	13	0.00	0.024
291	5.24	5.24	0.	8	0.00	73.	0.	7	0.013	0.	6	0.00	0.011
292	5.24	5.24	0.	1	0.00	8.	0.	0.	0.001	0.	0.	0.01	0.000
293	5.24	5.24	726	6	11.22	656.	654	4	0.052	596	4	9.20	0.048
294	5.24	5.24	618	12	9.48	633.	510	9	0.051	458	8	7.05	0.046
295	5.24	5.24	264	12	3.87	340.	129	7	0.022	118	7	1.66	0.021
296	5.24	5.24	452	2	6.98	394.	293	-1	0.019	269	-2	4.14	0.017
297	5.24	5.24	407	-1	6.28	327.	315	-3	0.019	285	-5	4.33	0.015
298	5.24	5.24	362	-2	5.58	282.	359	-12	0.014	329	0.	5.08	0.023
303	5.24	5.24	22	-9	0.41	-3.	52	-9	0.000	48	-9	0.58	0.000
308	5.24	5.24	1	-7	0.22	-3.	0.	-6	0.000	0.	-6	0.19	0.000
310	5.24	5.24	103	-5	1.43	37.	98	-5	0.003	92	-5	1.26	0.002
311	5.24	5.24	86	1	1.33	82.	81	1	0.008	75	1	1.15	0.008
312	5.24	5.24	75	6	0.92	128.	70	7	0.019	64	7	0.62	0.018
313	5.24	5.24	41	-6	0.46	0.	64	-4	0.001	59	-4	0.73	0.001
315	5.24	5.24	246	-3	3.76	172.	226	-3	0.013	206	-3	3.15	0.012
316	5.24	5.24	233	2	3.60	211.	215	2	0.019	196	2	3.02	0.017
317	5.24	5.24	195	6	2.96	218.	179	6	0.023	162	6	2.44	0.021
502	5.24	5.24	481	12	7.34	517.	433	13	0.053	386	12	5.84	0.049
503	5.24	5.24	171	19	1.64	335.	152	21	0.054	133	20	0.08	0.051
504	5.24	5.24	0.	20	0.00	190.	0.	20	0.038	0.	18	0.00	0.035
505	5.24	5.24	120	12	1.26	227.	108	17	0.043	96	15	0.00	0.038
506	5.24	5.24	406	16	6.04	500.	367	11	0.044	325	9	4.94	0.039
507	5.24	5.24	301	-6	4.57	193.	273	0.	0.019	242	-2	3.71	0.015
508	5.24	5.24	59	-2	0.87	31.	55	-1	0.003	52	-2	0.76	0.002
509	5.24	5.24	0.	3	0.00	31.	0.	4	0.007	0.	2	0.00	0.005
510	5.24	5.24	202	6	3.06	225.	180	6	0.024	159	5	2.39	0.020
511	5.24	5.24	437	4	6.75	403.	395	4	0.034	353	3	5.46	0.030
512	5.24	5.24	344	3	5.31	314.	314	4	0.028	283	3	4.36	0.025
513	5.24	5.24	125	4	1.89	143.	113	5	0.016	103	4	1.52	0.014
514	5.24	5.24	68	2	1.02	78.	37	4	0.011	35	4	0.30	0.011
515	5.24	5.24	120	7	1.71	167.	114	7	0.022	108	7	1.45	0.021
516	5.24	5.24	320	4	4.93	308.	283	5	0.028	251	4	3.86	0.025
547	5.24	5.24	608	-1	9.37	490.	533	-8	0.030	474	0.	7.32	0.033
548	5.24	5.24	95	-5	1.28	29.	92	-5	0.002	86	-5	1.16	0.002
549	5.24	5.24	397	-2	6.12	310.	349	-3	0.021	307	-3	4.71	0.018
550	5.24	5.24	325	-1	5.00	256.	284	-2	0.018	255	-2	3.93	0.016
551	5.24	5.24	405	-1	6.25	327.	352	-1	0.024	311	-1	4.79	0.021
552	5.24	5.24	75	-4	1.01	22.	70	-4	0.002	66	-4	0.87	0.001
553	5.24	5.24	22	-1	0.32	10.	20	-1	0.001	19	-1	0.27	0.001
554	5.24	5.24	52	7	0.20	119.	58	7	0.019	52	7	0.17	0.019
555	5.24	5.24	176	-1	2.71	137.	197	-1	0.013	185	-1	2.84	0.012
556	5.24	5.24	595	-4	9.15	450.	544	-4	0.034	495	-5	7.59	0.030

578	5.24	5.24	0.	3	0.00	26.	0.	2	0.004	0.	1	0.00	0.002
579	5.24	5.24	72	-5	0.90	13.	68	-5	0.001	65	-5	0.80	0.001
580	5.24	5.24	0.	1	0.00	10.	0.	0.	0.001	0.	-1	0.02	0.000
581	5.24	5.24	731	-1	11.28	591.	623	-4	0.040	551	-5	8.46	0.034
582	5.24	5.24	585	-2	9.02	462.	472	-4	0.029	416	-6	6.36	0.024
583	5.24	5.24	102	-6	1.39	33.	92	-5	0.002	87	-5	1.15	0.002
584	5.24	5.24	523	-4	8.03	389.	471	-3	0.030	423	-4	6.49	0.026
585	5.24	5.24	183	-6	2.70	94.	188	-4	0.009	175	-5	2.62	0.008
586	5.24	5.24	546	-5	8.38	399.	489	-4	0.031	435	-4	6.68	0.026
587	5.24	5.24	232	-5	3.50	144.	219	-4	0.012	203	-4	3.07	0.010
588	5.24	5.24	377	4	5.82	352.	329	4	0.030	289	4	4.47	0.026
589	5.24	5.24	293	3	4.52	276.	263	3	0.024	237	3	3.65	0.021
590	5.24	5.24	176	11	2.43	257.	167	11	0.032	155	11	2.08	0.031
591	5.24	5.24	129	10	1.68	205.	129	10	0.028	121	10	1.50	0.027

ARMATURA INFERIORE VERTICALE

GUSCI			COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
208	5.24	5.24	320	0.	4.95	269.	288	2	0.023	256	1	3.96	0.019
209	5.24	5.24	97	-6	1.28	25.	78	3	0.011	64	2	0.96	0.008
210	5.24	5.24	0.	-5	0.16	-2.	0.	-2	0.000	0.	-3	0.09	0.000
211	5.24	5.24	84	-24	1.29	-6.	78	-12	0.000	63	-12	0.79	0.000
212	5.24	5.24	816	-34	11.70	353.	718	-33	0.021	640	-32	8.90	0.017
243	5.24	5.24	780	-53	10.01	175.	708	-60	0.005	627	-61	7.08	0.002
244	5.24	5.24	240	-40	2.77	-4.	240	-38	0.000	221	-39	2.60	0.000
247	5.24	5.24	0.	-36	1.15	-17.	0.	-37	0.000	0.	-38	1.21	0.000
248	5.24	5.24	122	-32	1.78	-8.	102	-31	0.000	88	-31	1.54	0.000
249	5.24	5.24	85	-26	1.35	-7.	66	-26	0.000	55	-26	1.18	0.000
250	5.24	5.24	219	-31	2.43	1.	193	-28	0.000	171	-28	1.95	0.000
251	5.24	5.24	272	-21	3.35	47.	247	-17	0.004	217	-17	2.62	0.002
252	5.24	5.24	228	-30	2.50	4.	209	-25	0.000	184	-26	2.04	0.000
253	5.24	5.24	939	-63	12.09	216.	794	-79	0.003	678	-80	7.42	0.001
255	5.24	5.24	0.	-48	1.53	-23.	0.	-47	0.000	0.	-48	1.50	0.000
256	5.24	5.24	0.	-32	1.03	-15.	0.	-31	0.000	0.	-32	1.00	0.000
257	5.24	5.24	0.	-18	0.58	-9.	0.	-17	0.000	0.	-18	0.56	0.000
258	5.24	5.24	723	-61	8.57	95.	549	-77	0.000	451	-78	5.27	0.000
259	5.24	5.24	0.	-72	2.29	-34.	0.	-59	0.000	0.	-60	1.90	0.000
260	5.24	5.24	0.	-50	1.58	-24.	0.	-43	0.000	0.	-43	1.37	0.000
261	5.24	5.24	0.	-29	0.93	-14.	0.	-28	0.000	0.	-29	0.91	0.000
262	5.24	5.24	0.	-16	0.52	-8.	0.	-15	0.000	0.	-16	0.50	0.000
263	5.24	5.24	943	-46	13.17	347.	780	-57	0.009	671	-57	7.94	0.005
264	5.24	5.24	0.	-55	1.75	-26.	0.	-41	0.000	0.	-41	1.30	0.000
265	5.24	5.24	0.	-36	1.14	-17.	0.	-27	0.000	0.	-28	0.87	0.000
266	5.24	5.24	0.	-22	0.71	-11.	0.	-17	0.000	0.	-18	0.56	0.000
267	5.24	5.24	60	-11	0.72	-1.	46	-10	0.000	34	-10	0.54	0.000
269	5.24	5.24	402	-72	4.77	-9.	346	-68	0.000	301	-67	3.99	0.000
270	5.24	5.24	0.	-56	1.77	-26.	0.	-45	0.000	0.	-46	1.45	0.000
272	5.24	5.24	0.	-38	1.20	-18.	0.	-31	0.000	0.	-33	1.05	0.000
274	5.24	5.24	130	-32	1.81	-7.	111	-24	0.000	95	-26	1.43	0.000
276	5.24	5.24	262	-28	2.90	15.	237	-23	0.001	214	-25	2.34	0.000
278	5.24	5.24	0.	-118	3.72	-56.	443	-106	0.000	353	-105	5.54	0.000
279	5.24	5.24	0.	-89	2.81	-42.	0.	-82	0.000	0.	-82	2.60	0.000
280	5.24	5.24	0.	-70	2.22	-33.	0.	-60	0.000	0.	-61	1.94	0.000
281	5.24	5.24	0.	-47	1.49	-22.	0.	-44	0.000	0.	-45	1.44	0.000
282	5.24	5.24	198	-37	2.41	-5.	174	-34	0.000	151	-35	2.07	0.000
283	5.24	5.24	0.	-123	3.89	-58.	115	-104	0.000	32	-106	3.57	0.000
284	5.24	5.24	0.	-85	2.70	-41.	0.	-90	0.000	0.	-91	2.88	0.000
285	5.24	5.24	0.	-75	2.39	-36.	0.	-78	0.000	0.	-78	2.47	0.000
286	5.24	5.24	0.	-62	1.95	-29.	0.	-59	0.000	0.	-60	1.91	0.000
287	5.24	5.24	0.	-44	1.38	-21.	0.	-42	0.000	0.	-43	1.36	0.000
288	5.24	5.24	15	-91	2.97	-42.	476	-82	0.000	377	-83	4.97	0.000
289	5.24	5.24	0.	-72	2.28	-34.	0.	-74	0.000	0.	-74	2.34	0.000
290	5.24	5.24	0.	-70	2.22	-33.	0.	-68	0.000	0.	-68	2.15	0.000
291	5.24	5.24	0.	-68	2.14	-32.	0.	-64	0.000	0.	-63	1.98	0.000
292	5.24	5.24	13	-49	1.65	-23.	11	-47	0.000	10	-48	1.60	0.000
293	5.24	5.24	625	-60	7.11	55.	562	-57	0.002	488	-56	5.35	0.001
294	5.24	5.24	21	-60	2.02	-27.	19	-57	0.000	10	-57	1.85	0.000
295	5.24	5.24	0.	-60	1.90	-29.	0.	-57	0.000	0.	-56	1.79	0.000
296	5.24	5.24	153	-63	2.94	-20.	125	-59	0.000	115	-58	2.54	0.000
297	5.24	5.24	252	-62	3.54	-14.	241	-58	0.000	211	-56	3.10	0.000
298	5.24	5.24	214	-60	3.25	-15.	202	-58	0.000	183	-58	2.99	0.000
303	5.24	5.24	0.	-89	2.82	-42.	0.	-86	0.000	0.	-84	2.65	0.000
308	5.24	5.24	0.	-90	2.85	-43.	0.	-87	0.000	0.	-85	2.69	0.000
310	5.24	5.24	194	-76	3.61	-24.	178	-72	0.000	161	-70	3.23	0.000
311	5.24	5.24	167	-64	3.06	-20.	151	-60	0.000	133	-59	2.69	0.000
312	5.24	5.24	111	-51	2.32	-17.	98	-47	0.000	83	-46	1.99	0.000
313	5.24	5.24	0.	-71	2.26	-34.	0.	-69	0.000	0.	-68	2.15	0.000
315	5.24	5.24	189	-53	2.84	-13.	170	-49	0.000	151	-49	2.48	0.000
316	5.24	5.24	190	-46	2.64	-10.	171	-43	0.000	152	-42	2.29	0.000
317	5.24	5.24	149	-41	2.21	-10.	135	-37	0.000	118	-37	1.91	0.000
502	5.24	5.24	338	-5	5.16	230.	305	-3	0.018	273	-4	4.18	0.016
503	5.24	5.24	264	-7	3.96	154.	237	-5	0.012	210	-6	3.14	0.009
504	5.24	5.24	0.	-6	0.19	-3.	0.	-4	0.000	0.	-5	0.17	0.000
505	5.24	5.24	207	-6	3.08	115.	187	-5	0.009	164	-6	2.42	0.006
506	5.24	5.24	302	-14	4.27	120.	275	-12	0.009	242	-13	3.34	0.006
507	5.24	5.24	239	-53	3.18	-10.	215	-50	0.000	185	-51	2.76	0.000
508	5.24	5.24	147	-33	1.95	-6.	133	-31	0.000	115	-32	1.73	0.000
509	5.24	5.24	20	-30	1.08	-13.	15	-28	0.000	10	-29	0.99	0.000
510	5.24	5.24	265	-30	2.92	12.	240	-27	0.000	215	-28	2.36	0.000
511	5.24	5.24	237	-25	2.63	14.	220	-22	0.001	204	-23	2.23	0.000

512	5.24	5.24	212	-27	2.32	4.	194	-24	0.000	172	-25	1.91	0.000
513	5.24	5.24	96	-34	1.66	-10.	86	-30	0.000	76	-30	1.43	0.000
514	5.24	5.24	31	-39	1.42	-17.	23	-35	0.000	20	-35	1.22	0.000
515	5.24	5.24	77	-29	1.38	-9.	68	-25	0.000	62	-24	1.16	0.000
516	5.24	5.24	181	-32	2.15	-4.	164	-29	0.000	143	-28	1.78	0.000
547	5.24	5.24	205	-51	2.88	-11.	187	-53	0.000	164	-53	2.69	0.000
548	5.24	5.24	164	-68	3.16	-22.	118	-70	0.000	112	-69	2.87	0.000
549	5.24	5.24	142	-60	2.79	-20.	115	-58	0.000	97	-57	2.41	0.000
550	5.24	5.24	317	-63	3.96	-10.	267	-60	0.000	243	-59	3.39	0.000
551	5.24	5.24	279	-71	3.98	-16.	269	-67	0.000	232	-66	3.53	0.000
552	5.24	5.24	206	-95	4.30	-32.	190	-90	0.000	173	-89	3.90	0.000
553	5.24	5.24	169	-75	3.44	-25.	152	-71	0.000	135	-69	3.03	0.000
554	5.24	5.24	109	-54	2.38	-19.	95	-49	0.000	79	-48	2.01	0.000
555	5.24	5.24	106	-52	2.32	-18.	116	-55	0.000	111	-54	2.39	0.000
556	5.24	5.24	139	-44	2.25	-12.	137	-43	0.000	124	-43	2.13	0.000
578	5.24	5.24	0.	-60	1.89	-28.	0.	-58	0.000	0.	-59	1.88	0.000
579	5.24	5.24	173	-75	3.45	-25.	140	-78	0.000	136	-77	3.28	0.000
580	5.24	5.24	0.	-68	2.15	-32.	0.	-64	0.000	0.	-65	2.07	0.000
581	5.24	5.24	175	-57	2.88	-16.	161	-54	0.000	142	-55	2.63	0.000
582	5.24	5.24	0.	-45	1.41	-21.	0.	-47	0.000	0.	-48	1.53	0.000
583	5.24	5.24	180	-77	3.56	-25.	158	-76	0.000	149	-75	3.31	0.000
584	5.24	5.24	277	-41	3.02	-2.	257	-38	0.000	234	-39	2.69	0.000
585	5.24	5.24	230	-62	3.39	-15.	218	-62	0.000	208	-61	3.22	0.000
586	5.24	5.24	278	-34	3.04	7.	249	-34	0.000	222	-34	2.47	0.000
587	5.24	5.24	211	-58	3.16	-15.	197	-55	0.000	182	-54	2.86	0.000
588	5.24	5.24	0.	-54	1.70	-25.	0.	-50	0.000	0.	-50	1.58	0.000
589	5.24	5.24	0.	-40	1.28	-19.	0.	-38	0.000	0.	-37	1.19	0.000
590	5.24	5.24	6	-28	0.91	-13.	49	-26	0.000	38	-26	1.05	0.000
591	5.24	5.24	0.	-25	0.78	-12.	35	-22	0.000	23	-21	0.81	0.000

ARMATURA SUPERI ORE ORI ZZONTALE

GUSCI	COMBI NAZIONE RARA		COMB. FREQUENTE			COMB. QUASI PERMANENTE							
	Af	AfC	Mom	Nor	σC	σF	Mom	Nor	WkF	Mom	Nor	σC	WkP
208	5.24	5.24	139	20	0.43	322.	135	22	0.056	132	21	0.00	0.054
209	5.24	5.24	0.	25	0.00	238.	0.	28	0.054	0.	27	0.00	0.051
210	5.24	5.24	0.	28	0.00	269.	0.	33	0.064	0.	31	0.00	0.058
211	5.24	5.24	107	25	0.00	336.	128	27	0.065	143	25	0.00	0.062
212	5.24	5.24	315	15	4.60	409.	313	15	0.048	296	15	4.28	0.047
243	5.24	5.24	415	-5	6.35	291.	387	-2	0.025	349	-2	5.37	0.022
244	5.24	5.24	73	5	0.99	111.	73	5	0.015	71	4	0.99	0.013
247	5.24	5.24	0.	5	0.00	51.	0.	-4	0.000	0.	-5	0.15	0.000
248	5.24	5.24	0.	-6	0.20	-3.	0.	-3	0.000	0.	-3	0.10	0.000
249	5.24	5.24	0.	11	0.00	106.	48	0.	0.003	47	-1	0.71	0.002
250	5.24	5.24	0.	-2	0.07	-1.	0.	1	0.002	0.	0.	0.00	0.001
251	5.24	5.24	215	17	2.72	355.	266	6	0.030	242	5	3.71	0.026
252	5.24	5.24	0.	4	0.00	33.	0.	4	0.008	0.	3	0.00	0.006
253	5.24	5.24	541	-4	8.33	408.	498	-5	0.030	450	-5	6.89	0.026
255	5.24	5.24	843	5	13.03	749.	757	4	0.060	673	3	10.39	0.053
256	5.24	5.24	808	8	12.48	746.	725	7	0.063	646	6	9.97	0.055
257	5.24	5.24	673	11	10.36	671.	606	11	0.061	540	10	8.31	0.054
258	5.24	5.24	198	-2	3.04	142.	181	-3	0.010	168	-4	2.53	0.008
259	5.24	5.24	764	7	11.80	699.	676	6	0.058	600	5	9.28	0.051
260	5.24	5.24	1022	12	15.78	967.	913	12	0.084	811	11	12.51	0.075
261	5.24	5.24	883	16	13.57	892.	793	15	0.081	704	14	10.82	0.073
262	5.24	5.24	569	18	8.58	656.	511	18	0.067	454	16	6.80	0.061
263	5.24	5.24	573	3	8.86	500.	524	2	0.041	470	2	7.26	0.036
264	5.24	5.24	898	12	13.85	863.	796	13	0.078	708	11	10.90	0.069
265	5.24	5.24	792	17	12.13	830.	713	19	0.084	640	17	9.73	0.075
266	5.24	5.24	780	20	11.89	850.	701	22	0.088	628	20	9.48	0.079
267	5.24	5.24	653	21	9.87	749.	590	23	0.082	528	21	7.84	0.075
269	5.24	5.24	186	14	2.45	294.	205	12	0.037	205	11	2.92	0.035
270	5.24	5.24	0.	31	0.00	299.	0.	30	0.057	0.	27	0.00	0.051
272	5.24	5.24	0.	31	0.00	297.	0.	31	0.059	0.	27	0.00	0.052
274	5.24	5.24	0.	20	0.00	191.	0.	21	0.040	0.	18	0.00	0.035
276	5.24	5.24	0.	11	0.00	107.	0.	12	0.022	0.	10	0.00	0.020
278	5.24	5.24	723	7	11.17	663.	678	4	0.055	629	3	9.71	0.049
279	5.24	5.24	917	26	13.94	1021.	831	22	0.097	757	20	11.53	0.088
280	5.24	5.24	689	28	10.21	856.	634	25	0.090	581	23	8.63	0.081
281	5.24	5.24	693	21	10.48	788.	636	20	0.079	584	18	8.84	0.072
282	5.24	5.24	557	13	8.51	594.	513	13	0.058	469	11	7.16	0.053
283	5.24	5.24	496	3	7.67	442.	353	2	0.028	334	1	5.16	0.025
284	5.24	5.24	927	22	14.17	988.	837	17	0.088	761	16	11.67	0.081
285	5.24	5.24	1089	23	16.70	1129.	986	20	0.103	891	18	13.67	0.093
286	5.24	5.24	888	16	13.64	895.	805	14	0.081	724	13	11.14	0.073
287	5.24	5.24	559	8	8.62	546.	507	8	0.049	455	7	7.00	0.044
288	5.24	5.24	655	4	10.12	583.	616	3	0.048	572	2	8.83	0.044
289	5.24	5.24	952	17	14.64	959.	862	14	0.084	778	13	11.98	0.076
290	5.24	5.24	861	15	13.24	865.	780	14	0.078	703	13	10.80	0.071
291	5.24	5.24	894	8	13.81	816.	809	7	0.068	729	6	11.26	0.061
292	5.24	5.24	671	1	10.37	564.	609	0.	0.043	548	0.	8.47	0.038
293	5.24	5.24	400	6	6.16	386.	390	4	0.034	357	4	5.52	0.031
294	5.24	5.24	112	12	1.11	218.	189	9	0.029	166	8	2.40	0.026
295	5.24	5.24	0.	12	0.00	114.	0.	7	0.014	0.	7	0.00	0.013
296	5.24	5.24	64	2	0.97	74.	179	-1	0.011	161	-2	2.46	0.010
297	5.24	5.24	332	-1	5.12	265.	365	-3	0.023	331	-5	5.06	0.019
298	5.24	5.24	53	-2	0.79	27.	81	-12	0.000	77	0.	1.18	0.005
303	5.24	5.24	15	-9	0.18	-5.	0.	-9	0.000	0.	-9	0.28	0.000
308	5.24	5.24	8	-7	0.17	-4.	7	-6	0.000	6	-6	0.16	0.000
310	5.24	5.24	0.	-5	0.16	-2.	0.	-5	0.000	0.	-5	0.16	0.000
311	5.24	5.24	0.	1	0.00	11.	0.	1	0.003	0.	1	0.00	0.003

312	5.24	5.24	0.	6	0.00	61.	0.	7	0.013	0.	7	0.00	0.013
313	5.24	5.24	0.	-6	0.18	-3.	0.	-4	0.000	0.	-4	0.14	0.000
315	5.24	5.24	0.	-3	0.10	-1.	0.	-3	0.000	0.	-3	0.09	0.000
316	5.24	5.24	0.	2	0.00	17.	0.	2	0.004	0.	2	0.00	0.004
317	5.24	5.24	0.	6	0.00	53.	0.	6	0.012	0.	6	0.00	0.011
502	5.24	5.24	285	12	4.22	357.	262	13	0.042	240	12	3.45	0.039
503	5.24	5.24	469	19	6.97	578.	423	21	0.068	378	20	5.42	0.063
504	5.24	5.24	249	20	3.14	412.	223	20	0.054	198	18	2.27	0.049
505	5.24	5.24	449	12	6.83	496.	405	17	0.058	361	15	5.33	0.052
506	5.24	5.24	343	16	5.01	448.	342	11	0.042	308	9	4.67	0.038
507	5.24	5.24	406	-6	6.21	280.	369	0.	0.026	334	-2	5.14	0.022
508	5.24	5.24	388	-2	5.98	303.	352	-1	0.024	316	-2	4.87	0.021
509	5.24	5.24	257	3	3.96	245.	232	4	0.022	207	2	3.19	0.019
510	5.24	5.24	400	6	6.17	389.	366	6	0.036	333	5	5.13	0.032
511	5.24	5.24	151	4	2.29	167.	152	4	0.018	154	3	2.36	0.017
512	5.24	5.24	58	3	0.84	78.	53	4	0.010	50	3	0.69	0.009
513	5.24	5.24	0.	4	0.00	37.	0.	5	0.009	0.	4	0.00	0.008
514	5.24	5.24	0.	2	0.00	21.	0.	4	0.008	0.	4	0.00	0.008
515	5.24	5.24	8	7	0.00	70.	0.	7	0.014	0.	7	0.00	0.014
516	5.24	5.24	71	4	0.98	103.	70	5	0.014	70	4	0.95	0.013
547	5.24	5.24	0.	-1	0.04	-1.	0.	-8	0.000	0.	0.	0.01	0.000
548	5.24	5.24	0.	-5	0.17	-3.	0.	-5	0.000	0.	-5	0.16	0.000
549	5.24	5.24	0.	-2	0.06	-1.	0.	-3	0.000	0.	-3	0.11	0.000
550	5.24	5.24	3	-1	0.02	-1.	4	-2	0.000	6	-2	0.01	0.000
551	5.24	5.24	45	-1	0.69	30.	55	-1	0.003	54	-1	0.82	0.003
552	5.24	5.24	0.	-4	0.14	-2.	0.	-4	0.000	0.	-4	0.13	0.000
553	5.24	5.24	0.	-1	0.03	0.	0.	-1	0.000	0.	-1	0.02	0.000
554	5.24	5.24	0.	7	0.00	70.	0.	7	0.014	0.	7	0.00	0.014
555	5.24	5.24	0.	-1	0.03	0.	0.	-1	0.000	0.	-1	0.03	0.000
556	5.24	5.24	0.	-4	0.13	-2.	0.	-4	0.000	0.	-5	0.15	0.000
578	5.24	5.24	849	3	13.13	730.	761	2	0.057	676	1	10.44	0.049
579	5.24	5.24	0.	-5	0.17	-3.	0.	-5	0.000	0.	-5	0.16	0.000
580	5.24	5.24	869	1	13.43	729.	776	0.	0.055	690	-1	10.65	0.048
581	5.24	5.24	238	-1	3.67	183.	262	-4	0.014	237	-5	3.59	0.012
582	5.24	5.24	0.	-2	0.07	-1.	66	-4	0.001	65	-6	0.76	0.000
583	5.24	5.24	0.	-6	0.18	-3.	0.	-5	0.000	0.	-5	0.17	0.000
584	5.24	5.24	0.	-4	0.14	-2.	0.	-3	0.000	0.	-4	0.13	0.000
585	5.24	5.24	0.	-6	0.19	-3.	0.	-4	0.000	0.	-5	0.15	0.000
586	5.24	5.24	0.	-5	0.17	-3.	0.	-4	0.000	0.	-4	0.14	0.000
587	5.24	5.24	0.	-5	0.15	-2.	0.	-4	0.000	0.	-4	0.13	0.000
588	5.24	5.24	99	4	1.46	122.	89	4	0.013	84	4	1.25	0.012
589	5.24	5.24	0.	3	0.00	32.	0.	3	0.007	0.	3	0.00	0.005
590	5.24	5.24	0.	11	0.00	103.	0.	11	0.021	0.	11	0.00	0.020
591	5.24	5.24	0.	10	0.00	91.	0.	10	0.019	0.	10	0.00	0.019

ARMATURA SUPERIORE VERTI CALE

GUSCI	Af		COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
208	5.24	5.24	362	0.	5.60	303.	332	2	0.026	303	1	4.68	0.023
209	5.24	5.24	394	-6	6.01	266.	365	3	0.031	337	2	5.21	0.027
210	5.24	5.24	305	-5	4.64	202.	290	-2	0.019	273	-3	4.19	0.016
211	5.24	5.24	726	-24	10.67	367.	663	-12	0.035	601	-12	9.09	0.030
212	5.24	5.24	184	-34	0.07	-28.	213	-33	0.000	197	-32	0.22	0.000
243	5.24	5.24	234	-53	0.22	-40.	239	-60	0.000	227	-61	0.52	0.000
244	5.24	5.24	324	-40	3.54	8.	292	-38	0.000	267	-39	2.98	0.000
247	5.24	5.24	253	-36	2.80	1.	245	-37	0.000	223	-38	0.17	0.000
248	5.24	5.24	0.	-32	1.02	-15.	0.	-31	0.000	0.	-31	0.99	0.000
249	5.24	5.24	321	-26	3.88	49.	306	-26	0.002	275	-26	3.13	0.001
250	5.24	5.24	0.	-31	0.99	-15.	0.	-28	0.000	0.	-28	0.88	0.000
251	5.24	5.24	391	-21	5.37	131.	359	-17	0.010	326	-17	4.47	0.008
252	5.24	5.24	32	-30	0.74	-16.	34	-25	0.000	35	-26	0.60	0.000
253	5.24	5.24	0.	-63	2.00	-30.	0.	-79	0.000	0.	-80	2.54	0.000
255	5.24	5.24	849	-48	11.47	257.	768	-47	0.014	687	-48	8.76	0.010
256	5.24	5.24	672	-32	9.41	252.	609	-31	0.016	547	-32	7.35	0.011
257	5.24	5.24	453	-18	6.53	201.	410	-17	0.014	371	-18	5.20	0.010
258	5.24	5.24	0.	-61	1.94	-29.	0.	-77	0.000	0.	-78	2.46	0.000
259	5.24	5.24	949	-72	11.68	164.	837	-59	0.011	742	-60	8.95	0.006
260	5.24	5.24	1086	-50	15.34	428.	981	-43	0.030	875	-43	12.19	0.023
261	5.24	5.24	657	-29	9.33	266.	597	-28	0.017	536	-29	7.35	0.013
262	5.24	5.24	252	-16	3.28	62.	230	-15	0.004	208	-16	2.56	0.002
263	5.24	5.24	0.	-46	1.46	-22.	0.	-57	0.000	0.	-57	1.81	0.000
264	5.24	5.24	1066	-55	14.71	366.	948	-41	0.029	844	-41	11.79	0.023
265	5.24	5.24	865	-36	12.39	371.	790	-27	0.030	711	-28	10.29	0.025
266	5.24	5.24	665	-22	9.76	334.	604	-17	0.027	544	-18	8.02	0.022
267	5.24	5.24	427	-11	6.39	247.	387	-10	0.018	348	-10	5.16	0.015
269	5.24	5.24	254	-72	0.69	-50.	290	-68	0.000	293	-67	0.29	0.000
270	5.24	5.24	431	-56	4.72	8.	421	-45	0.001	406	-46	4.46	0.001
272	5.24	5.24	170	-38	0.15	-29.	166	-31	0.000	160	-33	0.05	0.000
274	5.24	5.24	96	-32	0.40	-21.	104	-24	0.000	112	-26	0.14	0.000
276	5.24	5.24	150	-28	0.06	-22.	168	-23	0.000	165	-25	0.24	0.000
278	5.24	5.24	672	-118	0.46	-98.	367	-106	0.000	385	-105	0.94	0.000
279	5.24	5.24	1038	-89	12.26	132.	940	-82	0.006	852	-82	9.66	0.003
280	5.24	5.24	652	-70	7.21	36.	599	-60	0.002	547	-61	6.01	0.001
281	5.24	5.24	500	-47	5.72	46.	461	-44	0.002	421	-45	4.65	0.001
282	5.24	5.24	311	-37	3.40	10.	288	-34	0.000	264	-35	2.90	0.000
283	5.24	5.24	731	-123	0.67	-104.	0.	-104	0.000	11	-106	3.30	0.000
284	5.24	5.24	1038	-85	12.44	148.	934	-90	0.004	847	-91	9.37	0.002
285	5.24	5.24	938	-75	11.33	142.	855	-78	0.005	771	-78	8.63	0.002
286	5.24	5.24	483	-62	5.28	10.	441	-59	0.000	398	-60	0.57	0.000
287	5.24	5.24	161	-44	0.38	-31.	149	-42	0.000	136	-43	0.51	0.000

288	5.24	5.24	576	-91	0.70	-79.	215	-82	0.000	254	-83	1.04	0.000
289	5.24	5.24	1046	-72	13.35	228.	946	-74	0.009	855	-74	10.06	0.006
290	5.24	5.24	773	-70	8.94	81.	703	-68	0.003	635	-68	7.02	0.001
291	5.24	5.24	576	-68	6.30	20.	526	-64	0.001	476	-63	5.22	0.000
292	5.24	5.24	379	-49	4.15	6.	349	-47	0.000	323	-48	0.48	0.000
293	5.24	5.24	388	-60	0.53	-52.	379	-57	0.000	368	-56	0.53	0.000
294	5.24	5.24	647	-60	7.45	65.	612	-57	0.003	550	-57	6.14	0.002
295	5.24	5.24	264	-60	0.26	-45.	256	-57	0.000	230	-56	0.36	0.000
296	5.24	5.24	335	-63	0.10	-51.	319	-59	0.000	288	-58	0.03	0.000
297	5.24	5.24	411	-62	0.60	-55.	386	-58	0.000	357	-56	0.44	0.000
298	5.24	5.24	355	-60	0.30	-51.	326	-58	0.000	302	-58	0.03	0.000
303	5.24	5.24	327	-89	0.78	-63.	274	-86	0.000	256	-84	1.06	0.000
308	5.24	5.24	305	-90	0.95	-62.	217	-87	0.000	205	-85	1.42	0.000
310	5.24	5.24	0.	-76	2.40	-36.	0.	-72	0.000	0.	-70	2.23	0.000
311	5.24	5.24	0.	-64	2.02	-30.	0.	-60	0.000	0.	-59	1.86	0.000
312	5.24	5.24	0.	-51	1.62	-24.	0.	-47	0.000	0.	-46	1.47	0.000
313	5.24	5.24	302	-71	0.38	-53.	250	-69	0.000	234	-68	0.69	0.000
315	5.24	5.24	0.	-53	1.66	-25.	0.	-49	0.000	0.	-49	1.54	0.000
316	5.24	5.24	0.	-46	1.46	-22.	0.	-43	0.000	0.	-42	1.34	0.000
317	5.24	5.24	0.	-41	1.28	-19.	0.	-37	0.000	0.	-37	1.17	0.000
502	5.24	5.24	336	-5	5.13	229.	305	-3	0.018	274	-4	4.19	0.016
503	5.24	5.24	293	-7	4.41	177.	264	-5	0.014	236	-6	3.55	0.011
504	5.24	5.24	53	-6	0.58	2.	47	-4	0.000	43	-5	0.47	0.000
505	5.24	5.24	282	-6	4.27	177.	256	-5	0.014	230	-6	3.46	0.011
506	5.24	5.24	380	-14	5.53	182.	342	-12	0.013	309	-13	4.44	0.010
507	5.24	5.24	377	-53	4.18	2.	345	-50	0.000	319	-51	0.37	0.000
508	5.24	5.24	213	-33	0.29	-29.	197	-31	0.000	181	-32	0.12	0.000
509	5.24	5.24	57	-30	0.60	-18.	52	-28	0.000	48	-29	0.63	0.000
510	5.24	5.24	240	-30	2.63	6.	220	-27	0.000	202	-28	2.23	0.000
511	5.24	5.24	199	-25	2.18	5.	189	-22	0.000	180	-23	1.97	0.000
512	5.24	5.24	234	-27	2.56	8.	210	-24	0.000	192	-25	2.10	0.000
513	5.24	5.24	58	-34	0.70	-20.	52	-30	0.000	48	-30	0.65	0.000
514	5.24	5.24	0.	-39	1.23	-18.	0.	-35	0.000	0.	-35	1.10	0.000
515	5.24	5.24	111	-29	0.21	-20.	97	-25	0.000	94	-24	0.18	0.000
516	5.24	5.24	305	-32	3.38	18.	281	-29	0.001	263	-28	2.91	0.001
547	5.24	5.24	136	-51	0.76	-33.	167	-53	0.000	150	-53	0.73	0.000
548	5.24	5.24	0.	-68	2.14	-32.	0.	-70	0.000	0.	-69	2.17	0.000
549	5.24	5.24	0.	-60	1.91	-29.	1	-58	0.000	2	-57	1.79	0.000
550	5.24	5.24	4	-63	1.96	-30.	48	-60	0.000	45	-59	1.60	0.000
551	5.24	5.24	348	-71	0.07	-55.	321	-67	0.000	298	-66	0.23	0.000
552	5.24	5.24	0.	-95	3.01	-45.	0.	-90	0.000	0.	-89	2.82	0.000
553	5.24	5.24	0.	-75	2.39	-36.	0.	-71	0.000	0.	-69	2.19	0.000
554	5.24	5.24	0.	-54	1.70	-26.	0.	-49	0.000	0.	-48	1.51	0.000
555	5.24	5.24	0.	-52	1.66	-25.	0.	-55	0.000	0.	-54	1.70	0.000
556	5.24	5.24	55	-44	1.04	-24.	68	-43	0.000	60	-43	0.99	0.000
578	5.24	5.24	916	-60	11.91	222.	828	-58	0.011	737	-59	8.91	0.007
579	5.24	5.24	0.	-75	2.37	-36.	0.	-78	0.000	0.	-77	2.43	0.000
580	5.24	5.24	1057	-68	13.79	263.	940	-64	0.013	835	-65	10.19	0.008
581	5.24	5.24	737	-57	9.06	126.	670	-54	0.006	597	-55	6.87	0.003
582	5.24	5.24	629	-45	7.96	129.	585	-47	0.005	525	-48	6.04	0.003
583	5.24	5.24	0.	-77	2.44	-37.	0.	-76	0.000	0.	-75	2.38	0.000
584	5.24	5.24	137	-41	0.43	-28.	132	-38	0.000	119	-39	0.49	0.000
585	5.24	5.24	0.	-62	1.95	-29.	0.	-62	0.000	0.	-61	1.93	0.000
586	5.24	5.24	0.	-34	1.08	-16.	0.	-34	0.000	0.	-34	1.09	0.000
587	5.24	5.24	0.	-58	1.85	-28.	0.	-55	0.000	0.	-54	1.73	0.000
588	5.24	5.24	171	-54	0.63	-36.	140	-50	0.000	137	-50	0.73	0.000
589	5.24	5.24	93	-40	0.70	-25.	68	-38	0.000	70	-37	0.75	0.000
590	5.24	5.24	67	-28	0.46	-17.	47	-26	0.000	49	-26	0.51	0.000
591	5.24	5.24	29	-25	0.60	-14.	0.	-22	0.000	0.	-21	0.66	0.000

MACROGUSCI 0 lat_centrale

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: -->

Nome	Descrizione
1	SLU SENZA SI SMA 1
2	SLU SENZA SI SMA 2
3	SLU SENZA SI SMA 3
4	SLU SENZA SI SMA 4
5	SLU SENZA SI SMA 5
6	SLU SENZA SI SMA 6
7	SLU SENZA SI SMA 7
8	SLU SENZA SI SMA 8
22	SLU SI SMAX P vuoto
23	SLU SI SMAY P vuoto

DATI:

tensione di snervamento acciaio (fyk):	4500	daN/cm2
coefficiente sicurezza acciaio	: 1.15	
deformazione ultima acciaio	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento	(k): 1	
resistenza cilindrica cls	(fck): 249	daN/cm2
coefficiente sicurezza cls	: 1.5	
coefficiente riduttivo	(alfa): 0.85	
copri ferro inferiore (asse armatura):	5	cm
copri ferro superiore (asse armatura):	5	cm
moltiplicatore sollecitazioni	: 1	

LEGENDA:

spess = spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
 Af = area disposta al lembo teso, in cm² al metro
 Afc = area disposta al lembo compresso, in cm² al metro
 Mom = momento flettente [daNcm/cm]
 Nor = sforzo normale [daN]
 epsC = deformazione cls [per mille]
 epsF = deformazione acciaino [per mille]

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L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciaino alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm ² al metro)												τ _x	τ _y	τ _t
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
183	5.24	0.00	0.54	5.24	0.00	0.96	5.24	0.00	1.00	5.24	0.00	0.75			
184	5.24	0.00	0.46	5.24	0.00	0.50	5.24	0.09	1.38	5.24	0.00	0.66			
185	5.24	0.00	0.33	5.24	0.00	0.28	5.24	0.25	1.50	5.24	0.00	0.43			
186	5.24	0.00	0.19	5.24	0.00	0.12	5.24	0.25	1.24	5.24	0.02	0.29			
187	5.24	0.00	0.07	5.24	0.00	0.08	5.24	0.22	0.94	5.24	0.02	0.21			
218	5.24	0.00	0.78	5.24	0.00	1.23	5.24	0.00	1.17	5.24	0.00	0.93			
221	5.24	0.00	0.72	5.24	0.00	0.71	5.24	0.00	1.42	5.24	0.00	0.98			
223	5.24	0.00	0.59	5.24	0.00	0.47	5.24	0.09	1.47	5.24	0.00	0.71			
225	5.24	0.00	0.38	5.24	0.00	0.28	5.24	0.12	1.21	5.24	0.00	0.47			
227	5.24	0.00	0.20	5.24	0.00	0.16	5.24	0.15	0.93	5.24	0.00	0.37			
523	5.24	0.00	0.06	5.24	0.03	0.12	5.24	0.10	0.50	5.24	0.03	0.24			
524	5.24	0.00	0.14	5.24	0.00	0.14	5.24	0.08	0.70	5.24	0.00	0.32			

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vr_{cd} = compressione cls d' anima
 Vr_{sd} = trazione armatura trasversale
 Vr_{d,s} = scorrimento in zona dissipativa

Quota [cm]	Sezione [cm ²]	Af long. [cm ²]	Af trasv. [cm ²]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	5400	18.85	18.85	38920	152388	59007	-	-
60.0	5400	18.85	18.85	36189	152402	59007	-	-
100.0	5400	18.85	18.85	36189	152402	59007	-	-
140.0	5400	18.85	18.85	36189	152402	59007	-	-
180.0	5400	18.85	18.85	30331	152968	59007	-	-
220.0	5400	18.85	18.85	30331	152968	59007	-	-
260.0	5400	18.85	18.85	21661	153239	59007	-	-
300.0	5400	18.85	18.85	21661	153239	59007	-	-
340.0	5400	18.85	18.85	14311	153227	59007	-	-
380.0	5400	18.85	18.85	14311	153227	59007	-	-
420.0	5400	18.85	18.85	14311	153227	59007	-	-
460.0	5400	18.85	18.85	10138	153013	59007	-	-
500.0	5400	18.85	18.85	10138	153013	59007	-	-
540.0	5400	18.85	18.85	10774	152854	59007	-	-
565.0	5400	18.85	18.85	10774	152854	59007	-	-

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X v1-2-3
39	SLU SI SMA Y v1-2-3

GUSCI	AREE ARMATURA (cm ² al metro)												τ _x	τ _y	τ _t
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
183	5.24	0.00	0.37	5.24	0.00	0.66	5.24	0.00	0.61	5.24	0.00	0.51			
184	5.24	0.00	0.32	5.24	0.00	0.35	5.24	0.00	0.87	5.24	0.00	0.44			
185	5.24	0.00	0.25	5.24	0.00	0.19	5.24	0.08	0.97	5.24	0.00	0.30			
186	5.24	0.00	0.16	5.24	0.00	0.06	5.24	0.12	0.84	5.24	0.04	0.19			
187	5.24	0.00	0.08	5.24	0.00	0.02	5.24	0.12	0.64	5.24	0.04	0.13			
218	5.24	0.00	0.55	5.24	0.00	0.86	5.24	0.00	0.81	5.24	0.00	0.65			
221	5.24	0.00	0.50	5.24	0.00	0.50	5.24	0.00	0.98	5.24	0.00	0.68			
223	5.24	0.00	0.41	5.24	0.00	0.32	5.24	0.00	1.01	5.24	0.00	0.49			
225	5.24	0.00	0.28	5.24	0.00	0.19	5.24	0.02	0.85	5.24	0.00	0.31			

186	5.24	5.24	0.	-18	0.57	-8.	0.	-5	0.000	0.	-5	0.16	0.000
187	5.24	5.24	0.	-18	0.56	-8.	0.	-12	0.000	0.	-12	0.39	0.000
218	5.24	5.24	242	96	0.00	1151.	174	82	0.173	176	82	0.00	0.173
221	5.24	5.24	0.	82	0.00	784.	45	65	0.129	45	65	0.00	0.129
223	5.24	5.24	0.	44	0.00	420.	0.	40	0.077	0.	40	0.00	0.077
225	5.24	5.24	0.	20	0.00	194.	0.	17	0.033	0.	17	0.00	0.033
227	5.24	5.24	0.	7	0.00	63.	0.	2	0.004	0.	2	0.00	0.005
523	5.24	5.24	106	3	1.62	117.	120	0.	0.008	119	0.	1.83	0.008
524	5.24	5.24	0.	-6	0.19	-3.	0.	-3	0.000	0.	-3	0.08	0.000

ARMATURA SUPERI ORE ORIZZONTALE

GUSCI	Af	Afc	COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
183	5.24	5.24	321	55	0.00	828.	164	57	0.125	164	57	0.00	0.125
184	5.24	5.24	1110	25	17.00	1169.	625	43	0.124	625	43	8.38	0.124
185	5.24	5.24	1603	-3	24.74	1299.	963	24	0.109	964	24	14.71	0.108
186	5.24	5.24	1524	-13	23.42	1135.	966	1	0.070	967	1	14.94	0.070
187	5.24	5.24	1246	-11	19.14	924.	833	-8	0.051	832	-8	12.78	0.051
218	5.24	5.24	259	92	0.00	1123.	177	86	0.181	176	85	0.00	0.180
221	5.24	5.24	938	76	11.72	1562.	572	73	0.188	572	73	3.80	0.187
223	5.24	5.24	1360	60	19.96	1744.	884	55	0.164	885	55	12.22	0.164
225	5.24	5.24	1284	29	19.64	1357.	871	31	0.116	872	31	13.07	0.116
227	5.24	5.24	1082	-1	16.70	881.	770	11	0.072	771	10	11.89	0.072
523	5.24	5.24	654	-3	10.08	516.	473	1	0.034	473	1	7.31	0.035
524	5.24	5.24	665	-4	10.24	506.	449	2	0.034	449	1	6.94	0.034

ARMATURA SUPERI ORE VERTICALE

GUSCI	Af	Afc	COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
183	5.24	5.24	0.	93	0.00	891.	0.	70	0.133	0.	70	0.00	0.133
184	5.24	5.24	252	53	0.00	743.	93	45	0.095	93	45	0.00	0.095
185	5.24	5.24	370	4	5.72	344.	235	15	0.045	236	16	3.20	0.045
186	5.24	5.24	367	-18	5.13	136.	235	-5	0.011	235	-5	3.54	0.012
187	5.24	5.24	327	-18	4.49	108.	204	-12	0.004	204	-12	2.71	0.004
218	5.24	5.24	0.	96	0.00	920.	0.	82	0.156	0.	82	0.00	0.156
221	5.24	5.24	311	82	0.00	1081.	205	65	0.145	205	65	0.00	0.145
223	5.24	5.24	412	44	4.08	798.	271	40	0.103	271	40	0.17	0.103
225	5.24	5.24	340	20	4.75	490.	218	17	0.048	218	17	2.74	0.048
227	5.24	5.24	352	7	5.41	358.	253	2	0.022	253	2	3.91	0.022
523	5.24	5.24	227	3	3.50	217.	174	0.	0.012	175	0.	2.70	0.012
524	5.24	5.24	304	-6	4.60	193.	219	-3	0.013	218	-3	3.33	0.013

MACROGUSCI 0 |at_destro

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU SENZA SISMA 1
2	SLU SENZA SISMA 2
3	SLU SENZA SISMA 3
4	SLU SENZA SISMA 4
5	SLU SENZA SISMA 5
6	SLU SENZA SISMA 6
7	SLU SENZA SISMA 7
8	SLU SENZA SISMA 8
22	SLU SISMAX P vuoto
23	SLU SISMAX P vuoto

DATI:

tensione di snervamento acciaio (fyk):	4500	daN/cm ²
coefficiente sicurezza acciaio	: 1.15	
deformazione ultima acciaio	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento (k)	: 1	
resistenza cilindrica cls (fck)	: 249	daN/cm ²
coefficiente sicurezza cls	: 1.5	
coefficiente riduttivo (alfa)	: 0.85	
copri ferro inferiore (asse armatura):	5	cm
copri ferro superiore (asse armatura):	5	cm
moltiplicatore sollecitazioni	: 1	

LEGENDA:

spess	= spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
Af	= area disposta al lembo teso, in cm ² al metro
Afc	= area disposta al lembo compresso, in cm ² al metro
Mom	= momento flettente [daNcm/cm]
Nor	= sforzo normale [daN]
epsC	= deformazione cls [per mille]
epsF	= deformazione acciaio [per mille]

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L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciaio alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)												tx	ty	tz
	INF. ORI ZZ.			INF. VERTIC.			SUP. ORI ZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
188	5.24	0.00	1.00	5.24	0.00	0.44	5.24	0.00	0.53	5.24	0.00	0.18			
189	5.24	0.00	0.79	5.24	0.00	0.17	5.24	0.00	0.60	5.24	0.00	0.46			
190	5.24	0.00	0.59	5.24	0.00	0.47	5.24	0.00	0.44	5.24	0.00	0.19			
191	5.24	0.00	0.54	5.24	0.00	0.20	5.24	0.00	0.50	5.24	0.00	0.60			
192	5.24	0.00	0.53	5.24	0.00	0.50	5.24	0.00	0.52	5.24	0.00	0.25			
193	5.24	0.00	0.61	5.24	0.00	0.46	5.24	0.00	0.60	5.24	0.00	0.63			
194	5.24	0.00	0.31	5.24	0.00	0.21	5.24	0.15	1.21	5.24	0.00	0.21			
195	5.24	0.00	0.35	5.24	0.00	0.34	5.24	0.00	0.72	5.24	0.00	0.46			
197	5.24	0.00	0.54	5.24	0.00	0.34	5.24	0.00	0.38	5.24	0.00	0.14			
198	5.24	0.00	0.29	5.24	0.00	0.23	5.24	0.00	0.41	5.24	0.00	0.11			
199	5.24	0.00	0.04	5.24	0.00	0.00	5.24	0.36	1.31	5.24	0.06	0.20			
200	5.24	0.00	0.77	5.24	0.00	0.25	5.24	0.00	0.30	5.24	0.00	0.20			
202	5.24	0.00	0.10	5.24	0.01	0.04	5.24	0.02	0.18	5.24	0.03	0.11			
203	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.32	1.15	5.24	0.05	0.14			
204	5.24	0.04	0.51	5.24	0.00	0.16	5.24	0.00	0.14	5.24	0.00	0.13			
205	5.24	0.04	0.19	5.24	0.00	0.04	5.24	0.00	0.03	5.24	0.01	0.08			
207	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.24	0.85	5.24	0.03	0.09			
493	5.24	0.03	0.22	5.24	0.00	0.06	5.24	0.00	0.09	5.24	0.00	0.21			
494	5.24	0.03	0.12	5.24	0.00	0.07	5.24	0.00	0.05	5.24	0.00	0.11			
495	5.24	0.01	0.02	5.24	0.00	0.01	5.24	0.02	0.07	5.24	0.02	0.06	0.6	0.2	0.6
560	5.24	0.00	0.92	5.24	0.00	0.33	5.24	0.00	0.45	5.24	0.00	0.14	0.5	0.1	0.5
561	5.24	0.00	0.87	5.24	0.00	0.31	5.24	0.00	0.37	5.24	0.00	0.18	0.2	0.1	0.2
562	5.24	0.00	0.34	5.24	0.00	0.07	5.24	0.00	0.17	5.24	0.00	0.05	0.1	0.0	0.1
563	5.24	0.00	0.28	5.24	0.00	0.12	5.24	0.00	0.11	5.24	0.00	0.09	0.3	0.0	0.3
564	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.03	0.10	5.24	0.03	0.07	0.2	0.1	0.2
565	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.02	0.07	5.24	0.02	0.08	0.2	0.2	0.2
576	5.24	0.00	0.09	5.24	0.00	0.00	5.24	0.00	0.37	5.24	0.02	0.05	0.6	0.2	0.7
577	5.24	0.00	0.04	5.24	0.00	0.00	5.24	0.11	0.53	5.24	0.04	0.13			

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vrcd = compressione cls d' anima
Vrds = trazione armatura trasversale
Vrds = scorrimento in zona dissipativa

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vrcd [daN]	Vrds [daN]	al fas	Vrds [daN]
20.0	10500	36.65	36.65	47362	299361	114735	-	-
60.0	10500	36.65	36.65	44245	299289	114735	-	-
100.0	10500	36.65	36.65	44245	299289	114735	-	-
140.0	10500	36.65	36.65	44245	299289	114735	-	-
180.0	10500	36.65	36.65	34216	298991	114735	-	-
220.0	10500	36.65	36.65	34216	298991	114735	-	-
260.0	10500	36.65	36.65	22614	298547	114735	-	-
300.0	10500	36.65	36.65	22614	298547	114735	-	-
340.0	10500	36.65	36.65	14646	298061	114735	-	-
380.0	10500	36.65	36.65	14646	298061	114735	-	-
420.0	10500	36.65	36.65	14646	298061	114735	-	-
460.0	10500	36.65	36.65	9561	297406	114735	-	-
500.0	10500	36.65	36.65	9561	297406	114735	-	-
540.0	10500	36.65	36.65	8251	296999	114735	-	-
565.0	10500	36.65	36.65	8251	296999	114735	-	-

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X v1-2-3
39	SLU SI SMA Y v1-2-3

del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)												tx	ty	tz
	INF. ORI ZZ.			INF. VERTIC.			SUP. ORI ZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
188	5.24	0.00	0.79	5.24	0.00	0.32	5.24	0.00	0.38	5.24	0.00	0.14			
189	5.24	0.00	0.62	5.24	0.00	0.10	5.24	0.00	0.36	5.24	0.00	0.31			
190	5.24	0.00	0.48	5.24	0.00	0.31	5.24	0.00	0.43	5.24	0.00	0.16			
191	5.24	0.00	0.42	5.24	0.00	0.14	5.24	0.00	0.47	5.24	0.00	0.40			
192	5.24	0.00	0.38	5.24	0.00	0.33	5.24	0.00	0.42	5.24	0.00	0.20			
193	5.24	0.00	0.43	5.24	0.00	0.29	5.24	0.00	0.50	5.24	0.00	0.44			
194	5.24	0.00	0.23	5.24	0.00	0.12	5.24	0.04	0.84	5.24	0.00	0.19			

195	5.24	0.00	0.28	5.24	0.00	0.28	5.24	0.00	0.50	5.24	0.00	0.30			
197	5.24	0.00	0.44	5.24	0.00	0.24	5.24	0.00	0.28	5.24	0.00	0.09			
198	5.24	0.00	0.26	5.24	0.00	0.15	5.24	0.00	0.36	5.24	0.00	0.10			
199	5.24	0.00	0.10	5.24	0.00	0.00	5.24	0.22	0.91	5.24	0.04	0.14			
200	5.24	0.00	0.61	5.24	0.00	0.20	5.24	0.00	0.22	5.24	0.00	0.10			
202	5.24	0.00	0.08	5.24	0.01	0.03	5.24	0.03	0.20	5.24	0.02	0.07			
203	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.21	0.78	5.24	0.04	0.11			
204	5.24	0.04	0.41	5.24	0.02	0.14	5.24	0.00	0.10	5.24	0.00	0.05			
205	5.24	0.03	0.17	5.24	0.01	0.04	5.24	0.00	0.02	5.24	0.01	0.01			
207	5.24	0.00	0.00	5.24	0.01	0.01	5.24	0.16	0.57	5.24	0.03	0.07			
493	5.24	0.03	0.21	5.24	0.00	0.05	5.24	0.00	0.04	5.24	0.00	0.13			
494	5.24	0.01	0.10	5.24	0.00	0.04	5.24	0.00	0.04	5.24	0.00	0.05			
495	5.24	0.01	0.03	5.24	0.01	0.01	5.24	0.02	0.06	5.24	0.02	0.06			
560	5.24	0.00	0.73	5.24	0.00	0.24	5.24	0.00	0.34	5.24	0.00	0.11	0.4	0.1	0.4
561	5.24	0.00	0.69	5.24	0.00	0.25	5.24	0.00	0.28	5.24	0.00	0.15	0.4	0.1	0.4
562	5.24	0.00	0.30	5.24	0.01	0.05	5.24	0.00	0.14	5.24	0.00	0.01	0.1	0.1	0.1
563	5.24	0.00	0.24	5.24	0.00	0.09	5.24	0.00	0.08	5.24	0.00	0.04	0.1	0.0	0.1
564	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.02	0.08	5.24	0.02	0.06	0.2	0.0	0.2
565	5.24	0.00	0.01	5.24	0.01	0.02	5.24	0.02	0.05	5.24	0.02	0.06	0.1	0.1	0.1
576	5.24	0.00	0.02	5.24	0.00	0.00	5.24	0.03	0.20	5.24	0.01	0.04	0.1	0.1	0.1
577	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.09	0.33	5.24	0.03	0.10	0.4	0.1	0.4

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vrcd = compressione cls d' anima
Vrds = trazione armatura trasversale
Vrd,s = scorrimento in zona dissipativa

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vrcd [daN]	Vrds [daN]	al fas	Vrd,s [daN]
20.0	10500	36.65	36.65	36726	298849	114735	-	-
60.0	10500	36.65	36.65	34128	298724	114735	-	-
100.0	10500	36.65	36.65	34128	298724	114735	-	-
140.0	10500	36.65	36.65	34128	298724	114735	-	-
180.0	10500	36.65	36.65	25613	298318	114735	-	-
220.0	10500	36.65	36.65	25613	298318	114735	-	-
260.0	10500	36.65	36.65	15787	297860	114735	-	-
300.0	10500	36.65	36.65	15787	297860	114735	-	-
340.0	10500	36.65	36.65	8093	297551	114735	-	-
380.0	10500	36.65	36.65	8093	297551	114735	-	-
420.0	10500	36.65	36.65	8093	297551	114735	-	-
460.0	10500	36.65	36.65	4015	297127	114735	-	-
500.0	10500	36.65	36.65	4015	297127	114735	-	-
540.0	10500	36.65	36.65	4373	296846	114735	-	-
565.0	10500	36.65	36.65	4373	296846	114735	-	-

MACROGUSCIO 1 at_destro

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
9	RARA 1 (RARA)
10	RARA 2 (RARA)
11	RARA 3 (RARA)
13	RARA 5 (RARA)
14	RARA 6 (RARA)
15	RARA 7 (RARA)
16	RARA 8 (RARA)
17	FREQUENTE 1 (FREQUENTE)
18	FREQUENTE 2 (FREQUENTE)
19	QUASI PERMANENTE (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 5 cm
copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm2 al metro)
Afc = area effettiva compressa (cm2 al metro)
Mom = momento flettente [daNcm/cm]
Nor = sforzo normale [daN]
σc = tensione calcestruzzo [daN/cm2]
valore max per combinazione rara = 149.4 daN/cm2
quasi permanente = 112 daN/cm2
σf = tensione acciaio [daN/cm2]
valore max per combinazione rara = 3600 daN/cm2
wkF = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
wkP = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm

<-

ARMATURA INFERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA						COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
188	5.24	5.24	725	59	9.00	1214.	661	65	0.172	611	61	6.50	0.162
189	5.24	5.24	320	41	2.17	688.	265	49	0.119	255	46	0.00	0.114

190	5.24	5.24	527	35	7.15	796.	215	62	0.140	225	61	0.00	0.138
191	5.24	5.24	154	47	0.00	601.	0.	67	0.128	8	65	0.00	0.125
192	5.24	5.24	444	25	6.27	625.	11	53	0.103	59	50	0.00	0.101
193	5.24	5.24	270	53	0.00	762.	0.	66	0.125	1	64	0.00	0.123
194	5.24	5.24	0.	-8	0.24	-4.	0.	27	0.051	0.	27	0.00	0.051
195	5.24	5.24	0.	24	0.00	225.	0.	42	0.081	0.	43	0.00	0.081
197	5.24	5.24	642	12	9.86	657.	310	40	0.101	311	40	2.10	0.101
198	5.24	5.24	239	-2	3.66	173.	0.	28	0.054	0.	25	0.00	0.047
199	5.24	5.24	0.	-31	0.97	-15.	0.	-9	0.000	0.	-9	0.28	0.000
200	5.24	5.24	760	29	11.34	921.	699	28	0.100	641	26	9.49	0.092
202	5.24	5.24	160	-17	1.78	10.	0.	-2	0.000	0.	-4	0.13	0.000
203	5.24	5.24	0.	-31	0.98	-15.	0.	-9	0.000	0.	-9	0.29	0.000
204	5.24	5.24	548	11	8.41	560.	508	10	0.053	468	9	7.19	0.048
205	5.24	5.24	200	-6	2.95	103.	238	-1	0.016	236	-2	3.62	0.015
207	5.24	5.24	0.	-16	0.50	-8.	0.	-9	0.000	0.	-9	0.28	0.000
493	5.24	5.24	298	2	4.60	266.	275	1	0.020	254	0.	3.92	0.018
494	5.24	5.24	76	-3	1.11	36.	128	0.	0.008	128	-1	1.97	0.008
495	5.24	5.24	40	-13	0.67	-4.	51	-8	0.000	51	-8	0.58	0.000
560	5.24	5.24	805	52	11.03	1199.	719	56	0.156	651	53	8.14	0.146
561	5.24	5.24	831	46	11.80	1157.	746	46	0.137	667	43	9.11	0.127
562	5.24	5.24	498	-5	7.65	366.	292	19	0.056	291	19	3.97	0.055
563	5.24	5.24	390	-3	6.00	296.	292	9	0.036	288	8	4.39	0.034
564	5.24	5.24	50	-20	0.95	-6.	0.	-7	0.000	0.	-8	0.25	0.000
565	5.24	5.24	27	-19	0.76	-7.	23	-10	0.000	26	-11	0.50	0.000
576	5.24	5.24	0.	2	0.00	15.	0.	0.	0.000	0.	0.	0.01	0.000
577	5.24	5.24	0.	-2	0.06	-1.	0.	-2	0.000	0.	-2	0.06	0.000

ARMATURA INFERIORE VERTICALE

GUSCI	COMBINAZIONE RARA		COMB. FREQUENTE				COMB. QUASI PERMANENTE						
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
188	5.24	5.24	430	2	6.65	378.	272	9	0.035	266	9	4.01	0.034
189	5.24	5.24	0.	-22	0.70	-11.	0.	-8	0.000	0.	-8	0.27	0.000
190	5.24	5.24	403	10	6.16	431.	128	4	0.017	129	5	1.93	0.017
191	5.24	5.24	0.	-22	0.70	-10.	0.	-4	0.000	0.	-4	0.12	0.000
192	5.24	5.24	390	13	5.87	458.	87	9	0.024	105	10	1.21	0.026
193	5.24	5.24	0.	6	0.00	54.	0.	17	0.033	0.	18	0.00	0.034
194	5.24	5.24	0.	-2	0.07	-1.	0.	6	0.011	0.	6	0.00	0.011
195	5.24	5.24	0.	29	0.00	274.	0.	28	0.053	0.	28	0.00	0.053
197	5.24	5.24	360	2	5.57	319.	171	3	0.017	166	3	2.56	0.017
198	5.24	5.24	119	0.	1.83	100.	24	-2	0.000	25	-2	0.29	0.000
199	5.24	5.24	0.	-22	0.71	-11.	0.	-18	0.000	0.	-18	0.57	0.000
200	5.24	5.24	180	0.	2.78	152.	179	7	0.024	175	6	2.62	0.023
202	5.24	5.24	30	-13	0.59	-4.	4	-12	0.000	4	-12	0.41	0.000
203	5.24	5.24	0.	-34	1.08	-16.	0.	-30	0.000	0.	-30	0.94	0.000
204	5.24	5.24	147	-4	2.19	81.	149	-1	0.010	136	-1	2.10	0.009
205	5.24	5.24	0.	-10	0.33	-5.	43	-7	0.000	27	-8	0.41	0.000
207	5.24	5.24	0.	-26	0.82	-12.	0.	-26	0.000	0.	-26	0.81	0.000
493	5.24	5.24	6	-1	0.07	1.	14	-1	0.000	4	-1	0.05	0.000
494	5.24	5.24	0.	0.	0.01	0.	0.	0.	0.001	0.	0.	0.00	0.001
495	5.24	5.24	0.	-9	0.29	-4.	20	-9	0.000	20	-9	0.40	0.000
560	5.24	5.24	306	2	4.73	268.	203	8	0.028	193	8	2.86	0.027
561	5.24	5.24	213	7	3.21	251.	165	15	0.041	157	15	1.77	0.040
562	5.24	5.24	59	-8	0.65	1.	100	-5	0.003	94	-5	1.29	0.002
563	5.24	5.24	87	-2	1.30	49.	102	0.	0.007	100	0.	1.55	0.007
564	5.24	5.24	0.	-18	0.56	-8.	0.	-17	0.000	0.	-17	0.54	0.000
565	5.24	5.24	0.	-13	0.42	-6.	31	-12	0.000	28	-12	0.56	0.000
576	5.24	5.24	0.	-9	0.28	-4.	0.	-10	0.000	0.	-10	0.31	0.000
577	5.24	5.24	0.	-12	0.39	-6.	0.	-14	0.000	0.	-14	0.45	0.000

ARMATURA SUPERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA		COMB. FREQUENTE				COMB. QUASI PERMANENTE						
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
188	5.24	5.24	0.	59	0.00	567.	0.	65	0.124	0.	61	0.00	0.117
189	5.24	5.24	0.	41	0.00	388.	0.	49	0.093	0.	46	0.00	0.089
190	5.24	5.24	0.	35	0.00	334.	0.	62	0.119	0.	61	0.00	0.116
191	5.24	5.24	0.	47	0.00	453.	72	67	0.135	43	65	0.00	0.129
192	5.24	5.24	0.	25	0.00	239.	199	53	0.121	166	50	0.00	0.112
193	5.24	5.24	69	53	0.00	571.	141	66	0.139	129	64	0.00	0.135
194	5.24	5.24	1078	-8	16.57	814.	602	27	0.090	603	27	8.87	0.090
195	5.24	5.24	412	24	5.81	584.	238	42	0.104	233	43	0.00	0.104
197	5.24	5.24	0.	12	0.00	119.	0.	40	0.075	0.	40	0.00	0.075
198	5.24	5.24	0.	-2	0.08	-1.	130	28	0.067	87	25	0.00	0.055
199	5.24	5.24	1693	-31	25.70	1099.	967	-9	0.059	968	-9	14.86	0.059
200	5.24	5.24	0.	29	0.00	273.	0.	28	0.054	0.	26	0.00	0.050
202	5.24	5.24	42	-17	0.27	-11.	117	-2	0.006	109	-4	1.58	0.004
203	5.24	5.24	1614	-31	24.46	1029.	995	-9	0.061	995	-9	15.28	0.061
204	5.24	5.24	0.	11	0.00	101.	0.	10	0.019	0.	9	0.00	0.017
205	5.24	5.24	0.	-6	0.20	-3.	0.	-1	0.000	0.	-2	0.06	0.000
207	5.24	5.24	1100	-16	16.80	753.	798	-9	0.048	798	-9	12.23	0.047
493	5.24	5.24	0.	2	0.00	19.	0.	1	0.001	0.	0.	0.00	0.001
494	5.24	5.24	0.	-3	0.09	-1.	0.	0.	0.000	0.	-1	0.02	0.000
495	5.24	5.24	133	-13	1.50	10.	116	-8	0.001	117	-8	1.47	0.001
560	5.24	5.24	0.	52	0.00	494.	0.	56	0.107	0.	53	0.00	0.101
561	5.24	5.24	0.	46	0.00	437.	0.	46	0.088	0.	43	0.00	0.082
562	5.24	5.24	0.	-5	0.15	-2.	0.	19	0.036	0.	19	0.00	0.036
563	5.24	5.24	0.	-3	0.09	-1.	0.	9	0.017	0.	8	0.00	0.015
564	5.24	5.24	174	-20	1.90	6.	150	-7	0.004	151	-8	2.08	0.004
565	5.24	5.24	134	-19	1.48	1.	118	-10	0.001	119	-11	1.38	0.001
576	5.24	5.24	453	2	7.01	390.	313	0.	0.022	313	0.	4.84	0.022

577 | 5.24 5.24 | 801 -2 12.35 642. | 579 -2 0.039 | 579 -2 8.92 0.039 |

ARMATURA SUPERIORE VERTICALE

GUSCI			COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	AF	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
188	5.24	5.24	0.	2	0.00	21.	0.	9	0.017	0.	9	0.00	0.016
189	5.24	5.24	566	-22	8.18	256.	371	-8	0.018	379	-8	5.72	0.019
190	5.24	5.24	0.	10	0.00	91.	0.	4	0.008	0.	5	0.00	0.009
191	5.24	5.24	570	-22	8.25	261.	399	-4	0.024	393	-4	6.03	0.024
192	5.24	5.24	0.	13	0.00	126.	78	9	0.024	68	10	0.24	0.024
193	5.24	5.24	521	6	8.05	488.	291	17	0.052	289	18	4.02	0.053
194	5.24	5.24	88	-2	1.32	51.	117	6	0.018	95	6	1.33	0.017
195	5.24	5.24	236	29	1.84	494.	44	28	0.057	43	28	0.00	0.057
197	5.24	5.24	0.	2	0.00	20.	0.	3	0.006	0.	3	0.00	0.006
198	5.24	5.24	0.	0.	0.00	1.	0.	-2	0.000	0.	-2	0.08	0.000
199	5.24	5.24	291	-22	3.57	49.	154	-18	0.000	158	-18	1.74	0.000
200	5.24	5.24	0.	0.	0.00	3.	0.	7	0.012	0.	6	0.00	0.012
202	5.24	5.24	170	-13	2.11	30.	52	-12	0.000	52	-12	0.06	0.000
203	5.24	5.24	329	-34	3.66	21.	167	-30	0.000	167	-30	0.10	0.000
204	5.24	5.24	0.	-4	0.13	-2.	0.	-1	0.000	0.	-1	0.03	0.000
205	5.24	5.24	70	-10	0.10	-9.	0.	-7	0.000	0.	-8	0.24	0.000
207	5.24	5.24	173	-26	0.25	-23.	99	-26	0.000	99	-26	0.20	0.000
493	5.24	5.24	125	-1	1.92	98.	105	-1	0.006	103	-1	1.59	0.006
494	5.24	5.24	82	0.	1.26	64.	40	0.	0.004	42	0.	0.65	0.004
495	5.24	5.24	125	-9	1.57	24.	90	-9	0.000	89	-9	1.01	0.000
560	5.24	5.24	0.	2	0.00	15.	0.	8	0.015	0.	8	0.00	0.015
561	5.24	5.24	0.	7	0.00	70.	0.	15	0.029	0.	15	0.00	0.028
562	5.24	5.24	0.	-8	0.26	-4.	0.	-5	0.000	0.	-5	0.16	0.000
563	5.24	5.24	0.	-2	0.08	-1.	0.	0.	0.000	0.	0.	0.00	0.000
564	5.24	5.24	241	-18	3.02	47.	92	-17	0.000	99	-17	0.08	0.000
565	5.24	5.24	214	-13	2.83	57.	79	-12	0.000	85	-12	0.94	0.000
576	5.24	5.24	128	-9	1.64	28.	74	-10	0.000	74	-10	0.81	0.000
577	5.24	5.24	296	-12	4.24	126.	209	-14	0.003	208	-14	2.66	0.003

MACROGUSCI 0 l a t_ s i n i s t r o

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU SENZA SI SMA 1
2	SLU SENZA SI SMA 2
3	SLU SENZA SI SMA 3
4	SLU SENZA SI SMA 4
5	SLU SENZA SI SMA 5
6	SLU SENZA SI SMA 6
7	SLU SENZA SI SMA 7
8	SLU SENZA SI SMA 8
22	SLU SISMAY P vuoto
23	SLU SISMAY P vuoto

DATI:

tensione di snervamento acciaio (fyk): 4500 daN/cm2
 coefficiente sicurezza acciaio : 1.15
 deformazione ultima acciaio : 1.9565 per mille
 deformazione ultima cls : 3.5 per mille
 rapporto rottura/snervamento (k): 1
 resistenza cilindrica cls (fck): 249 daN/cm2
 coefficiente sicurezza cls : 1.5
 coefficiente riduttivo (alfa): 0.85
 copri ferro inferiore (asse armatura): 5 cm
 copri ferro superiore (asse armatura): 5 cm
 moltiplicatore sollecitazioni : 1

LEGENDA:

spess = spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
 Af = area disposta al lembo teso, in cm2 al metro
 Afc = area disposta al lembo compresso, in cm2 al metro
 Mom = momento flettente [daNcm/cm]
 Nor = sforzo normale [daN]
 epsC = deformazione cls [per mille]
 epsF = deformazione acciaio [per mille]

<-

L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciaio alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

AREE ARMATURA (cm2 al metro)

GUSCI	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.			τx	τy	τt
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
129	5.24	0.00	0.63	5.24	0.00	0.70	5.24	0.00	0.37	5.24	0.00	0.57			

131	5.24	0.22	0.90	5.24	0.00	0.37	5.24	0.00	0.14	5.24	0.00	0.38			
133	5.24	0.34	1.16	5.24	0.00	0.25	5.24	0.01	0.01	5.24	0.00	0.13			
135	5.24	0.31	1.07	5.24	0.04	0.17	5.24	0.01	-0.01	5.24	0.00	0.06			
137	5.24	0.21	0.75	5.24	0.00	0.22	5.24	0.00	0.02	5.24	0.00	0.09			
268	5.24	0.00	0.26	5.24	0.15	0.42	5.24	0.00	0.57	5.24	0.02	-0.02			
271	5.24	0.00	0.37	5.24	0.02	0.04	5.24	0.00	0.96	5.24	0.06	0.15			
273	5.24	0.00	0.37	5.24	0.01	-0.01	5.24	0.01	1.02	5.24	0.03	0.09			
275	5.24	0.00	0.25	5.24	0.02	0.04	5.24	0.07	0.77	5.24	0.03	0.10			
277	5.24	0.00	0.16	5.24	0.00	0.00	5.24	0.07	0.47	5.24	0.02	0.05			
319	5.24	0.00	0.53	5.24	0.25	0.75	5.24	0.00	0.34	5.24	0.02	-0.02			
320	5.24	0.00	0.62	5.24	0.02	0.20	5.24	0.00	0.82	5.24	0.13	0.47			
321	5.24	0.00	0.60	5.24	0.31	1.06	5.24	0.00	0.55	5.24	0.01	-0.01			
322	5.24	0.00	0.54	5.24	0.00	0.32	5.24	0.00	0.86	5.24	0.02	0.69			
323	5.24	0.00	0.63	5.24	0.17	1.10	5.24	0.00	0.65	5.24	0.00	0.25			
324	5.24	0.00	0.44	5.24	0.00	0.36	5.24	0.00	0.68	5.24	0.00	0.71			
325	5.24	0.00	0.59	5.24	0.00	1.00	5.24	0.00	0.67	5.24	0.00	0.55			
326	5.24	0.00	0.51	5.24	0.02	0.07	5.24	0.00	0.36	5.24	0.07	0.23			
328	5.24	0.00	0.44	5.24	0.00	0.24	5.24	0.00	0.85	5.24	0.06	0.57			
329	5.24	0.00	0.37	5.24	0.00	0.26	5.24	0.00	0.47	5.24	0.00	0.46			
330	5.24	0.00	0.34	5.24	0.01	0.00	5.24	0.00	0.25	5.24	0.05	0.20			
331	5.24	0.00	0.47	5.24	0.00	0.11	5.24	0.00	0.65	5.24	0.04	0.28			
333	5.24	0.00	0.27	5.24	0.00	0.18	5.24	0.00	0.34	5.24	0.00	0.26			
334	5.24	0.00	0.24	5.24	0.01	0.09	5.24	0.00	0.22	5.24	0.02	0.12			
335	5.24	0.00	0.28	5.24	0.00	0.12	5.24	0.00	0.43	5.24	0.00	0.14			
336	5.24	0.00	0.22	5.24	0.00	0.15	5.24	0.00	0.39	5.24	0.00	0.15			
517	5.24	0.04	0.14	5.24	0.05	0.18	5.24	0.04	0.17	5.24	0.01	0.05			
518	5.24	0.00	0.15	5.24	0.03	0.14	5.24	0.00	0.20	5.24	0.01	0.13			
519	5.24	0.00	0.17	5.24	0.00	0.13	5.24	0.00	0.22	5.24	0.00	0.11			
520	5.24	0.00	0.17	5.24	0.00	0.22	5.24	0.00	0.23	5.24	0.00	0.18			
521	5.24	0.00	0.23	5.24	0.00	0.25	5.24	0.00	0.21	5.24	0.00	0.20			
566	5.24	0.00	0.58	5.24	0.01	0.01	5.24	0.00	0.41	5.24	0.11	0.34	0.3	0.3	0.4
567	5.24	0.00	0.56	5.24	0.01	-0.01	5.24	0.00	0.39	5.24	0.08	0.25	0.4	0.0	0.4
568	5.24	0.00	0.57	5.24	0.01	0.17	5.24	0.00	0.77	5.24	0.09	0.45	0.2	0.3	0.4
569	5.24	0.00	0.53	5.24	0.03	0.12	5.24	0.00	0.70	5.24	0.10	0.36	0.2	0.2	0.3
570	5.24	0.00	0.29	5.24	0.00	0.18	5.24	0.00	0.62	5.24	0.00	0.28	0.0	0.2	0.2
571	5.24	0.00	0.25	5.24	0.00	0.15	5.24	0.00	0.50	5.24	0.00	0.24	0.0	0.3	0.3
572	5.24	0.00	0.14	5.24	0.00	0.22	5.24	0.00	0.17	5.24	0.00	0.15	0.4	0.1	0.4
573	5.24	0.00	0.15	5.24	0.00	0.21	5.24	0.00	0.19	5.24	0.00	0.15	0.2	0.2	0.3
574	5.24	0.00	0.40	5.24	0.00	0.22	5.24	0.00	0.16	5.24	0.00	0.15	0.2	0.0	0.2
575	5.24	0.03	0.48	5.24	0.00	0.20	5.24	0.00	0.09	5.24	0.00	0.10	0.6	0.0	0.6

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vr_{cd} = compressione cls d' anima
 Vr_{sd} = trazione armatura trasversale
 Vr_{d,s} = scorrimento in zona di ssi passiva

Quota [cm]	Sezione [cm ²]	Af long. [cm ²]	Af trasv. [cm ²]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	15900	55.50	55.50	65415	454739	173742	-	-
60.0	15900	55.50	55.50	60956	454362	173742	-	-
100.0	15900	55.50	55.50	60956	454362	173742	-	-
140.0	15900	55.50	55.50	60956	454362	173742	-	-
180.0	15900	55.50	55.50	50517	453446	173742	-	-
220.0	15900	55.50	55.50	50517	453446	173742	-	-
260.0	15900	55.50	55.50	37811	452397	173742	-	-
300.0	15900	55.50	55.50	37811	452397	173742	-	-
340.0	15900	55.50	55.50	30130	451335	173742	-	-
380.0	15900	55.50	55.50	30130	451335	173742	-	-
420.0	15900	55.50	55.50	30130	451335	173742	-	-
460.0	15900	55.50	55.50	25494	450253	173742	-	-
500.0	15900	55.50	55.50	25494	450253	173742	-	-
540.0	15900	55.50	55.50	24313	449647	173742	-	-
565.0	15900	55.50	55.50	24313	449647	173742	-	-

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X v1-2-3
39	SLU SI SMA Y v1-2-3

GUSCI	AREE ARMATURA (cm ² al metro)												τ _x	τ _y	τ _t
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
129	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
	5.24	0.00	0.43	5.24	0.00	0.41	5.24	0.00	0.32	5.24	0.00	0.43			

131	5.24	0.12	0.61	5.24	0.00	0.34	5.24	0.00	0.19	5.24	0.00	0.28			
133	5.24	0.22	0.78	5.24	0.00	0.21	5.24	0.00	0.03	5.24	0.00	0.10			
135	5.24	0.21	0.72	5.24	0.02	0.16	5.24	0.00	0.00	5.24	0.00	0.04			
137	5.24	0.14	0.50	5.24	0.03	0.10	5.24	0.00	0.02	5.24	0.00	0.05			
268	5.24	0.00	0.23	5.24	0.08	0.24	5.24	0.00	0.49	5.24	0.01	-0.01			
271	5.24	0.00	0.32	5.24	0.02	0.04	5.24	0.00	0.80	5.24	0.04	0.12			
273	5.24	0.00	0.31	5.24	0.00	0.00	5.24	0.00	0.87	5.24	0.02	0.06			
275	5.24	0.00	0.22	5.24	0.00	0.00	5.24	0.00	0.66	5.24	0.02	0.06			
277	5.24	0.00	0.13	5.24	0.00	0.00	5.24	0.03	0.44	5.24	0.02	0.07			
319	5.24	0.00	0.45	5.24	0.16	0.49	5.24	0.00	0.27	5.24	0.01	-0.01			
320	5.24	0.00	0.53	5.24	0.06	0.23	5.24	0.00	0.57	5.24	0.08	0.32			
321	5.24	0.00	0.49	5.24	0.21	0.73	5.24	0.00	0.41	5.24	0.01	-0.01			
322	5.24	0.00	0.46	5.24	0.00	0.29	5.24	0.00	0.58	5.24	0.00	0.48			
323	5.24	0.00	0.48	5.24	0.11	0.74	5.24	0.00	0.44	5.24	0.00	0.27			
324	5.24	0.00	0.41	5.24	0.00	0.33	5.24	0.00	0.49	5.24	0.00	0.49			
325	5.24	0.00	0.43	5.24	0.00	0.67	5.24	0.00	0.46	5.24	0.00	0.44			
326	5.24	0.00	0.44	5.24	0.04	0.13	5.24	0.00	0.27	5.24	0.04	0.15			
328	5.24	0.00	0.42	5.24	0.00	0.24	5.24	0.00	0.59	5.24	0.03	0.38			
329	5.24	0.00	0.34	5.24	0.00	0.24	5.24	0.00	0.36	5.24	0.00	0.33			
330	5.24	0.00	0.32	5.24	0.03	0.10	5.24	0.00	0.22	5.24	0.03	0.10			
331	5.24	0.00	0.42	5.24	0.03	0.16	5.24	0.00	0.45	5.24	0.04	0.17			
333	5.24	0.00	0.26	5.24	0.00	0.19	5.24	0.00	0.22	5.24	0.00	0.16			
334	5.24	0.00	0.24	5.24	0.02	0.09	5.24	0.00	0.19	5.24	0.01	0.06			
335	5.24	0.00	0.27	5.24	0.00	0.10	5.24	0.00	0.31	5.24	0.00	0.10			
336	5.24	0.00	0.23	5.24	0.00	0.13	5.24	0.00	0.31	5.24	0.00	0.07			
517	5.24	0.00	0.05	5.24	0.02	0.07	5.24	0.03	0.17	5.24	0.00	0.07			
518	5.24	0.00	0.17	5.24	0.00	0.12	5.24	0.00	0.13	5.24	0.00	0.10			
519	5.24	0.00	0.15	5.24	0.00	0.10	5.24	0.00	0.16	5.24	0.00	0.10			
520	5.24	0.00	0.12	5.24	0.00	0.12	5.24	0.00	0.20	5.24	0.00	0.10			
521	5.24	0.00	0.16	5.24	0.00	0.14	5.24	0.00	0.14	5.24	0.00	0.08			
566	5.24	0.00	0.49	5.24	0.06	0.18	5.24	0.00	0.28	5.24	0.07	0.23	0.2	0.2	0.2
567	5.24	0.00	0.47	5.24	0.04	0.13	5.24	0.00	0.29	5.24	0.05	0.16	0.3	0.0	0.3
568	5.24	0.00	0.50	5.24	0.03	0.22	5.24	0.00	0.54	5.24	0.06	0.30	0.2	0.2	0.2
569	5.24	0.00	0.47	5.24	0.05	0.17	5.24	0.00	0.48	5.24	0.07	0.24	0.2	0.1	0.2
570	5.24	0.00	0.31	5.24	0.00	0.19	5.24	0.00	0.43	5.24	0.00	0.20	0.0	0.2	0.2
571	5.24	0.00	0.27	5.24	0.00	0.17	5.24	0.00	0.35	5.24	0.00	0.16	0.0	0.2	0.2
572	5.24	0.00	0.20	5.24	0.00	0.12	5.24	0.00	0.06	5.24	0.00	0.04	0.3	0.1	0.3
573	5.24	0.00	0.17	5.24	0.00	0.12	5.24	0.00	0.07	5.24	0.00	0.05	0.1	0.1	0.2
574	5.24	0.00	0.27	5.24	0.00	0.11	5.24	0.00	0.11	5.24	0.00	0.05	0.1	0.0	0.1
575	5.24	0.01	0.32	5.24	0.00	0.09	5.24	0.00	0.06	5.24	0.00	0.02	0.4	0.0	0.4

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vr_{cd} = compressione cls d' anima
Vr_{sd} = trazione armatura trasversale
Vr_{d,s} = scorrimento in zona di sspatiiva

Quota [cm]	Sezione [cm ²]	Af long. [cm ²]	Af trasv. [cm ²]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	15900	55.50	55.50	51086	453716	173742	-	-
60.0	15900	55.50	55.50	47301	453379	173742	-	-
100.0	15900	55.50	55.50	47301	453379	173742	-	-
140.0	15900	55.50	55.50	47301	453379	173742	-	-
180.0	15900	55.50	55.50	38504	452559	173742	-	-
220.0	15900	55.50	55.50	38504	452559	173742	-	-
260.0	15900	55.50	55.50	27938	451627	173742	-	-
300.0	15900	55.50	55.50	27938	451627	173742	-	-
340.0	15900	55.50	55.50	19360	450742	173742	-	-
380.0	15900	55.50	55.50	19360	450742	173742	-	-
420.0	15900	55.50	55.50	19360	450742	173742	-	-
460.0	15900	55.50	55.50	15382	449928	173742	-	-
500.0	15900	55.50	55.50	15382	449928	173742	-	-
540.0	15900	55.50	55.50	14425	449463	173742	-	-
565.0	15900	55.50	55.50	14425	449463	173742	-	-

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VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PI ASTRA)

CASI DI CARICO: ->

Nome	Descrizione
9	RARA 1 (RARA)
10	RARA 2 (RARA)
11	RARA 3 (RARA)
13	RARA 5 (RARA)
14	RARA 6 (RARA)
15	RARA 7 (RARA)
16	RARA 8 (RARA)
17	FREQUENTE 1 (FREQUENTE)
18	FREQUENTE 2 (FREQUENTE)
19	QUASI PERMANENTE (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 5 cm
copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm2 al metro)
 Afc = area effettiva compressa (cm2 al metro)
 Mom = momento flettente [daNcm/cm]
 Nor = sforzo normale [daN]
 σc = tensione calcestruzzo [daN/cm2]
 valore max per combinazione rara = 149.4 daN/cm2
 quasi permanente = 112 daN/cm2
 σf = tensione acciaio [daN/cm2]
 valore max per combinazione rara = 3600 daN/cm2
 wkF = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
 wkP = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm

<-

ARMATURA INFERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA						COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
129	5.24	5.24	476	23	6.90	631.	247	36	0.091	239	36	0.00	0.092
131	5.24	5.24	1204	-3	18.58	967.	489	23	0.077	491	23	7.15	0.076
133	5.24	5.24	1517	-21	23.17	1047.	723	8	0.064	724	8	11.18	0.064
135	5.24	5.24	1554	-18	23.80	1107.	770	-2	0.052	770	-2	11.89	0.052
137	5.24	5.24	1066	-2	16.44	856.	633	2	0.047	633	2	9.78	0.047
268	5.24	5.24	0.	19	0.00	182.	0.	23	0.044	0.	21	0.00	0.040
271	5.24	5.24	0.	42	0.00	401.	0.	42	0.081	0.	38	0.00	0.073
273	5.24	5.24	0.	36	0.00	348.	0.	37	0.070	0.	33	0.00	0.063
275	5.24	5.24	0.	20	0.00	196.	0.	21	0.041	0.	19	0.00	0.036
277	5.24	5.24	0.	8	0.00	74.	0.	9	0.017	0.	8	0.00	0.014
319	5.24	5.24	159	15	1.82	285.	320	29	0.079	271	27	2.86	0.072
320	5.24	5.24	0.	25	0.00	236.	219	47	0.112	140	45	0.00	0.099
321	5.24	5.24	238	27	2.12	480.	178	44	0.102	165	43	0.00	0.098
322	5.24	5.24	0.	40	0.00	380.	83	56	0.115	27	54	0.00	0.105
323	5.24	5.24	126	53	0.00	623.	162	61	0.133	126	61	0.00	0.128
324	5.24	5.24	54	24	0.00	277.	79	44	0.091	73	41	0.00	0.086
325	5.24	5.24	198	52	0.00	687.	108	55	0.116	61	54	0.00	0.110
326	5.24	5.24	0.	4	0.00	36.	143	34	0.079	103	31	0.00	0.069
328	5.24	5.24	0.	15	0.00	143.	77	40	0.083	0.	37	0.00	0.070
329	5.24	5.24	0.	0.	0.00	0.	127	28	0.067	90	25	0.00	0.057
330	5.24	5.24	0.	-3	0.08	-1.	113	19	0.048	66	17	0.00	0.039
331	5.24	5.24	0.	2	0.00	22.	211	22	0.058	143	20	0.55	0.051
333	5.24	5.24	12	-8	0.31	-3.	127	14	0.037	84	12	0.27	0.030
334	5.24	5.24	47	-4	0.56	6.	78	9	0.023	36	8	0.00	0.018
335	5.24	5.24	0.	1	0.00	10.	130	12	0.033	71	11	0.00	0.028
336	5.24	5.24	0.	0.	0.01	0.	79	12	0.032	22	11	0.00	0.023
517	5.24	5.24	0.	2	0.00	23.	0.	1	0.003	0.	1	0.00	0.002
518	5.24	5.24	123	1	1.90	108.	73	7	0.020	38	7	0.00	0.017
519	5.24	5.24	0.	5	0.00	52.	88	10	0.025	57	9	0.00	0.023
520	5.24	5.24	0.	6	0.00	59.	41	10	0.024	30	10	0.00	0.022
521	5.24	5.24	232	5	3.54	245.	76	9	0.023	56	8	0.01	0.021
566	5.24	5.24	102	16	0.00	252.	264	40	0.102	195	37	0.00	0.090
567	5.24	5.24	0.	11	0.00	107.	210	42	0.100	149	38	0.00	0.087
568	5.24	5.24	0.	14	0.00	138.	227	41	0.100	137	38	0.00	0.086
569	5.24	5.24	0.	8	0.00	78.	244	33	0.085	159	30	0.00	0.074
570	5.24	5.24	0.	3	0.00	28.	72	26	0.056	0.	23	0.00	0.044
571	5.24	5.24	0.	0.	0.00	1.	85	20	0.046	11	18	0.00	0.035
572	5.24	5.24	195	-6	2.88	102.	126	8	0.023	97	6	1.33	0.018
573	5.24	5.24	179	-3	2.73	122.	105	7	0.019	74	6	0.96	0.016
574	5.24	5.24	396	21	5.67	541.	264	18	0.053	252	19	3.29	0.053
575	5.24	5.24	629	12	9.67	638.	454	12	0.053	449	12	6.83	0.052

ARMATURA INFERIORE VERTICALE

GUSCI	COMBINAZIONE RARA						COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
129	5.24	5.24	418	42	4.43	784.	161	35	0.082	149	36	0.00	0.083
131	5.24	5.24	105	22	0.00	314.	223	22	0.058	177	22	1.19	0.058
133	5.24	5.24	194	-1	2.99	149.	200	6	0.025	184	6	2.76	0.024
135	5.24	5.24	260	-12	3.69	105.	207	-2	0.012	185	-2	2.83	0.011
137	5.24	5.24	217	-5	3.28	134.	152	-2	0.009	134	-2	2.05	0.008
268	5.24	5.24	670	-62	7.68	64.	297	-43	0.000	295	-45	3.26	0.000
271	5.24	5.24	0.	-41	1.31	-20.	0.	-29	0.000	0.	-30	0.96	0.000
273	5.24	5.24	0.	-30	0.95	-14.	0.	-21	0.000	0.	-22	0.71	0.000
275	5.24	5.24	0.	-25	0.80	-12.	0.	-17	0.000	0.	-18	0.57	0.000
277	5.24	5.24	0.	-19	0.59	-9.	0.	-13	0.000	0.	-14	0.43	0.000
319	5.24	5.24	1266	-80	16.61	325.	592	-51	0.004	580	-51	6.76	0.004
320	5.24	5.24	0.	-22	0.71	-11.	216	-18	0.002	121	-18	1.32	0.000
321	5.24	5.24	1509	-56	21.94	709.	603	-27	0.018	599	-27	8.50	0.018
322	5.24	5.24	0.	8	0.00	77.	175	6	0.023	110	6	1.54	0.019
323	5.24	5.24	1284	-17	19.62	895.	496	4	0.042	491	5	7.59	0.042
324	5.24	5.24	0.	26	0.00	253.	139	20	0.051	100	21	0.00	0.050
325	5.24	5.24	954	21	14.61	1000.	213	28	0.071	201	29	0.60	0.073
326	5.24	5.24	0.	-27	0.86	-13.	83	-24	0.000	33	-24	0.95	0.000
328	5.24	5.24	0.	4	0.00	41.	130	2	0.012	41	2	0.59	0.007
329	5.24	5.24	0.	11	0.00	106.	125	12	0.031	74	12	0.00	0.030
330	5.24	5.24	0.	-19	0.62	-9.	62	-17	0.000	20	-17	0.65	0.000
331	5.24	5.24	0.	-7	0.21	-3.	89	-8	0.001	59	-7	0.64	0.000
333	5.24	5.24	47	-5	0.52	2.	123	5	0.017	77	5	1.08	0.014
334	5.24	5.24	0.	-12	0.39	-6.	40	-8	0.000	13	-8	0.34	0.000
335	5.24	5.24	0.	-2	0.08	-1.	31	-3	0.000	32	-3	0.39	0.000
336	5.24	5.24	4	3	0.00	28.	110	3	0.013	89	3	1.34	0.012
517	5.24	5.24	255	-13	3.55	92.	66	-7	0.000	65	-7	0.71	0.000
518	5.24	5.24	178	-1	2.74	137.	69	2	0.008	46	1	0.70	0.006

519	5.24	5.24	42	4	0.44	78.	78	5	0.015	68	5	0.87	0.014
520	5.24	5.24	166	8	2.39	224.	81	8	0.022	79	8	0.79	0.022
521	5.24	5.24	245	11	3.61	311.	60	10	0.025	47	10	0.00	0.023
566	5.24	5.24	0.	-42	1.33	-20.	209	-32	0.000	114	-33	1.75	0.000
567	5.24	5.24	0.	-46	1.44	-22.	146	-34	0.000	66	-35	1.51	0.000
568	5.24	5.24	0.	-8	0.25	-4.	151	-10	0.002	59	-9	0.67	0.000
569	5.24	5.24	0.	-15	0.49	-7.	143	-16	0.000	64	-16	0.89	0.000
570	5.24	5.24	0.	2	0.00	18.	105	3	0.013	55	3	0.76	0.010
571	5.24	5.24	0.	1	0.00	13.	94	0.	0.007	55	0.	0.85	0.005
572	5.24	5.24	273	-4	4.17	190.	107	4	0.015	79	4	1.14	0.012
573	5.24	5.24	234	2	3.62	215.	98	5	0.017	71	5	0.92	0.015
574	5.24	5.24	216	9	3.18	275.	132	8	0.025	110	8	1.41	0.024
575	5.24	5.24	231	4	3.56	234.	202	3	0.020	188	3	2.89	0.019

ARMATURA SUPERI ORE ORI ZZONTALE

GUSCI	COMBI NAZI ONE RARA		COMB. FREQUENTE			COMB. QUASI PERMANENTE							
	Af	Afc	Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
129	5.24	5.24	0.	23	0.00	221.	0.	36	0.068	0.	36	0.00	0.069
131	5.24	5.24	0.	-3	0.09	-1.	0.	23	0.045	0.	23	0.00	0.044
133	5.24	5.24	0.	-21	0.66	-10.	0.	8	0.016	0.	8	0.00	0.015
135	5.24	5.24	0.	-18	0.57	-9.	0.	-2	0.000	0.	-2	0.06	0.000
137	5.24	5.24	0.	-2	0.08	-1.	0.	2	0.003	0.	2	0.00	0.003
268	5.24	5.24	328	19	4.60	467.	350	23	0.067	291	21	3.84	0.059
271	5.24	5.24	762	42	10.82	1063.	636	42	0.123	572	38	7.75	0.111
273	5.24	5.24	942	36	14.03	1151.	819	37	0.124	711	33	10.39	0.109
275	5.24	5.24	828	20	12.63	892.	709	21	0.087	599	19	9.05	0.075
277	5.24	5.24	523	8	8.05	510.	439	9	0.046	360	8	5.52	0.038
319	5.24	5.24	0.	15	0.00	141.	0.	29	0.056	0.	27	0.00	0.052
320	5.24	5.24	413	25	5.76	596.	0.	47	0.091	0.	45	0.00	0.085
321	5.24	5.24	0.	27	0.00	260.	0.	44	0.084	0.	43	0.00	0.082
322	5.24	5.24	534	40	6.95	853.	0.	56	0.107	0.	54	0.00	0.103
323	5.24	5.24	0.	53	0.00	503.	0.	61	0.117	0.	61	0.00	0.116
324	5.24	5.24	574	24	8.49	716.	0.	44	0.083	0.	41	0.00	0.079
325	5.24	5.24	216	52	0.00	705.	6	55	0.106	0.	54	0.00	0.104
326	5.24	5.24	223	4	3.44	223.	0.	34	0.065	0.	31	0.00	0.059
328	5.24	5.24	767	15	11.77	786.	0.	40	0.076	39	37	0.00	0.074
329	5.24	5.24	328	0.	5.06	271.	0.	28	0.054	0.	25	0.00	0.048
330	5.24	5.24	309	-3	4.75	230.	0.	19	0.036	4	17	0.00	0.033
331	5.24	5.24	554	2	8.56	481.	0.	22	0.042	0.	20	0.00	0.038
333	5.24	5.24	313	-8	4.70	185.	0.	14	0.027	0.	12	0.00	0.023
334	5.24	5.24	302	-4	4.62	211.	103	9	0.024	85	8	1.01	0.021
335	5.24	5.24	397	1	6.14	338.	0.	12	0.023	0.	11	0.00	0.021
336	5.24	5.24	432	0.	6.67	354.	0.	12	0.024	0.	11	0.00	0.021
517	5.24	5.24	241	2	3.71	223.	161	1	0.014	149	1	2.30	0.012
518	5.24	5.24	238	1	3.68	203.	113	7	0.022	86	7	1.10	0.019
519	5.24	5.24	191	5	2.90	213.	15	10	0.020	19	9	0.00	0.019
520	5.24	5.24	246	6	3.75	267.	0.	10	0.020	0.	10	0.00	0.019
521	5.24	5.24	244	5	3.74	255.	0.	9	0.017	0.	8	0.00	0.016
566	5.24	5.24	216	16	2.81	346.	0.	40	0.077	0.	37	0.00	0.071
567	5.24	5.24	275	11	4.07	343.	0.	42	0.079	0.	38	0.00	0.073
568	5.24	5.24	583	14	8.89	629.	0.	41	0.078	0.	38	0.00	0.073
569	5.24	5.24	548	8	8.44	536.	0.	33	0.063	0.	30	0.00	0.058
570	5.24	5.24	665	3	10.27	579.	0.	26	0.049	18	23	0.00	0.046
571	5.24	5.24	574	0.	8.86	476.	0.	20	0.038	0.	18	0.00	0.034
572	5.24	5.24	270	-6	4.06	162.	0.	8	0.014	0.	6	0.00	0.011
573	5.24	5.24	277	-3	4.25	203.	0.	7	0.013	0.	6	0.00	0.011
574	5.24	5.24	0.	21	0.00	199.	0.	18	0.035	0.	19	0.00	0.036
575	5.24	5.24	0.	12	0.00	111.	0.	12	0.023	0.	12	0.00	0.023

ARMATURA SUPERI ORE VERTI CALE

GUSCI	COMBI NAZI ONE RARA		COMB. FREQUENTE			COMB. QUASI PERMANENTE							
	Af	Afc	Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
129	5.24	5.24	0.	42	0.00	403.	194	35	0.086	142	36	0.00	0.082
131	5.24	5.24	82	22	0.00	292.	0.	22	0.042	0.	22	0.00	0.043
133	5.24	5.24	0.	-1	0.04	-1.	0.	6	0.012	0.	6	0.00	0.012
135	5.24	5.24	0.	-12	0.37	-6.	0.	-2	0.000	0.	-2	0.08	0.000
137	5.24	5.24	0.	-5	0.15	-2.	0.	-2	0.000	0.	-2	0.05	0.000
268	5.24	5.24	0.	-62	1.98	-30.	0.	-43	0.000	0.	-45	1.42	0.000
271	5.24	5.24	428	-41	4.86	36.	17	-29	0.000	63	-30	0.57	0.000
273	5.24	5.24	160	-30	0.05	-24.	81	-21	0.000	87	-22	0.17	0.000
275	5.24	5.24	120	-25	0.06	-20.	121	-17	0.000	98	-18	0.04	0.000
277	5.24	5.24	139	-19	1.53	2.	105	-13	0.000	74	-14	0.03	0.000
319	5.24	5.24	0.	-80	2.54	-38.	0.	-51	0.000	0.	-51	1.63	0.000
320	5.24	5.24	633	-22	9.25	309.	0.	-18	0.000	0.	-18	0.56	0.000
321	5.24	5.24	0.	-56	1.78	-27.	0.	-27	0.000	0.	-27	0.85	0.000
322	5.24	5.24	738	8	11.39	691.	0.	6	0.011	0.	6	0.00	0.012
323	5.24	5.24	0.	-17	0.53	-8.	0.	4	0.008	0.	5	0.00	0.009
324	5.24	5.24	678	26	10.08	831.	0.	20	0.038	0.	21	0.00	0.040
325	5.24	5.24	0.	21	0.00	199.	0.	28	0.053	0.	29	0.00	0.055
326	5.24	5.24	356	-27	4.37	61.	0.	-24	0.000	0.	-24	0.75	0.000
328	5.24	5.24	689	4	10.64	612.	0.	2	0.004	0.	2	0.00	0.004
329	5.24	5.24	330	11	4.96	387.	0.	12	0.022	0.	12	0.00	0.022
330	5.24	5.24	261	-19	3.24	48.	30	-17	0.000	30	-17	0.34	0.000
331	5.24	5.24	368	-7	5.59	239.	0.	-8	0.000	0.	-7	0.24	0.000
333	5.24	5.24	288	-5	4.38	188.	0.	5	0.009	0.	5	0.00	0.009
334	5.24	5.24	75	-12	0.07	-11.	105	-8	0.001	79	-8	0.88	0.000
335	5.24	5.24	135	-2	2.05	88.	0.	-3	0.000	0.	-3	0.08	0.000
336	5.24	5.24	72	3	1.08	86.	0.	3	0.006	0.	3	0.00	0.006
517	5.24	5.24	63	-13	0.01	-10.	0.	-7	0.000	0.	-7	0.23	0.000

518	5.24	5.24	129	-1	1.99	96.	71	2	0.008	44	1	0.66	0.006
519	5.24	5.24	17	4	0.00	57.	76	5	0.015	60	5	0.73	0.014
520	5.24	5.24	69	8	0.53	146.	28	8	0.019	25	8	0.00	0.018
521	5.24	5.24	135	11	1.71	220.	0.	10	0.019	0.	10	0.00	0.019
566	5.24	5.24	635	-42	8.23	152.	0.	-32	0.000	0.	-33	1.04	0.000
567	5.24	5.24	556	-46	6.67	80.	0.	-34	0.000	0.	-35	1.10	0.000
568	5.24	5.24	670	-8	10.25	474.	0.	-10	0.000	0.	-9	0.30	0.000
569	5.24	5.24	573	-15	8.55	323.	0.	-16	0.000	0.	-16	0.49	0.000
570	5.24	5.24	345	2	5.33	304.	0.	3	0.006	0.	3	0.00	0.006
571	5.24	5.24	275	1	4.25	241.	0.	0.	0.000	0.	0.	0.00	0.001
572	5.24	5.24	155	-4	2.33	93.	0.	4	0.008	0.	4	0.00	0.007
573	5.24	5.24	142	2	2.19	139.	0.	5	0.010	0.	5	0.00	0.010
574	5.24	5.24	38	9	0.00	126.	0.	8	0.016	0.	8	0.00	0.016
575	5.24	5.24	0.	4	0.00	41.	0.	3	0.006	0.	3	0.00	0.006

MACROGUSCI 0 retro_1

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU SENZA SI SMA 1
2	SLU SENZA SI SMA 2
3	SLU SENZA SI SMA 3
4	SLU SENZA SI SMA 4
5	SLU SENZA SI SMA 5
6	SLU SENZA SI SMA 6
7	SLU SENZA SI SMA 7
8	SLU SENZA SI SMA 8
22	SLU SI SMAX P vuoto
23	SLU SI SMAY P vuoto

DATI:

tensione di snervamento acciai o (fyk):	4500	daN/cm2
coefficiente sicurezza acciai o	: 1.15	
deformazione ultima acciai o	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento (k):	1	
resistenza cilindrica cls (fck):	249	daN/cm2
coefficiente sicurezza cls	: 1.5	
coefficiente riduttivo (alfa):	0.85	
copri ferro inferiore (asse armatura):	5	cm
copri ferro superiore (asse armatura):	5	cm
moltiplicatore sollecitazioni	: 1	

LEGENDA:

spess	= spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
Af	= area disposta al lembo teso, in cm2 al metro
Afc	= area disposta al lembo compresso, in cm2 al metro
Mom	= momento flettente [daNcm/cm]
Nor	= sforzo normale [daN]
epsC	= deformazione cls [per mille]
epsF	= deformazione acciai o [per mille]

<-

L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciai o alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)												τx	τy	τt
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.			SUP. VERTIC.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
128	5.24	0.19	0.69	5.24	0.23	0.84	5.24	0.05	0.41	5.24	0.04	0.25			
130	5.24	0.29	1.04	5.24	0.03	0.30	5.24	0.06	0.33	5.24	0.18	0.68			
132	5.24	0.32	1.13	5.24	0.00	0.04	5.24	0.04	0.22	5.24	0.07	0.37			
134	5.24	0.30	1.06	5.24	0.00	0.13	5.24	0.00	0.12	5.24	0.04	0.33			
136	5.24	0.19	1.02	5.24	0.00	0.26	5.24	0.00	0.32	5.24	0.07	0.46			
138	5.24	0.06	0.23	5.24	0.36	1.31	5.24	0.12	0.65	5.24	0.05	0.17			
139	5.24	0.00	0.09	5.24	0.00	0.00	5.24	0.20	0.95	5.24	0.22	0.81			
140	5.24	0.00	0.06	5.24	0.00	0.03	5.24	0.22	0.98	5.24	0.21	0.77			
141	5.24	0.00	0.07	5.24	0.00	0.05	5.24	0.21	0.93	5.24	0.16	0.65			
142	5.24	0.00	0.10	5.24	0.00	0.11	5.24	0.16	0.85	5.24	0.13	0.54			
143	5.24	0.00	0.16	5.24	0.39	1.40	5.24	0.07	0.25	5.24	0.00	0.02			
144	5.24	0.00	0.02	5.24	0.00	0.00	5.24	0.22	0.87	5.24	0.20	0.74			
145	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.29	1.05	5.24	0.23	0.82			
146	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.29	1.03	5.24	0.18	0.65			
147	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.22	0.82	5.24	0.12	0.43			
148	5.24	0.00	0.41	5.24	0.36	1.36	5.24	0.01	0.70	5.24	0.00	0.30			
149	5.24	0.00	0.29	5.24	0.00	0.17	5.24	0.12	0.93	5.24	0.21	0.86			
150	5.24	0.00	0.14	5.24	0.00	0.00	5.24	0.17	0.93	5.24	0.21	0.73			
151	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.22	0.79	5.24	0.17	0.59			
152	5.24	0.03	0.09	5.24	0.03	0.09	5.24	0.20	0.69	5.24	0.14	0.46			
153	5.24	0.09	0.89	5.24	0.11	0.79	5.24	0.00	0.27	5.24	0.00	0.15			
154	5.24	0.25	1.28	5.24	0.00	0.15	5.24	0.00	0.31	5.24	0.06	0.62			
155	5.24	0.42	1.57	5.24	0.03	0.07	5.24	0.00	0.18	5.24	0.07	0.23			
156	5.24	0.41	1.49	5.24	0.04	0.09	5.24	0.00	0.03	5.24	0.05	0.14			
157	5.24	0.29	1.06	5.24	0.06	0.15	5.24	0.00	0.00	5.24	0.06	0.17			

158	5.24	0.10	1.00	5.24	0.19	1.03	5.24	0.00	0.37	5.24	0.00	0.30
159	5.24	0.33	1.49	5.24	0.03	0.29	5.24	0.00	0.42	5.24	0.09	0.89
160	5.24	0.44	1.61	5.24	0.03	0.08	5.24	0.00	0.16	5.24	0.08	0.40
161	5.24	0.43	1.57	5.24	0.04	0.11	5.24	0.00	0.02	5.24	0.08	0.28
162	5.24	0.34	1.23	5.24	0.07	0.19	5.24	0.01	0.05	5.24	0.12	0.39
163	5.24	0.00	0.43	5.24	0.42	1.57	5.24	0.08	0.82	5.24	0.00	0.45
164	5.24	0.00	0.23	5.24	0.00	0.26	5.24	0.20	1.03	5.24	0.22	1.19
165	5.24	0.00	0.08	5.24	0.00	0.05	5.24	0.24	1.00	5.24	0.28	1.02
166	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.25	0.89	5.24	0.23	0.79
167	5.24	0.03	0.10	5.24	0.03	0.08	5.24	0.23	0.81	5.24	0.19	0.63
168	5.24	0.02	0.08	5.24	0.45	1.59	5.24	0.09	0.29	5.24	0.00	0.06
169	5.24	0.00	0.00	5.24	0.00	0.10	5.24	0.26	0.92	5.24	0.23	1.03
170	5.24	0.00	0.00	5.24	0.00	0.01	5.24	0.33	1.15	5.24	0.31	1.14
171	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.32	1.14	5.24	0.25	0.91
172	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.26	0.92	5.24	0.18	0.60
173	5.24	0.04	0.30	5.24	0.44	1.57	5.24	0.14	0.75	5.24	0.00	0.35
174	5.24	0.00	0.07	5.24	0.00	0.24	5.24	0.26	1.10	5.24	0.22	1.22
175	5.24	0.00	0.06	5.24	0.00	0.11	5.24	0.27	1.13	5.24	0.27	1.12
176	5.24	0.00	0.06	5.24	0.00	0.06	5.24	0.26	1.11	5.24	0.23	0.92
177	5.24	0.00	0.08	5.24	0.00	0.05	5.24	0.22	1.03	5.24	0.19	0.74
178	5.24	0.13	0.78	5.24	0.26	1.07	5.24	0.00	0.38	5.24	0.00	0.26
179	5.24	0.29	1.03	5.24	0.00	0.39	5.24	0.05	0.59	5.24	0.11	1.01
180	5.24	0.28	1.02	5.24	0.00	0.08	5.24	0.01	0.32	5.24	0.11	0.65
181	5.24	0.27	0.94	5.24	0.00	0.08	5.24	0.02	0.30	5.24	0.11	0.56
182	5.24	0.24	0.94	5.24	0.02	0.30	5.24	0.05	0.49	5.24	0.13	0.60
483	5.24	0.19	0.69	5.24	0.06	0.17	5.24	0.04	0.13	5.24	0.08	0.23
484	5.24	0.06	0.23	5.24	0.08	0.22	5.24	0.15	0.54	5.24	0.11	0.34
485	5.24	0.00	0.01	5.24	0.01	-0.01	5.24	0.11	0.41	5.24	0.06	0.18
486	5.24	0.00	0.26	5.24	0.08	0.27	5.24	0.10	0.69	5.24	0.12	0.41
487	5.24	0.04	0.79	5.24	0.10	0.36	5.24	0.00	0.51	5.24	0.12	0.44
488	5.24	0.16	0.80	5.24	0.07	0.39	5.24	0.08	0.54	5.24	0.13	0.62
489	5.24	0.03	0.23	5.24	0.07	0.25	5.24	0.17	0.79	5.24	0.15	0.53
490	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.13	0.49	5.24	0.08	0.25
491	5.24	0.08	0.29	5.24	0.10	0.30	5.24	0.19	0.67	5.24	0.16	0.48
492	5.24	0.22	0.80	5.24	0.09	0.28	5.24	0.08	0.27	5.24	0.12	0.37

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vrcd = compressione cls d' anima
Vrsd = trazione armatura trasversale
Vrd,s = scorrimento in zona di dissipativa

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vrcd [daN]	Vrsd [daN]	al fas	Vrd,s [daN]
20.0	29850	104.20	104.20	45897	842426	326176	-	-
60.0	29850	104.20	104.20	46050	843607	326176	-	-
100.0	29850	104.20	104.20	46050	843607	326176	-	-
140.0	29850	104.20	104.20	46050	843607	326176	-	-
180.0	29850	104.20	104.20	45510	845773	326176	-	-
220.0	29850	104.20	104.20	45510	845773	326176	-	-
260.0	29850	104.20	104.20	44540	847370	326176	-	-
300.0	29850	104.20	104.20	44540	847370	326176	-	-
340.0	29850	104.20	104.20	44271	848370	326176	-	-
380.0	29850	104.20	104.20	44271	848370	326176	-	-
420.0	29850	104.20	104.20	44271	848370	326176	-	-
460.0	29850	104.20	104.20	42710	849096	326176	-	-
500.0	29850	104.20	104.20	42710	849096	326176	-	-
540.0	29850	104.20	104.20	41143	849434	326176	-	-
565.0	29850	104.20	104.20	41143	849434	326176	-	-

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X v1-2-3
39	SLU SI SMA Y v1-2-3

GUSCI	AREE ARMATURA (cm2 al metro)									tx	ty	tz
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF
128	5.24	0.11	0.48	5.24	0.16	0.61	5.24	0.05	0.37	5.24	0.03	0.20
130	5.24	0.20	0.70	5.24	0.03	0.23	5.24	0.06	0.32	5.24	0.12	0.47
132	5.24	0.21	0.75	5.24	0.00	0.00	5.24	0.05	0.25	5.24	0.07	0.26
134	5.24	0.20	0.72	5.24	0.01	0.02	5.24	0.01	0.17	5.24	0.07	0.24
136	5.24	0.12	0.67	5.24	0.05	0.18	5.24	0.00	0.28	5.24	0.08	0.28

138	5.24	0.02	0.16	5.24	0.25	0.89	5.24	0.05	0.44	5.24	0.03	0.09
139	5.24	0.00	0.10	5.24	0.02	0.06	5.24	0.10	0.66	5.24	0.15	0.53
140	5.24	0.00	0.07	5.24	0.00	0.00	5.24	0.12	0.67	5.24	0.14	0.50
141	5.24	0.00	0.05	5.24	0.00	0.00	5.24	0.12	0.62	5.24	0.12	0.41
142	5.24	0.00	0.04	5.24	0.00	0.00	5.24	0.11	0.56	5.24	0.10	0.34
143	5.24	0.02	0.09	5.24	0.26	0.96	5.24	0.05	0.22	5.24	0.00	0.03
144	5.24	0.00	0.05	5.24	0.00	0.03	5.24	0.13	0.61	5.24	0.14	0.53
145	5.24	0.00	0.03	5.24	0.01	-0.01	5.24	0.18	0.73	5.24	0.15	0.53
146	5.24	0.00	0.01	5.24	0.01	-0.01	5.24	0.19	0.71	5.24	0.12	0.42
147	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.15	0.54	5.24	0.09	0.28
148	5.24	0.00	0.27	5.24	0.23	0.92	5.24	0.00	0.50	5.24	0.00	0.19
149	5.24	0.00	0.22	5.24	0.00	0.14	5.24	0.05	0.64	5.24	0.11	0.61
150	5.24	0.00	0.12	5.24	0.00	0.00	5.24	0.08	0.65	5.24	0.14	0.48
151	5.24	0.00	0.05	5.24	0.01	-0.01	5.24	0.12	0.59	5.24	0.12	0.37
152	5.24	0.02	0.07	5.24	0.01	0.02	5.24	0.13	0.49	5.24	0.10	0.30
153	5.24	0.01	0.60	5.24	0.05	0.53	5.24	0.00	0.22	5.24	0.00	0.11
154	5.24	0.14	0.86	5.24	0.00	0.12	5.24	0.00	0.19	5.24	0.03	0.42
155	5.24	0.27	1.07	5.24	0.02	0.03	5.24	0.00	0.14	5.24	0.05	0.15
156	5.24	0.27	0.99	5.24	0.02	0.03	5.24	0.00	0.05	5.24	0.04	0.10
157	5.24	0.20	0.71	5.24	0.04	0.09	5.24	0.00	0.00	5.24	0.05	0.13
158	5.24	0.05	0.65	5.24	0.12	0.66	5.24	0.00	0.24	5.24	0.00	0.21
159	5.24	0.21	0.95	5.24	0.02	0.21	5.24	0.00	0.21	5.24	0.05	0.59
160	5.24	0.30	1.06	5.24	0.01	0.03	5.24	0.00	0.10	5.24	0.06	0.23
161	5.24	0.29	1.06	5.24	0.02	0.03	5.24	0.00	0.01	5.24	0.05	0.15
162	5.24	0.23	0.84	5.24	0.05	0.13	5.24	0.01	0.03	5.24	0.07	0.23
163	5.24	0.00	0.26	5.24	0.29	1.03	5.24	0.01	0.53	5.24	0.00	0.16
164	5.24	0.00	0.16	5.24	0.00	0.17	5.24	0.11	0.69	5.24	0.12	0.78
165	5.24	0.00	0.07	5.24	0.00	0.01	5.24	0.15	0.68	5.24	0.19	0.67
166	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.17	0.61	5.24	0.15	0.51
167	5.24	0.02	0.06	5.24	0.01	-0.01	5.24	0.16	0.55	5.24	0.13	0.41
168	5.24	0.02	0.09	5.24	0.32	1.10	5.24	0.06	0.20	5.24	0.01	-0.01
169	5.24	0.00	0.00	5.24	0.00	0.07	5.24	0.17	0.60	5.24	0.15	0.66
170	5.24	0.00	0.00	5.24	0.00	0.00	5.24	0.22	0.77	5.24	0.20	0.73
171	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.21	0.76	5.24	0.17	0.59
172	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.17	0.61	5.24	0.12	0.39
173	5.24	0.00	0.21	5.24	0.30	1.05	5.24	0.05	0.49	5.24	0.01	0.10
174	5.24	0.00	0.07	5.24	0.00	0.16	5.24	0.15	0.74	5.24	0.12	0.78
175	5.24	0.00	0.06	5.24	0.00	0.06	5.24	0.16	0.76	5.24	0.19	0.71
176	5.24	0.00	0.05	5.24	0.00	0.00	5.24	0.16	0.75	5.24	0.16	0.57
177	5.24	0.00	0.04	5.24	0.00	0.00	5.24	0.14	0.67	5.24	0.13	0.46
178	5.24	0.04	0.52	5.24	0.19	0.69	5.24	0.00	0.28	5.24	0.01	0.14
179	5.24	0.19	0.69	5.24	0.00	0.26	5.24	0.02	0.42	5.24	0.06	0.66
180	5.24	0.19	0.65	5.24	0.00	0.05	5.24	0.00	0.26	5.24	0.08	0.43
181	5.24	0.18	0.62	5.24	0.00	0.00	5.24	0.00	0.23	5.24	0.09	0.32
182	5.24	0.17	0.62	5.24	0.06	0.20	5.24	0.03	0.26	5.24	0.11	0.36
483	5.24	0.13	0.48	5.24	0.05	0.13	5.24	0.02	0.09	5.24	0.06	0.16
484	5.24	0.04	0.16	5.24	0.06	0.16	5.24	0.10	0.37	5.24	0.08	0.24
485	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.07	0.27	5.24	0.05	0.13
486	5.24	0.00	0.17	5.24	0.05	0.17	5.24	0.07	0.45	5.24	0.08	0.27
487	5.24	0.02	0.52	5.24	0.07	0.24	5.24	0.00	0.36	5.24	0.08	0.30
488	5.24	0.10	0.54	5.24	0.09	0.30	5.24	0.04	0.35	5.24	0.11	0.38
489	5.24	0.01	0.15	5.24	0.06	0.21	5.24	0.11	0.52	5.24	0.10	0.35
490	5.24	0.00	0.00	5.24	0.01	-0.01	5.24	0.09	0.33	5.24	0.06	0.19
491	5.24	0.05	0.20	5.24	0.07	0.23	5.24	0.13	0.46	5.24	0.11	0.33
492	5.24	0.15	0.54	5.24	0.08	0.23	5.24	0.05	0.18	5.24	0.09	0.25

L' ARMATURA È OVUNQUE > DELLA QUANTITÀ RICHIESTA: IL PUNTO 2.3 DELLE NTC È VERIFICATO (Rd > Ed)

*** VERIFICHE A TAGLIO SECONDO NTC2018 (cap. 7.4.4.5.1) ***

Vr_{cd} = compressione cls d' anima
 Vr_{sd} = trazione armatura trasversale
 Vr_{d,s} = scorrimento in zona di dissipativa

Quota [cm]	Sezi one [cm ²]	Af long. [cm ²]	Af trasv. [cm ²]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	29850	104.20	104.20	33200	844492	326176	-	-
60.0	29850	104.20	104.20	32175	845464	326176	-	-
100.0	29850	104.20	104.20	32175	845464	326176	-	-
140.0	29850	104.20	104.20	32175	845464	326176	-	-
180.0	29850	104.20	104.20	31147	847292	326176	-	-
220.0	29850	104.20	104.20	31147	847292	326176	-	-
260.0	29850	104.20	104.20	29760	848692	326176	-	-
300.0	29850	104.20	104.20	29760	848692	326176	-	-
340.0	29850	104.20	104.20	29074	849393	326176	-	-
380.0	29850	104.20	104.20	29074	849393	326176	-	-
420.0	29850	104.20	104.20	29074	849393	326176	-	-
460.0	29850	104.20	104.20	28041	849643	326176	-	-
500.0	29850	104.20	104.20	28041	849643	326176	-	-
540.0	29850	104.20	104.20	27117	849700	326176	-	-
565.0	29850	104.20	104.20	27117	849700	326176	-	-

MACROGUSCI 0 retro_1

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->
 Nome Descrizi one

- 9 RARA 1 (RARA)
- 10 RARA 2 (RARA)
- 11 RARA 3 (RARA)
- 13 RARA 5 (RARA)
- 14 RARA 6 (RARA)
- 15 RARA 7 (RARA)
- 16 RARA 8 (RARA)
- 17 FREQUENTE 1 (FREQUENTE)
- 18 FREQUENTE 2 (FREQUENTE)
- 19 QUASI PERMANENTE (QUASI PERMANENTE)

DATI :

copri ferro inferiore (asse armatura): 5 cm
 copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm2 al metro)
 Afc = area effettiva compressa (cm2 al metro)
 Mom = momento flettente [daNcm/cm]
 Nor = sforzo normale [daN]
 σ_c = tensione calcestruzzo [daN/cm2]
 valore max per combinazione rara = 149.4 daN/cm2
 quasi permanente = 112 daN/cm2
 σ_f = tensione acciai [daN/cm2]
 valore max per combinazione rara = 3600 daN/cm2
 wkF = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
 wkP = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm

<-

ARMATURA INFERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA						COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
128	5.24	5.24	994	-4	15.32	777.	487	19	0.068	489	19	7.27	0.068
130	5.24	5.24	1364	-16	20.90	973.	627	14	0.069	628	14	9.61	0.069
132	5.24	5.24	1254	-15	19.21	893.	539	6	0.047	540	6	8.34	0.047
134	5.24	5.24	1248	-3	19.25	1004.	456	4	0.038	457	4	7.07	0.038
136	5.24	5.24	1177	7	18.19	1048.	639	11	0.064	640	11	9.84	0.064
138	5.24	5.24	328	-13	4.73	147.	205	2	0.018	205	2	3.17	0.018
139	5.24	5.24	0.	-20	0.63	-9.	0.	-1	0.000	0.	-1	0.02	0.000
140	5.24	5.24	0.	-15	0.49	-7.	0.	-4	0.000	0.	-4	0.13	0.000
141	5.24	5.24	0.	-5	0.17	-3.	0.	-4	0.000	0.	-3	0.11	0.000
142	5.24	5.24	0.	-1	0.04	-1.	0.	0	0.000	0.	0	0.00	0.000
143	5.24	5.24	0.	-11	0.34	-5.	0.	-2	0.000	0.	-3	0.10	0.000
144	5.24	5.24	0.	-18	0.56	-8.	0.	0	0.000	0.	-1	0.02	0.000
145	5.24	5.24	0.	-18	0.57	-9.	0.	-3	0.000	0.	-3	0.10	0.000
146	5.24	5.24	0.	-12	0.38	-6.	0.	-3	0.000	0.	-3	0.11	0.000
147	5.24	5.24	0.	-2	0.05	-1.	0.	-2	0.000	0.	-2	0.05	0.000
148	5.24	5.24	389	-8	5.88	239.	266	0	0.019	266	-3	4.07	0.016
149	5.24	5.24	0.	-14	0.43	-6.	23	-2	0.000	22	-2	0.26	0.000
150	5.24	5.24	0.	-22	0.69	-10.	0.	-5	0.000	0.	-5	0.17	0.000
151	5.24	5.24	0.	-19	0.60	-9.	0.	-7	0.000	0.	-7	0.24	0.000
152	5.24	5.24	0.	-8	0.24	-4.	0.	-9	0.000	0.	-9	0.28	0.000
153	5.24	5.24	1011	-11	15.50	730.	527	13	0.059	528	13	8.07	0.059
154	5.24	5.24	1635	-3	25.23	1325.	939	8	0.079	940	8	14.53	0.079
155	5.24	5.24	1853	-5	28.59	1482.	1151	1	0.083	1152	1	17.79	0.083
156	5.24	5.24	1932	-2	29.83	1578.	1143	-3	0.077	1144	-3	17.65	0.077
157	5.24	5.24	1604	-5	24.73	1274.	1069	-5	0.070	1069	-5	16.47	0.070
158	5.24	5.24	1220	-5	18.81	963.	669	22	0.087	670	22	10.09	0.087
159	5.24	5.24	1776	12	27.45	1586.	1043	20	0.107	1044	19	16.04	0.107
160	5.24	5.24	1835	1	28.35	1530.	1199	8	0.097	1199	8	18.54	0.097
161	5.24	5.24	1886	-8	29.07	1482.	1204	-2	0.083	1205	-2	18.60	0.083
162	5.24	5.24	1695	-2	26.17	1383.	1167	-5	0.077	1167	-5	17.99	0.077
163	5.24	5.24	491	-2	7.57	386.	313	4	0.029	313	4	4.83	0.029
164	5.24	5.24	0.	-4	0.11	-2.	20	-4	0.000	20	-4	0.26	0.000
165	5.24	5.24	0.	-15	0.47	-7.	0.	-6	0.000	0.	-6	0.19	0.000
166	5.24	5.24	0.	-19	0.59	-9.	0.	-9	0.000	0.	-9	0.30	0.000
167	5.24	5.24	0.	-16	0.51	-8.	0.	-10	0.000	0.	-10	0.33	0.000
168	5.24	5.24	0.	-10	0.32	-5.	0.	-6	0.000	0.	-6	0.20	0.000
169	5.24	5.24	0.	-20	0.62	-9.	0.	-10	0.000	0.	-10	0.33	0.000
170	5.24	5.24	0.	-22	0.69	-10.	0.	-12	0.000	0.	-12	0.37	0.000
171	5.24	5.24	0.	-17	0.53	-8.	0.	-9	0.000	0.	-9	0.30	0.000
172	5.24	5.24	0.	-10	0.30	-5.	0.	-5	0.000	0.	-5	0.17	0.000
173	5.24	5.24	355	-11	5.23	184.	221	6	0.026	221	6	3.36	0.026
174	5.24	5.24	0.	-15	0.48	-7.	0.	-2	0.000	0.	-2	0.06	0.000
175	5.24	5.24	0.	-13	0.41	-6.	0.	-1	0.000	0.	-1	0.02	0.000
176	5.24	5.24	0.	-5	0.15	-2.	0.	-5	0.000	0.	-5	0.17	0.000
177	5.24	5.24	0.	-6	0.20	-3.	0.	-2	0.000	0.	-2	0.06	0.000
178	5.24	5.24	1167	4	18.03	1000.	634	24	0.087	635	24	9.48	0.087
179	5.24	5.24	1335	-7	20.55	1029.	763	18	0.085	764	18	11.67	0.085
180	5.24	5.24	931	-9	14.29	682.	590	9	0.057	590	9	9.09	0.057
181	5.24	5.24	1018	-2	15.70	820.	484	3	0.039	485	3	7.49	0.039
182	5.24	5.24	1171	-5	18.04	917.	718	7	0.062	718	7	11.09	0.062
483	5.24	5.24	1008	-9	15.47	740.	738	-2	0.049	738	-2	11.37	0.049
484	5.24	5.24	289	-1	4.46	232.	220	-8	0.008	220	-8	3.19	0.008
485	5.24	5.24	0.	-6	0.20	-3.	0.	0	0.000	0.	0	0.01	0.000
486	5.24	5.24	208	3	3.20	200.	79	1	0.007	79	1	1.22	0.007
487	5.24	5.24	906	20	13.88	949.	625	18	0.075	625	18	9.48	0.075
488	5.24	5.24	1093	5	16.90	954.	744	12	0.073	744	12	11.46	0.073
489	5.24	5.24	213	-3	3.26	150.	109	0	0.007	109	0	1.68	0.007
490	5.24	5.24	0.	-4	0.11	-2.	0.	-2	0.000	0.	-2	0.06	0.000
491	5.24	5.24	396	-12	5.88	215.	258	-9	0.010	258	-9	3.77	0.010
492	5.24	5.24	1203	-7	18.53	926.	861	0	0.060	861	0	13.30	0.060

ARMATURA INFERIORE VERTICALE

GUSCI			COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
128	5.24	5.24	1340	-16	20.50	944.	969	1	0.070	964	1	14.89	0.069
130	5.24	5.24	332	-19	4.45	97.	340	-6	0.018	340	-6	5.16	0.018
132	5.24	5.24	0.	-19	0.61	-9.	0.	-11	0.000	0.	-11	0.34	0.000
134	5.24	5.24	71	-15	0.92	-3.	0.	-12	0.000	0.	-12	0.38	0.000
136	5.24	5.24	257	-8	3.81	138.	202	-9	0.006	215	-9	3.10	0.007
138	5.24	5.24	1884	-40	28.44	1162.	1133	-15	0.065	1129	-14	17.27	0.065
139	5.24	5.24	0.	-23	0.73	-11.	0.	-16	0.000	0.	-15	0.48	0.000
140	5.24	5.24	0.	-19	0.61	-9.	0.	-15	0.000	0.	-15	0.47	0.000
141	5.24	5.24	0.	-15	0.47	-7.	0.	-15	0.000	0.	-14	0.46	0.000
142	5.24	5.24	0.	-15	0.48	-7.	0.	-16	0.000	0.	-16	0.50	0.000
143	5.24	5.24	1796	-45	26.93	1046.	1095	-23	0.055	1090	-22	16.48	0.055
144	5.24	5.24	0.	-26	0.82	-12.	0.	-24	0.000	0.	-24	0.74	0.000
145	5.24	5.24	0.	-26	0.84	-13.	0.	-24	0.000	0.	-24	0.75	0.000
146	5.24	5.24	0.	-24	0.75	-11.	0.	-25	0.000	0.	-24	0.77	0.000
147	5.24	5.24	0.	-23	0.72	-11.	0.	-27	0.000	0.	-26	0.83	0.000
148	5.24	5.24	1843	-34	27.97	1191.	1071	-19	0.057	1067	-19	16.22	0.057
149	5.24	5.24	0.	-28	0.90	-14.	30	-23	0.000	29	-22	0.89	0.000
150	5.24	5.24	0.	-36	1.12	-17.	0.	-28	0.000	0.	-27	0.86	0.000
151	5.24	5.24	0.	-37	1.16	-17.	0.	-33	0.000	0.	-32	1.03	0.000
152	5.24	5.24	0.	-33	1.04	-16.	0.	-37	0.000	0.	-37	1.16	0.000
153	5.24	5.24	829	-14	12.60	543.	425	-5	0.025	423	-5	6.48	0.025
154	5.24	5.24	39	-27	1.08	-10.	62	-18	0.000	62	-18	0.95	0.000
155	5.24	5.24	0.	-34	1.09	-16.	24	-30	0.000	24	-30	1.10	0.000
156	5.24	5.24	97	-41	1.92	-14.	0.	-38	0.000	0.	-37	1.18	0.000
157	5.24	5.24	208	-46	2.74	-9.	83	-40	0.000	82	-40	1.77	0.000
158	5.24	5.24	1293	-10	19.87	972.	725	10	0.067	723	10	11.14	0.068
159	5.24	5.24	336	-19	4.52	100.	246	-5	0.013	245	-4	3.73	0.013
160	5.24	5.24	0.	-32	1.01	-15.	29	-20	0.000	29	-19	0.79	0.000
161	5.24	5.24	146	-33	1.96	-7.	29	-30	0.000	29	-29	1.11	0.000
162	5.24	5.24	422	-37	4.93	49.	233	-35	0.000	233	-34	2.53	0.000
163	5.24	5.24	2148	-43	32.51	1352.	1129	-2	0.077	1126	-2	17.38	0.077
164	5.24	5.24	0.	-12	0.37	-6.	6	-9	0.000	5	-8	0.29	0.000
165	5.24	5.24	0.	-24	0.77	-12.	0.	-17	0.000	0.	-17	0.53	0.000
166	5.24	5.24	0.	-32	1.03	-15.	0.	-26	0.000	0.	-26	0.82	0.000
167	5.24	5.24	0.	-39	1.25	-19.	0.	-33	0.000	0.	-33	1.04	0.000
168	5.24	5.24	2104	-47	31.69	1275.	1096	-14	0.064	1092	-13	16.72	0.064
169	5.24	5.24	0.	-20	0.64	-10.	0.	-16	0.000	0.	-16	0.50	0.000
170	5.24	5.24	0.	-21	0.66	-10.	0.	-18	0.000	0.	-18	0.57	0.000
171	5.24	5.24	0.	-23	0.74	-11.	0.	-21	0.000	0.	-21	0.65	0.000
172	5.24	5.24	0.	-28	0.90	-13.	0.	-25	0.000	0.	-24	0.76	0.000
173	5.24	5.24	2169	-38	32.96	1415.	1157	2	0.084	1154	2	17.84	0.085
174	5.24	5.24	0.	-9	0.29	-4.	0.	-3	0.000	0.	-3	0.09	0.000
175	5.24	5.24	0.	-12	0.39	-6.	0.	-8	0.000	0.	-8	0.25	0.000
176	5.24	5.24	0.	-15	0.47	-7.	0.	-12	0.000	0.	-12	0.38	0.000
177	5.24	5.24	0.	-19	0.61	-9.	0.	-16	0.000	0.	-16	0.49	0.000
178	5.24	5.24	1580	-11	24.29	1193.	857	16	0.087	856	16	13.15	0.087
179	5.24	5.24	386	-7	5.87	254.	317	3	0.027	317	3	4.89	0.027
180	5.24	5.24	0.	-26	0.82	-12.	0.	-10	0.000	0.	-10	0.32	0.000
181	5.24	5.24	0.	-27	0.84	-13.	0.	-17	0.000	0.	-17	0.53	0.000
182	5.24	5.24	424	-22	5.85	145.	185	-15	0.002	185	-15	2.26	0.002
483	5.24	5.24	174	-47	2.56	-11.	156	-43	0.000	155	-42	2.29	0.000
484	5.24	5.24	348	-33	3.98	33.	236	-38	0.000	235	-37	2.64	0.000
485	5.24	5.24	0.	-24	0.76	-11.	0.	-30	0.000	0.	-29	0.92	0.000
486	5.24	5.24	346	-16	4.85	131.	185	-22	0.000	185	-21	2.03	0.000
487	5.24	5.24	534	-7	8.17	375.	425	-8	0.022	425	-8	6.45	0.022
488	5.24	5.24	719	-16	10.84	441.	466	-12	0.022	466	-11	7.00	0.022
489	5.24	5.24	385	-24	5.05	99.	195	-21	0.000	195	-20	2.18	0.001
490	5.24	5.24	0.	-31	0.98	-15.	0.	-28	0.000	0.	-27	0.86	0.000
491	5.24	5.24	458	-41	5.34	52.	269	-37	0.000	269	-36	2.95	0.000
492	5.24	5.24	541	-47	6.33	63.	334	-39	0.000	333	-39	3.64	0.000

ARMATURA SUPERIORE ORIZZONTALE

GUSCI			COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
128	5.24	5.24	232	-4	3.51	148.	265	19	0.054	265	19	3.49	0.054
130	5.24	5.24	0.	-16	0.50	-7.	224	14	0.042	222	14	3.05	0.042
132	5.24	5.24	0.	-15	0.46	-7.	0.	6	0.010	0.	6	0.00	0.011
134	5.24	5.24	0.	-3	0.09	-1.	0.	4	0.007	0.	4	0.00	0.007
136	5.24	5.24	0.	7	0.00	71.	72	11	0.029	72	11	0.00	0.028
138	5.24	5.24	443	-13	6.58	240.	176	2	0.016	178	2	2.75	0.016
139	5.24	5.24	1351	-20	20.61	920.	797	-1	0.055	797	-1	12.31	0.055
140	5.24	5.24	1355	-15	20.75	967.	944	-4	0.062	944	-4	14.55	0.062
141	5.24	5.24	1288	-5	19.85	1011.	889	-4	0.059	889	-3	13.70	0.059
142	5.24	5.24	1191	-1	18.39	972.	879	0.	0.062	879	0.	13.58	0.062
143	5.24	5.24	162	-11	2.09	39.	40	-2	0.001	54	-3	0.73	0.001
144	5.24	5.24	1127	-18	17.18	759.	615	0.	0.043	622	-1	9.60	0.043
145	5.24	5.24	1702	-18	26.09	1228.	1027	-3	0.069	1027	-3	15.84	0.069
146	5.24	5.24	1638	-12	25.19	1234.	1081	-3	0.073	1082	-3	16.68	0.072
147	5.24	5.24	1150	-2	17.75	935.	841	-2	0.057	842	-2	12.99	0.057
148	5.24	5.24	377	-8	5.68	229.	152	0.	0.011	154	-3	2.32	0.008
149	5.24	5.24	1211	-14	18.54	865.	659	-2	0.044	660	-2	10.18	0.044
150	5.24	5.24	1169	-22	17.73	751.	698	-5	0.044	698	-5	10.73	0.044
151	5.24	5.24	1114	-19	16.95	734.	634	-7	0.037	634	-7	9.71	0.037
152	5.24	5.24	1064	-8	16.35	802.	709	-9	0.041	709	-9	10.85	0.041
153	5.24	5.24	0.	-11	0.34	-5.	0.	13	0.024	0.	13	0.00	0.024

154	5.24	5.24	0.	-3	0.08	-1.	0.	8	0.015	0.	8	0.00	0.015
155	5.24	5.24	0.	-5	0.16	-2.	0.	1	0.002	0.	1	0.00	0.002
156	5.24	5.24	0.	-2	0.06	-1.	0.	-3	0.000	0.	-3	0.09	0.000
157	5.24	5.24	0.	-5	0.17	-2.	0.	-5	0.000	0.	-5	0.16	0.000
158	5.24	5.24	119	0.	1.73	55.	59	22	0.049	60	22	0.00	0.049
159	5.24	5.24	0.	12	0.00	111.	0.	20	0.037	0.	19	0.00	0.037
160	5.24	5.24	0.	1	0.00	12.	0.	8	0.014	0.	8	0.00	0.015
161	5.24	5.24	0.	-8	0.25	-4.	0.	-2	0.000	0.	-2	0.05	0.000
162	5.24	5.24	0.	-2	0.06	-1.	0.	-5	0.000	0.	-5	0.16	0.000
163	5.24	5.24	569	-2	8.78	451.	319	4	0.029	321	4	4.96	0.030
164	5.24	5.24	1447	-4	22.33	1161.	804	-4	0.052	805	-4	12.40	0.052
165	5.24	5.24	1336	-15	20.47	958.	794	-6	0.050	794	-6	12.21	0.050
166	5.24	5.24	1287	-19	19.64	879.	754	-9	0.044	755	-9	11.55	0.044
167	5.24	5.24	1290	-16	19.74	908.	836	-10	0.048	836	-10	12.79	0.048
168	5.24	5.24	185	-10	2.52	60.	98	-6	0.002	99	-6	1.29	0.002
169	5.24	5.24	1286	-20	19.61	870.	715	-10	0.040	716	-10	10.93	0.040
170	5.24	5.24	1917	-22	29.36	1370.	1140	-12	0.069	1141	-12	17.49	0.069
171	5.24	5.24	1850	-17	28.40	1364.	1177	-9	0.073	1178	-9	18.10	0.073
172	5.24	5.24	1352	-10	20.80	1022.	925	-5	0.060	925	-5	14.25	0.060
173	5.24	5.24	523	-11	7.89	321.	276	6	0.029	278	6	4.26	0.030
174	5.24	5.24	1584	-15	24.31	1159.	887	-2	0.060	888	-2	13.70	0.060
175	5.24	5.24	1637	-13	25.16	1225.	1002	-1	0.070	1002	-1	15.47	0.070
176	5.24	5.24	1614	-5	24.89	1287.	1002	-5	0.065	1002	-5	15.43	0.065
177	5.24	5.24	1483	-6	22.85	1163.	989	-2	0.067	990	-2	15.27	0.067
178	5.24	5.24	477	4	7.37	430.	271	24	0.065	271	24	3.23	0.065
179	5.24	5.24	245	-7	3.63	130.	198	18	0.049	198	18	2.26	0.049
180	5.24	5.24	0.	-9	0.28	-4.	0.	9	0.017	0.	9	0.00	0.017
181	5.24	5.24	0.	-2	0.07	-1.	0.	3	0.006	0.	3	0.00	0.006
182	5.24	5.24	160	-5	2.35	82.	132	7	0.022	132	7	1.89	0.022
483	5.24	5.24	0.	-9	0.30	-4.	0.	-2	0.000	0.	-2	0.08	0.000
484	5.24	5.24	830	-1	12.81	679.	618	-8	0.035	618	-8	9.44	0.035
485	5.24	5.24	520	-6	7.95	366.	416	0.	0.029	416	0.	6.42	0.029
486	5.24	5.24	882	3	13.63	757.	660	1	0.047	660	1	10.20	0.048
487	5.24	5.24	335	20	4.69	480.	366	18	0.058	366	18	5.29	0.058
488	5.24	5.24	593	5	9.17	541.	432	12	0.051	432	12	6.57	0.051
489	5.24	5.24	1094	-3	16.88	879.	759	0.	0.053	759	0.	11.72	0.053
490	5.24	5.24	649	-4	10.00	502.	467	-2	0.031	467	-2	7.20	0.031
491	5.24	5.24	1070	-12	16.40	770.	741	-9	0.043	741	-9	11.34	0.043
492	5.24	5.24	178	-7	2.57	81.	49	0.	0.003	49	0.	0.76	0.003

ARMATURA SUPERIORE VERTICALE

GUSCI	COMBINAZIONE RARA		COMB. FREQUENTE			COMB. QUASI PERMANENTE							
	Af	Afc	Mom	Nor	σc	σf	Mom	Nor	WkF	Mom	Nor	σc	WkP
128	5.24	5.24	0.	-16	0.52	-8.	57	1	0.006	49	1	0.74	0.005
130	5.24	5.24	887	-19	13.38	544.	627	-6	0.038	627	-6	9.62	0.038
132	5.24	5.24	291	-19	3.77	69.	393	-11	0.017	393	-11	5.86	0.017
134	5.24	5.24	247	-15	3.29	68.	338	-12	0.012	338	-12	4.94	0.013
136	5.24	5.24	490	-8	7.47	329.	511	-9	0.027	515	-9	7.84	0.028
138	5.24	5.24	0.	-40	1.28	-19.	0.	-15	0.000	0.	-14	0.46	0.000
139	5.24	5.24	1294	-23	19.65	844.	653	-16	0.031	654	-15	9.84	0.032
140	5.24	5.24	1149	-19	17.48	761.	768	-15	0.039	767	-15	11.63	0.040
141	5.24	5.24	942	-15	14.35	632.	678	-15	0.033	678	-14	10.24	0.034
142	5.24	5.24	794	-15	12.03	507.	684	-16	0.033	686	-16	10.32	0.033
143	5.24	5.24	0.	-45	1.42	-21.	0.	-23	0.000	0.	-22	0.71	0.000
144	5.24	5.24	1028	-26	15.40	597.	431	-24	0.010	433	-24	5.91	0.010
145	5.24	5.24	1365	-26	20.68	869.	805	-24	0.034	805	-24	11.95	0.034
146	5.24	5.24	1029	-24	15.50	620.	781	-25	0.032	781	-24	11.55	0.032
147	5.24	5.24	601	-23	8.71	278.	588	-27	0.017	588	-26	8.35	0.018
148	5.24	5.24	0.	-34	1.07	-16.	0.	-19	0.000	0.	-19	0.59	0.000
149	5.24	5.24	1261	-28	19.00	764.	617	-23	0.022	618	-22	9.01	0.023
150	5.24	5.24	1083	-36	15.94	552.	687	-28	0.023	687	-27	9.92	0.024
151	5.24	5.24	873	-37	12.51	374.	589	-33	0.013	589	-32	8.01	0.013
152	5.24	5.24	771	-33	11.01	325.	622	-37	0.012	623	-37	8.34	0.012
153	5.24	5.24	0.	-14	0.46	-7.	0.	-5	0.000	0.	-5	0.15	0.000
154	5.24	5.24	237	-27	2.61	11.	88	-18	0.000	88	-18	0.01	0.000
155	5.24	5.24	100	-34	0.46	-23.	69	-30	0.000	68	-30	0.52	0.000
156	5.24	5.24	0.	-41	1.31	-20.	35	-38	0.000	35	-37	0.96	0.000
157	5.24	5.24	0.	-46	1.44	-22.	13	-40	0.000	14	-40	1.18	0.000
158	5.24	5.24	0.	-10	0.31	-5.	0.	10	0.019	0.	10	0.00	0.019
159	5.24	5.24	544	-19	7.94	263.	273	-5	0.015	273	-4	4.16	0.015
160	5.24	5.24	210	-32	0.29	-28.	116	-20	0.000	116	-19	0.12	0.000
161	5.24	5.24	101	-33	0.43	-22.	81	-30	0.000	80	-29	0.43	0.000
162	5.24	5.24	200	-37	0.08	-30.	124	-35	0.000	125	-34	0.30	0.000
163	5.24	5.24	0.	-43	1.37	-21.	0.	-2	0.000	0.	-2	0.05	0.000
164	5.24	5.24	1571	-12	24.15	1183.	771	-9	0.046	772	-8	11.83	0.046
165	5.24	5.24	1462	-24	22.24	970.	867	-17	0.044	867	-17	13.13	0.045
166	5.24	5.24	1181	-32	17.61	660.	746	-26	0.028	746	-26	10.93	0.029
167	5.24	5.24	1068	-39	15.53	504.	789	-33	0.025	789	-33	11.32	0.026
168	5.24	5.24	0.	-47	1.50	-23.	0.	-14	0.000	0.	-13	0.42	0.000
169	5.24	5.24	1296	-20	19.75	872.	563	-16	0.024	564	-16	8.41	0.025
170	5.24	5.24	1809	-21	27.71	1291.	1013	-18	0.053	1014	-18	15.40	0.054
171	5.24	5.24	1432	-23	21.79	953.	985	-21	0.049	985	-21	14.88	0.049
172	5.24	5.24	895	-28	13.21	466.	752	-25	0.030	752	-24	11.10	0.031
173	5.24	5.24	0.	-38	1.22	-18.	0.	2	0.004	0.	2	0.00	0.005
174	5.24	5.24	1593	-9	24.52	1225.	771	-3	0.051	772	-3	11.90	0.051
175	5.24	5.24	1586	-12	24.39	1189.	941	-8	0.058	941	-8	14.46	0.058
176	5.24	5.24	1340	-15	20.53	960.	874	-12	0.049	874	-12	13.36	0.050
177	5.24	5.24	1143	-19	17.38	754.	867	-16	0.045	867	-16	13.17	0.046
178	5.24	5.24	0.	-11	0.36	-5.	0.	16	0.030	0.	16	0.00	0.030
179	5.24	5.24	1224	-7	18.85	947.	656	3	0.051	657	3	10.15	0.051

180	5.24	5.24	618	-26	8.85	265.	491	-10	0.025	491	-10	7.42	0.025
181	5.24	5.24	568	-27	7.99	219.	340	-17	0.009	340	-17	4.75	0.009
182	5.24	5.24	827	-22	12.35	468.	600	-15	0.028	600	-15	9.01	0.028
483	5.24	5.24	93	-47	0.89	-28.	112	-43	0.000	112	-42	0.63	0.000
484	5.24	5.24	582	-33	7.90	182.	486	-38	0.005	486	-37	5.99	0.005
485	5.24	5.24	180	-24	1.97	2.	227	-30	0.000	227	-29	2.48	0.000
486	5.24	5.24	594	-16	8.85	331.	487	-22	0.015	487	-21	6.94	0.015
487	5.24	5.24	621	-7	9.52	446.	562	-8	0.031	562	-8	8.58	0.032
488	5.24	5.24	889	-16	13.50	580.	650	-12	0.034	650	-11	9.87	0.035
489	5.24	5.24	778	-24	11.50	408.	594	-21	0.023	594	-20	8.72	0.023
490	5.24	5.24	308	-31	3.46	22.	295	-28	0.001	295	-27	3.39	0.001
491	5.24	5.24	796	-41	11.02	280.	602	-37	0.011	603	-36	8.04	0.012
492	5.24	5.24	550	-47	6.48	68.	374	-39	0.001	375	-39	4.18	0.001

MACROGUSCI 0 retro_2

VERIFICA ARMATURE EFFETTIVE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
1	SLU SENZA SISMA 1
2	SLU SENZA SISMA 2
3	SLU SENZA SISMA 3
4	SLU SENZA SISMA 4
5	SLU SENZA SISMA 5
6	SLU SENZA SISMA 6
7	SLU SENZA SISMA 7
8	SLU SENZA SISMA 8
22	SLU SISMAX P vuoto
23	SLU SISMAX P vuoto

DATI:

tensione di snervamento acciai o (fyk):	4500	daN/cm2
coefficiente sicurezza acciai o	: 1.15	
deformazione ultima acciai o	: 1.9565	per mille
deformazione ultima cls	: 3.5	per mille
rapporto rottura/snervamento (k):	1	
resistenza cilindrica cls (fck):	249	daN/cm2
coefficiente sicurezza cls	: 1.5	
coefficiente riduttivo (alfa):	0.85	
copri ferro inferiore (asse armatura):	5	cm
copri ferro superiore (asse armatura):	5	cm
moltiplicatore sollecitazioni	: 1	

LEGENDA:

spess = spessore guscio. Verifica effettuata su sezione BxH, con B=1 cm e H="spess" cm
 Af = area disposta al lembo teso, in cm2 al metro
 Afc = area disposta al lembo compresso, in cm2 al metro
 Mom = momento flettente [daNcm/cm]
 Nor = sforzo normale [daN]
 epsC = deformazione cls [per mille]
 epsF = deformazione acciai o [per mille]

<-

L'armatura è sufficiente se le deformazioni dei materiali sono ovunque minori delle corrispondenti deformazioni ultime.

Per gli elementi non dissipativi la permanenza in campo elastico è ottenuta limitando la deformazione dell'acciai o alla deformazione di snervamento (1.9565 per mille) e quella del calcestruzzo al 2 per mille.

GUSCI	AREE ARMATURA (cm2 al metro)									tx	ty	rt
	INF. ORIZZ.			INF. VERTIC.			SUP. ORIZZ.					
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF
213	5.24	0.24	1.09	5.24	0.06	0.23	5.24	0.03	0.42	5.24	0.16	0.58
214	5.24	0.31	1.08	5.24	0.01	-0.01	5.24	0.04	0.12	5.24	0.13	0.45
215	5.24	0.33	1.17	5.24	0.03	0.05	5.24	0.06	0.19	5.24	0.15	0.50
216	5.24	0.33	1.11	5.24	0.08	0.25	5.24	0.13	0.43	5.24	0.22	0.72
217	5.24	0.22	0.74	5.24	0.28	0.98	5.24	0.06	0.21	5.24	0.08	0.26
219	5.24	0.16	0.89	5.24	0.31	1.18	5.24	0.00	0.35	5.24	0.06	0.20
220	5.24	0.26	1.29	5.24	0.09	0.35	5.24	0.00	0.69	5.24	0.22	0.80
222	5.24	0.24	1.30	5.24	0.00	0.14	5.24	0.00	0.39	5.24	0.13	0.62
224	5.24	0.21	1.28	5.24	0.00	0.17	5.24	0.00	0.37	5.24	0.07	0.56
226	5.24	0.16	1.23	5.24	0.00	0.45	5.24	0.00	0.64	5.24	0.10	0.70
228	5.24	0.00	0.46	5.24	0.49	1.67	5.24	0.03	0.83	5.24	0.01	-0.01
229	5.24	0.00	0.32	5.24	0.03	0.08	5.24	0.20	1.20	5.24	0.29	0.98
230	5.24	0.00	0.17	5.24	0.00	0.00	5.24	0.24	1.19	5.24	0.30	1.08
231	5.24	0.00	0.25	5.24	0.00	0.04	5.24	0.21	1.21	5.24	0.24	0.95
232	5.24	0.00	0.30	5.24	0.00	0.11	5.24	0.14	1.21	5.24	0.17	0.84
233	5.24	0.00	0.22	5.24	0.50	1.69	5.24	0.00	0.38	5.24	0.01	-0.01
234	5.24	0.00	0.10	5.24	0.01	-0.01	5.24	0.23	0.97	5.24	0.25	0.81
235	5.24	0.00	0.09	5.24	0.00	0.00	5.24	0.29	1.29	5.24	0.32	1.12
236	5.24	0.00	0.19	5.24	0.00	0.01	5.24	0.29	1.29	5.24	0.26	0.99
237	5.24	0.00	0.27	5.24	0.00	0.07	5.24	0.16	1.18	5.24	0.15	0.75
238	5.24	0.08	0.35	5.24	0.46	1.60	5.24	0.17	0.60	5.24	0.02	0.05
239	5.24	0.03	0.11	5.24	0.03	0.07	5.24	0.27	1.02	5.24	0.29	0.96
240	5.24	0.00	0.01	5.24	0.00	0.00	5.24	0.28	1.06	5.24	0.30	1.06
241	5.24	0.00	0.14	5.24	0.00	0.00	5.24	0.24	1.10	5.24	0.25	0.93
242	5.24	0.00	0.24	5.24	0.00	0.07	5.24	0.17	1.12	5.24	0.18	0.83
497	5.24	0.09	0.96	5.24	0.11	0.54	5.24	0.00	0.69	5.24	0.14	0.67

498	5.24	0.00	0.53	5.24	0.06	0.46	5.24	0.07	1.01	5.24	0.13	0.69
499	5.24	0.00	0.30	5.24	0.00	0.11	5.24	0.00	0.76	5.24	0.00	0.42
500	5.24	0.00	0.55	5.24	0.03	0.48	5.24	0.04	1.05	5.24	0.10	0.71
501	5.24	0.06	0.98	5.24	0.05	0.61	5.24	0.00	0.75	5.24	0.10	0.74

L' ARMATURA È OVUNQUE > DELLA QUANTI TÀ RI CHI ESTA: I L PUNTO 2. 3 DELLE NTC È VERI FICATO (Rd > Ed)

*** VERI FICHE A TAGLIO SECONDO NTC2018 (cap. 7. 4. 4. 5. 1) ***

Vrcd = compressione cls d' anima
Vrds = trazione armatura trasversale
Vrd,s = scorrimento in zona di dissipativa

Quota [cm]	Sezione [cm2]	Af long. [cm2]	Af trasv. [cm2]	Taglio [daN]	Vrcd [daN]	Vrds [daN]	al fas	Vrd,s [daN]
20.0	15750	54.98	54.98	26321	447699	172103	-	-
60.0	15750	54.98	54.98	21641	447874	172103	-	-
100.0	15750	54.98	54.98	21641	447874	172103	-	-
140.0	15750	54.98	54.98	21641	447874	172103	-	-
180.0	15750	54.98	54.98	21270	447840	172103	-	-
220.0	15750	54.98	54.98	21270	447840	172103	-	-
260.0	15750	54.98	54.98	30059	447741	172103	-	-
300.0	15750	54.98	54.98	30059	447741	172103	-	-
340.0	15750	54.98	54.98	38559	447530	172103	-	-
380.0	15750	54.98	54.98	38559	447530	172103	-	-
420.0	15750	54.98	54.98	38559	447530	172103	-	-
460.0	15750	54.98	54.98	44535	447177	172103	-	-
500.0	15750	54.98	54.98	44535	447177	172103	-	-
540.0	15750	54.98	54.98	46584	446965	172103	-	-
565.0	15750	54.98	54.98	46584	446965	172103	-	-

CASI DI CARICO: ->

Nome	Descrizione
26	SLU SI SMA X P v1
27	SLU SI SMA Y P v1
28	SLU SI SMA X P v2
29	SLU SI SMA Y P v2
30	SLU SI SMA X P v3
31	SLU SI SMA Y P v3
32	SLU SI SMA X P v1-2
33	SLU SI SMA Y P v1-2
34	SLU SI SMA X P v1-3
35	SLU SI SMA Y P v1-3
36	SLU SI SMA X P v2-3
37	SLU SI SMA Y P v2-3
38	SLU SI SMA X v1-2-3
39	SLU SI SMA Y v1-2-3

GUSCI	AREE ARMATURA (cm2 al metro)									τx	τy	τt			
	INF. ORI ZZ.			INF. VERTIC.			SUP. ORI ZZ.						SUP. VERTIC.		
	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF	area	EpsC	EpsF			
213	5.24	0.15	0.73	5.24	0.06	0.21	5.24	0.02	0.28	5.24	0.11	0.37			
214	5.24	0.21	0.73	5.24	0.01	-0.01	5.24	0.03	0.09	5.24	0.09	0.29			
215	5.24	0.22	0.79	5.24	0.02	0.02	5.24	0.04	0.15	5.24	0.11	0.34			
216	5.24	0.22	0.75	5.24	0.05	0.15	5.24	0.09	0.32	5.24	0.14	0.48			
217	5.24	0.14	0.50	5.24	0.19	0.67	5.24	0.05	0.16	5.24	0.05	0.16			
219	5.24	0.09	0.58	5.24	0.21	0.79	5.24	0.00	0.30	5.24	0.04	0.13			
220	5.24	0.14	0.85	5.24	0.06	0.22	5.24	0.00	0.39	5.24	0.14	0.52			
222	5.24	0.14	0.87	5.24	0.00	0.09	5.24	0.00	0.25	5.24	0.11	0.38			
224	5.24	0.10	0.87	5.24	0.00	0.11	5.24	0.00	0.28	5.24	0.05	0.38			
226	5.24	0.07	0.83	5.24	0.00	0.30	5.24	0.00	0.44	5.24	0.06	0.48			
228	5.24	0.00	0.31	5.24	0.33	1.15	5.24	0.00	0.59	5.24	0.01	0.03			
229	5.24	0.00	0.24	5.24	0.03	0.10	5.24	0.07	0.85	5.24	0.19	0.69			
230	5.24	0.00	0.16	5.24	0.01	-0.01	5.24	0.13	0.83	5.24	0.20	0.70			
231	5.24	0.00	0.18	5.24	0.00	0.00	5.24	0.11	0.82	5.24	0.17	0.61			
232	5.24	0.00	0.21	5.24	0.00	0.06	5.24	0.05	0.82	5.24	0.11	0.56			
233	5.24	0.00	0.17	5.24	0.34	1.17	5.24	0.00	0.23	5.24	0.01	-0.01			
234	5.24	0.00	0.09	5.24	0.01	-0.01	5.24	0.14	0.65	5.24	0.17	0.53			
235	5.24	0.00	0.07	5.24	0.01	-0.01	5.24	0.17	0.87	5.24	0.21	0.72			
236	5.24	0.00	0.14	5.24	0.00	0.00	5.24	0.17	0.87	5.24	0.18	0.63			
237	5.24	0.00	0.19	5.24	0.00	0.03	5.24	0.07	0.79	5.24	0.11	0.48			
238	5.24	0.05	0.19	5.24	0.31	1.09	5.24	0.11	0.41	5.24	0.01	0.03			
239	5.24	0.00	0.08	5.24	0.04	0.09	5.24	0.16	0.71	5.24	0.19	0.63			
240	5.24	0.00	0.03	5.24	0.01	-0.01	5.24	0.17	0.73	5.24	0.20	0.68			
241	5.24	0.00	0.08	5.24	0.00	0.00	5.24	0.15	0.73	5.24	0.17	0.59			
242	5.24	0.00	0.16	5.24	0.00	0.00	5.24	0.10	0.76	5.24	0.14	0.52			
497	5.24	0.04	0.64	5.24	0.07	0.37	5.24	0.00	0.47	5.24	0.08	0.45			
498	5.24	0.00	0.36	5.24	0.03	0.31	5.24	0.01	0.68	5.24	0.08	0.47			
499	5.24	0.00	0.20	5.24	0.00	0.08	5.24	0.00	0.51	5.24	0.00	0.29			
500	5.24	0.00	0.37	5.24	0.01	0.33	5.24	0.00	0.71	5.24	0.06	0.48			
501	5.24	0.01	0.66	5.24	0.03	0.41	5.24	0.00	0.50	5.24	0.05	0.50			

L' ARMATURA È OVUNQUE > DELLA QUANTI TÀ RI CHI ESTA: I L PUNTO 2. 3 DELLE NTC È VERI FICATO (Rd > Ed)

*** VERI FICHE A TAGLIO SECONDO NTC2018 (cap. 7. 4. 4. 5. 1) ***

Vrcd = compressione cls d' anima

Vr_{sd} = trazione armatura trasversale
Vr_{d,s} = scorrimento in zona di ssi pativa

Quota [cm]	Sezione [cm ²]	Af long. [cm ²]	Af trasv. [cm ²]	Taglio [daN]	Vr _{cd} [daN]	Vr _{sd} [daN]	al fas	Vr _{d,s} [daN]
20.0	15750	54.98	54.98	20826	446674	172103	-	-
60.0	15750	54.98	54.98	17081	446894	172103	-	-
100.0	15750	54.98	54.98	17081	446894	172103	-	-
140.0	15750	54.98	54.98	17081	446894	172103	-	-
180.0	15750	54.98	54.98	15618	447187	172103	-	-
220.0	15750	54.98	54.98	15618	447187	172103	-	-
260.0	15750	54.98	54.98	20279	447254	172103	-	-
300.0	15750	54.98	54.98	20279	447254	172103	-	-
340.0	15750	54.98	54.98	25499	447211	172103	-	-
380.0	15750	54.98	54.98	25499	447211	172103	-	-
420.0	15750	54.98	54.98	25499	447211	172103	-	-
460.0	15750	54.98	54.98	29677	447088	172103	-	-
500.0	15750	54.98	54.98	29677	447088	172103	-	-
540.0	15750	54.98	54.98	31126	446988	172103	-	-
565.0	15750	54.98	54.98	31126	446988	172103	-	-

MACROGUSCIO retro_2

VERIFICHE A FESSURAZIONE (EFFETTO MEMBRANA + PIASTRA)

CASI DI CARICO: ->

Nome	Descrizione
9	RARA 1 (RARA)
10	RARA 2 (RARA)
11	RARA 3 (RARA)
13	RARA 5 (RARA)
14	RARA 6 (RARA)
15	RARA 7 (RARA)
16	RARA 8 (RARA)
17	FREQUENTE 1 (FREQUENTE)
18	FREQUENTE 2 (FREQUENTE)
19	QUASI PERMANENTE (QUASI PERMANENTE)

DATI:

copri ferro inferiore (asse armatura): 5 cm
copri ferro superiore (asse armatura): 5 cm

Af = area effettiva tesa (cm² al metro)

Afc = area effettiva compressa (cm² al metro)

Mom = momento flettente [daNcm/cm]

Nor = sforzo normale [daN]

σ_c = tensione calcestruzzo [daN/cm²]
valore max per combinazione rara = 149.4 daN/cm²
quasi permanente = 112 daN/cm²

σ_f = tensione acciai [daN/cm²]
valore max per combinazione rara = 3600 daN/cm²

wkF = apertura caratteristica per combinazione frequente (mm) - valore max = 0.2 mm
wkP = apertura caratteristica per combinazione quasi permanente (mm) - valore max = 0.2 mm

<-

ARMATURA INFERIORE ORIZZONTALE

GUSCI	COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE					
	Af	Afc	Mom	Nor	σ _c	σ _f	Mom	Nor	σ _c	wkP			
213	5.24	5.24	1324	2	20.45	1110.	843	4	0.066	843	4	13.02	0.066
214	5.24	5.24	1254	-5	19.32	983.	649	-7	0.039	649	-7	9.95	0.039
215	5.24	5.24	1222	-19	18.62	822.	720	-8	0.043	720	-8	11.03	0.043
216	5.24	5.24	1516	-26	23.06	1001.	814	-3	0.055	815	-3	12.57	0.055
217	5.24	5.24	1184	-17	18.07	808.	592	3	0.046	593	3	9.16	0.046
219	5.24	5.24	1212	0.	18.71	999.	626	5	0.053	627	6	9.69	0.053
220	5.24	5.24	1459	5	22.55	1257.	806	12	0.077	806	12	12.42	0.077
222	5.24	5.24	1117	10	17.26	1021.	654	15	0.071	654	15	10.01	0.071
224	5.24	5.24	1159	15	17.88	1114.	537	15	0.064	538	15	8.17	0.064
226	5.24	5.24	1267	10	19.58	1145.	767	16	0.081	767	16	11.76	0.081
228	5.24	5.24	468	0.	7.22	386.	304	0.	0.022	304	1	4.70	0.022
229	5.24	5.24	0.	10	0.00	98.	0.	7	0.013	0.	7	0.00	0.013
230	5.24	5.24	0.	11	0.00	103.	0.	10	0.019	0.	10	0.00	0.019
231	5.24	5.24	0.	17	0.00	165.	0.	13	0.025	0.	13	0.00	0.025
232	5.24	5.24	0.	25	0.00	240.	0.	18	0.034	0.	18	0.00	0.035
233	5.24	5.24	0.	-7	0.21	-3.	0.	0.	0.000	0.	0.	0.00	0.000
234	5.24	5.24	0.	-3	0.10	-2.	0.	1	0.002	0.	1	0.00	0.002
235	5.24	5.24	0.	-4	0.14	-2.	0.	3	0.005	0.	3	0.00	0.005
236	5.24	5.24	0.	4	0.00	33.	0.	8	0.015	0.	8	0.00	0.015
237	5.24	5.24	0.	24	0.00	229.	0.	17	0.032	0.	17	0.00	0.033
238	5.24	5.24	449	-10	6.78	278.	291	-3	0.018	291	-3	4.46	0.018
239	5.24	5.24	0.	-8	0.27	-4.	0.	0.	0.000	0.	0.	0.01	0.000
240	5.24	5.24	0.	-17	0.54	-8.	0.	-5	0.000	0.	-5	0.17	0.000
241	5.24	5.24	0.	-9	0.30	-4.	0.	1	0.001	0.	1	0.00	0.001
242	5.24	5.24	0.	14	0.00	133.	0.	14	0.026	0.	14	0.00	0.026
497	5.24	5.24	1154	21	17.74	1166.	804	19	0.088	804	19	12.29	0.089
498	5.24	5.24	319	30	3.59	577.	190	23	0.060	190	24	1.37	0.061
499	5.24	5.24	0.	30	0.00	291.	0.	25	0.047	0.	25	0.00	0.048
500	5.24	5.24	283	22	3.58	467.	159	20	0.052	160	21	1.03	0.053
501	5.24	5.24	1129	5	17.46	983.	770	12	0.074	770	12	11.86	0.075

ARMATURA INFERIORE VERTICALE

GUSCI	Af	Afc	COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
213	5.24	5.24	449	-15	6.58	223.	205	-17	0.002	205	-16	2.48	0.002
214	5.24	5.24	0.	-32	1.02	-15.	0.	-31	0.000	0.	-31	0.99	0.000
215	5.24	5.24	0.	-45	1.42	-21.	0.	-37	0.000	0.	-37	1.16	0.000
216	5.24	5.24	474	-44	5.42	44.	376	-33	0.002	375	-32	4.42	0.003
217	5.24	5.24	1573	-37	23.64	934.	932	-19	0.047	931	-19	14.09	0.047
219	5.24	5.24	1742	-40	26.22	1048.	1049	-20	0.054	1048	-20	15.88	0.054
220	5.24	5.24	468	-17	6.83	227.	381	-21	0.009	381	-20	5.22	0.009
222	5.24	5.24	0.	-6	0.19	-3.	0.	-13	0.000	0.	-13	0.41	0.000
224	5.24	5.24	0.	2	0.00	15.	0.	-7	0.000	0.	-7	0.22	0.000
226	5.24	5.24	432	-3	6.65	328.	182	-5	0.008	182	-5	2.72	0.008
228	5.24	5.24	2412	-49	36.48	1510.	1470	-39	0.066	1468	-39	21.95	0.067
229	5.24	5.24	0.	-27	0.86	-13.	26	-36	0.000	25	-35	1.28	0.000
230	5.24	5.24	0.	-24	0.76	-11.	0.	-25	0.000	0.	-24	0.77	0.000
231	5.24	5.24	0.	-8	0.24	-4.	0.	-15	0.000	0.	-14	0.46	0.000
232	5.24	5.24	0.	-2	0.05	-1.	0.	-8	0.000	0.	-8	0.24	0.000
233	5.24	5.24	2282	-73	33.66	1181.	1426	-48	0.056	1423	-47	20.92	0.056
234	5.24	5.24	0.	-31	0.98	-15.	0.	-42	0.000	0.	-42	1.33	0.000
235	5.24	5.24	0.	-35	1.11	-17.	0.	-30	0.000	0.	-30	0.94	0.000
236	5.24	5.24	0.	-15	0.49	-7.	0.	-18	0.000	0.	-17	0.54	0.000
237	5.24	5.24	0.	-2	0.06	-1.	0.	-7	0.000	0.	-7	0.22	0.000
238	5.24	5.24	2324	-67	34.54	1268.	1406	-43	0.059	1404	-42	20.80	0.059
239	5.24	5.24	0.	-32	1.01	-15.	45	-40	0.000	44	-39	1.52	0.000
240	5.24	5.24	0.	-35	1.11	-17.	0.	-31	0.000	0.	-31	0.97	0.000
241	5.24	5.24	0.	-20	0.64	-10.	0.	-20	0.000	0.	-19	0.61	0.000
242	5.24	5.24	0.	-7	0.21	-3.	0.	-8	0.000	0.	-8	0.25	0.000
497	5.24	5.24	729	2	11.26	622.	487	-1	0.033	487	-1	7.52	0.034
498	5.24	5.24	439	3	6.79	393.	241	-1	0.016	241	0.	3.73	0.017
499	5.24	5.24	0.	2	0.00	16.	0.	1	0.001	0.	1	0.00	0.002
500	5.24	5.24	415	-3	6.38	315.	219	-3	0.012	219	-3	3.35	0.013
501	5.24	5.24	727	-2	11.22	584.	492	-5	0.030	492	-4	7.56	0.030

ARMATURA SUPERIORE ORIZZONTALE

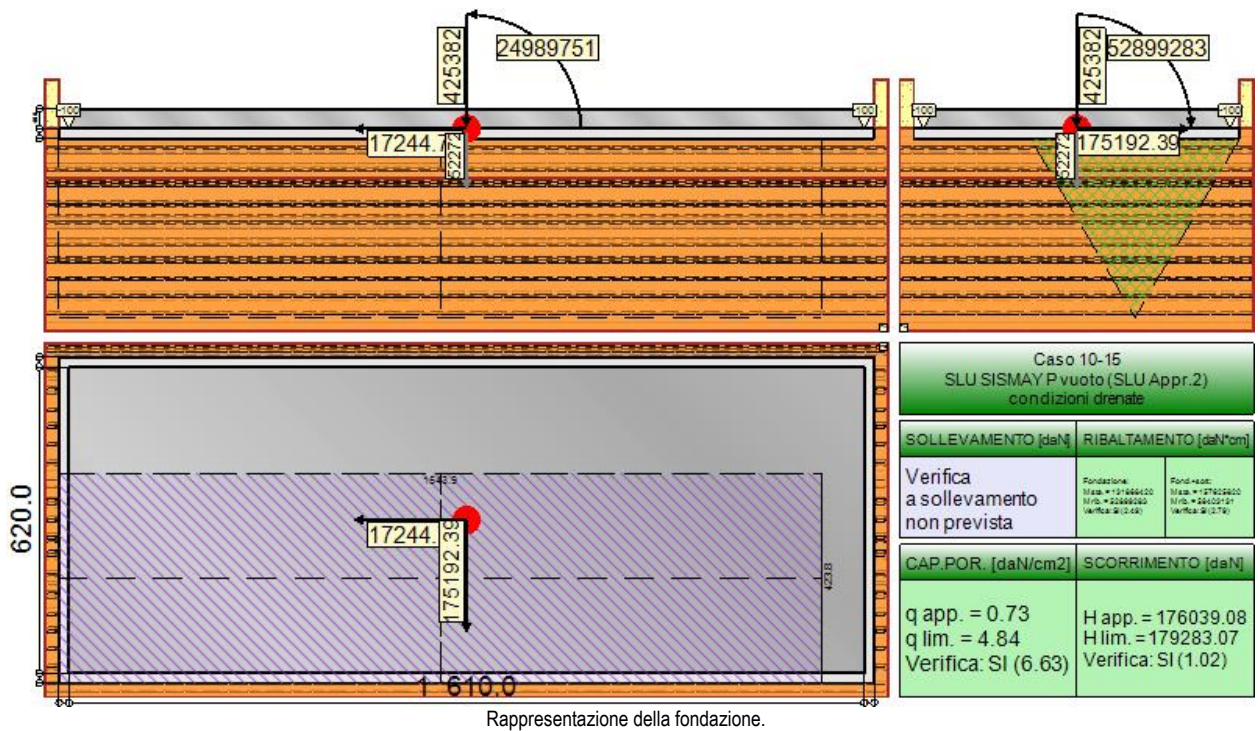
GUSCI	Af	Afc	COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
213	5.24	5.24	45	2	0.68	54.	15	4	0.010	15	4	0.00	0.010
214	5.24	5.24	0.	-5	0.17	-3.	0.	-7	0.000	0.	-7	0.22	0.000
215	5.24	5.24	0.	-19	0.61	-9.	0.	-8	0.000	0.	-8	0.26	0.000
216	5.24	5.24	68	-26	0.38	-16.	184	-3	0.010	183	-3	2.80	0.010
217	5.24	5.24	369	-17	5.19	142.	251	3	0.022	251	3	3.88	0.022
219	5.24	5.24	385	0.	5.95	316.	225	5	0.025	225	6	3.43	0.025
220	5.24	5.24	160	5	2.42	184.	218	12	0.038	217	12	3.07	0.038
222	5.24	5.24	0.	10	0.00	93.	0.	15	0.028	0.	15	0.00	0.028
224	5.24	5.24	0.	15	0.00	147.	0.	15	0.029	0.	15	0.00	0.029
226	5.24	5.24	111	10	1.33	192.	94	16	0.039	94	16	0.00	0.039
228	5.24	5.24	439	0.	6.78	362.	147	0.	0.011	148	1	2.29	0.011
229	5.24	5.24	1549	10	23.94	1384.	855	7	0.071	856	7	13.22	0.071
230	5.24	5.24	1583	11	24.46	1418.	973	10	0.085	973	10	15.03	0.085
231	5.24	5.24	1561	17	24.10	1465.	971	13	0.090	971	13	14.97	0.090
232	5.24	5.24	1482	25	22.81	1480.	997	18	0.100	997	18	15.33	0.101
233	5.24	5.24	108	-7	1.43	29.	16	0.	0.001	17	0.	0.26	0.001
234	5.24	5.24	1196	-3	18.45	957.	624	1	0.046	625	1	9.66	0.046
235	5.24	5.24	1906	-4	29.40	1532.	1112	3	0.082	1113	3	17.20	0.082
236	5.24	5.24	1892	4	29.23	1599.	1208	8	0.097	1208	8	18.67	0.098
237	5.24	5.24	1355	24	20.83	1363.	929	17	0.094	929	17	14.28	0.094
238	5.24	5.24	483	-10	7.31	305.	166	-3	0.009	168	-3	2.55	0.009
239	5.24	5.24	1566	-8	24.11	1210.	867	0.	0.061	868	0.	13.40	0.061
240	5.24	5.24	1553	-17	23.81	1117.	962	-5	0.062	963	-5	14.82	0.062
241	5.24	5.24	1534	-9	23.62	1175.	947	1	0.067	948	1	14.64	0.067
242	5.24	5.24	1473	14	22.76	1359.	988	14	0.092	988	14	15.24	0.093
497	5.24	5.24	590	21	8.84	701.	416	19	0.062	416	19	6.11	0.063
498	5.24	5.24	1148	30	17.48	1256.	807	23	0.097	807	24	12.24	0.098
499	5.24	5.24	609	30	8.80	816.	437	25	0.076	437	25	6.16	0.076
500	5.24	5.24	1136	22	17.43	1167.	796	20	0.091	797	21	12.14	0.092
501	5.24	5.24	633	5	9.78	572.	469	12	0.053	469	12	7.15	0.054

ARMATURA SUPERIORE VERTICALE

GUSCI	Af	Afc	COMBINAZIONE RARA				COMB. FREQUENTE			COMB. QUASI PERMANENTE			
			Mom	Nor	σ_c	σ_f	Mom	Nor	WkF	Mom	Nor	σ_c	WkP
213	5.24	5.24	808	-15	12.25	517.	586	-17	0.025	586	-16	8.73	0.026
214	5.24	5.24	418	-32	5.12	70.	283	-31	0.001	283	-31	3.12	0.001
215	5.24	5.24	499	-45	5.79	54.	424	-37	0.003	423	-37	4.97	0.003
216	5.24	5.24	1124	-44	16.21	504.	640	-33	0.016	640	-32	8.88	0.016
217	5.24	5.24	0.	-37	1.19	-18.	0.	-19	0.000	0.	-19	0.60	0.000
219	5.24	5.24	0.	-40	1.27	-19.	0.	-20	0.000	0.	-20	0.64	0.000
220	5.24	5.24	1192	-17	18.21	821.	686	-21	0.029	686	-20	10.19	0.029
222	5.24	5.24	584	-6	8.95	424.	533	-13	0.025	532	-13	8.00	0.025
224	5.24	5.24	465	2	7.19	400.	316	-7	0.015	316	-7	4.76	0.015
226	5.24	5.24	829	-3	12.79	656.	606	-5	0.037	606	-5	9.32	0.038
228	5.24	5.24	0.	-49	1.56	-23.	0.	-39	0.000	0.	-39	1.22	0.000
229	5.24	5.24	1575	-27	23.95	1036.	753	-36	0.021	753	-35	10.60	0.021
230	5.24	5.24	1644	-24	25.09	1122.	1018	-25	0.048	1018	-24	15.30	0.048
231	5.24	5.24	1372	-8	21.13	1059.	917	-15	0.050	917	-14	13.96	0.050
232	5.24	5.24	1222	-2	18.85	995.	942	-8	0.058	942	-8	14.48	0.059
233	5.24	5.24	0.	-73	2.31	-35.	0.	-48	0.000	0.	-47	1.50	0.000

234	5.24	5.24	1186	-31	17.74	678.	450	-42	0.002	451	-42	5.17	0.002
235	5.24	5.24	1853	-35	28.10	1187.	1059	-30	0.046	1059	-30	15.77	0.047
236	5.24	5.24	1547	-15	23.73	1126.	1103	-18	0.061	1103	-17	16.82	0.061
237	5.24	5.24	962	-2	14.84	776.	828	-7	0.051	828	-7	12.73	0.051
238	5.24	5.24	0.	-67	2.13	-32.	0.	-43	0.000	0.	-42	1.34	0.000
239	5.24	5.24	1578	-32	23.87	991.	761	-40	0.019	761	-39	10.51	0.019
240	5.24	5.24	1601	-35	24.15	979.	998	-31	0.041	998	-31	14.78	0.042
241	5.24	5.24	1358	-20	20.72	924.	903	-20	0.045	903	-19	13.64	0.045
242	5.24	5.24	1224	-7	18.84	946.	938	-8	0.058	938	-8	14.42	0.058
497	5.24	5.24	893	2	13.80	758.	661	-1	0.045	661	-1	10.21	0.046
498	5.24	5.24	871	3	13.45	749.	673	-1	0.047	673	0.	10.40	0.047
499	5.24	5.24	295	2	4.56	261.	293	1	0.021	293	1	4.52	0.022
500	5.24	5.24	856	-3	13.20	680.	664	-3	0.043	664	-3	10.24	0.044
501	5.24	5.24	911	-2	14.06	735.	681	-5	0.043	681	-4	10.48	0.044

10.4 VERIFICHE GEOTECNICHE



Descrizione dei Casi di calcolo e riassunto dei risultati.

Segue il riassunto dei Casi di calcolo analizzati. I dettagli di ciascun Caso (sollecitazioni, verifiche, ecc.) sono specificati nei paragrafi successivi.

Indici e nomi dei casi di carico			Elenco delle verifiche eseguite per ciascun caso				Sisma
Caso	Nome	Sestetti	Ver. dren.	Ver. non dren.	Ver. equ.	Ver. upl.	Coef. sism.
1	SLU SENZA SISMA 1 (SLU Appr.2)	1-1	Si	No	Si	No	Non sismico
1-1 Caso 1-1							
2	SLU SENZA SISMA 2 (SLU Appr.2)	2-1	Si	No	Si	No	Non sismico
2-1 Caso 2-1							
3	SLU SENZA SISMA 3 (SLU Appr.2)	3-1	Si	No	Si	No	Non sismico
3-1 Caso 3-1							
4	SLU SENZA SISMA 4 (SLU Appr.2)	4-1	Si	No	Si	No	Non sismico
4-1 Caso 4-1							
5	SLU SENZA SISMA 5 (SLU Appr.2)	5-1	Si	No	Si	No	Non sismico
5-1 Caso 5-1							
6	SLU SENZA SISMA 6 (SLU Appr.2)	6-1	Si	No	Si	No	Non sismico
6-1 Caso 6-1							
7	SLU SENZA SISMA 7 (SLU Appr.2)	7-1	Si	No	Si	No	Non sismico
7-1 Caso 7-1							
8	SLU SENZA SISMA 8 (SLU Appr.2)	8-1	Si	No	Si	No	Non sismico
8-1 Caso 8-1							
9	SLU SISMAY P vuoto (SLU Appr.2)	da 9-1 a 9-16	Si	No	Si	No	$k_{h,x} = 0.01, k_{h,y} = 0.00$
9-1 Caso 22-1; 9-2 Caso 22-2; 9-3 Caso 22-3; 9-4 Caso 22-4; 9-5 Caso 22-5; 9-6 Caso 22-6; 9-7 Caso 22-7; 9-8 Caso 22-8; 9-9 Caso 22-9; 9-10 Caso 22-10; 9-11 Caso 22-11; 9-12 Caso 22-12; 9-13 Caso 22-13; 9-14 Caso 22-14; 9-15 Caso 22-15; 9-16 Caso 22-16							
10	SLU SISMAY P vuoto (SLU Appr.2)	da 10-1 a 10-16	Si	No	Si	No	$k_{h,x} = 0.00, k_{h,y} = 0.01$
10-1 Caso 23-1; 10-2 Caso 23-2; 10-3 Caso 23-3; 10-4 Caso 23-4; 10-5 Caso 23-5; 10-6 Caso 23-6; 10-7 Caso 23-7; 10-8 Caso 23-8; 10-9 Caso 23-9; 10-10 Caso 23-10; 10-11 Caso 23-11; 10-12 Caso 23-12; 10-13 Caso 23-13; 10-14 Caso 23-14; 10-15 Caso 23-15; 10-16 Caso 23-16							

11	SLU SISMA X P v1 (SLU Appr.2)	da 11-1 a 11-4	Si	No	Si	No	Non sismico
11-1 Caso 26-1; 11-2 Caso 26-2; 11-3 Caso 26-3; 11-4 Caso 26-4							
12	SLU SISMA Y P v1 (SLU Appr.2)	da 12-1 a 12-4	Si	No	Si	No	Non sismico
12-1 Caso 27-1; 12-2 Caso 27-2; 12-3 Caso 27-3; 12-4 Caso 27-4							
13	SLU SISMA X P v2 (SLU Appr.2)	da 13-1 a 13-4	Si	No	Si	No	Non sismico
13-1 Caso 28-1; 13-2 Caso 28-2; 13-3 Caso 28-3; 13-4 Caso 28-4							
14	SLU SISMA Y P v2 (SLU Appr.2)	da 14-1 a 14-4	Si	No	Si	No	Non sismico
14-1 Caso 29-1; 14-2 Caso 29-2; 14-3 Caso 29-3; 14-4 Caso 29-4							
15	SLU SISMA X P v3 (SLU Appr.2)	da 15-1 a 15-4	Si	No	Si	No	Non sismico
15-1 Caso 30-1; 15-2 Caso 30-2; 15-3 Caso 30-3; 15-4 Caso 30-4							
16	SLU SISMA Y P v3 (SLU Appr.2)	da 16-1 a 16-4	Si	No	Si	No	Non sismico
16-1 Caso 31-1; 16-2 Caso 31-2; 16-3 Caso 31-3; 16-4 Caso 31-4							
17	SLU SISMA X P v1- 2 (SLU Appr.2)	da 17-1 a 17-16	Si	No	Si	No	Non sismico
17-1 Caso 32-1; 17-2 Caso 32-2; 17-3 Caso 32-3; 17-4 Caso 32-4; 17-5 Caso 32-5; 17-6 Caso 32-6; 17-7 Caso 32-7; 17-8 Caso 32-8; 17-9 Caso 32-9; 17-10 Caso 32-10; 17-11 Caso 32-11; 17-12 Caso 32-12; 17-13 Caso 32-13; 17-14 Caso 32-14; 17-15 Caso 32-15; 17-16 Caso 32-16							
18	SLU SISMA Y P v1- 2 (SLU Appr.2)	da 18-1 a 18-16	Si	No	Si	No	Non sismico
18-1 Caso 33-1; 18-2 Caso 33-2; 18-3 Caso 33-3; 18-4 Caso 33-4; 18-5 Caso 33-5; 18-6 Caso 33-6; 18-7 Caso 33-7; 18-8 Caso 33-8; 18-9 Caso 33-9; 18-10 Caso 33-10; 18-11 Caso 33-11; 18-12 Caso 33-12; 18-13 Caso 33-13; 18-14 Caso 33-14; 18-15 Caso 33-15; 18-16 Caso 33-16							
19	SLU SISMA X P v1- 3 (SLU Appr.2)	da 19-1 a 19-16	Si	No	Si	No	Non sismico
19-1 Caso 34-1; 19-2 Caso 34-2; 19-3 Caso 34-3; 19-4 Caso 34-4; 19-5 Caso 34-5; 19-6 Caso 34-6; 19-7 Caso 34-7; 19-8 Caso 34-8; 19-9 Caso 34-9; 19-10 Caso 34-10; 19-11 Caso 34-11; 19-12 Caso 34-12; 19-13 Caso 34-13; 19-14 Caso 34-14; 19-15 Caso 34-15; 19-16 Caso 34-16							
20	SLU SISMA Y P v1- 3 (SLU Appr.2)	da 20-1 a 20-16	Si	No	Si	No	Non sismico
20-1 Caso 35-1; 20-2 Caso 35-2; 20-3 Caso 35-3; 20-4 Caso 35-4; 20-5 Caso 35-5; 20-6 Caso 35-6; 20-7 Caso 35-7; 20-8 Caso 35-8; 20-9 Caso 35-9; 20-10 Caso 35-10; 20-11 Caso 35-11; 20-12 Caso 35-12; 20-13 Caso 35-13; 20-14 Caso 35-14; 20-15 Caso 35-15; 20-16 Caso 35-16							
21	SLU SISMA X P v2- 3 (SLU Appr.2)	da 21-1 a 21-16	Si	No	Si	No	Non sismico
21-1 Caso 36-1; 21-2 Caso 36-2; 21-3 Caso 36-3; 21-4 Caso 36-4; 21-5 Caso 36-5; 21-6 Caso 36-6; 21-7 Caso 36-7; 21-8 Caso 36-8; 21-9 Caso 36-9; 21-10 Caso 36-10; 21-11 Caso 36-11; 21-12 Caso 36-12; 21-13 Caso 36-13; 21-14 Caso 36-14; 21-15 Caso 36-15; 21-16 Caso 36-16							
22	SLU SISMA Y P v2- 3 (SLU Appr.2)	da 22-1 a 22-16	Si	No	Si	No	Non sismico
22-1 Caso 37-1; 22-2 Caso 37-2; 22-3 Caso 37-3; 22-4 Caso 37-4; 22-5 Caso 37-5; 22-6 Caso 37-6; 22-7 Caso 37-7; 22-8 Caso 37-8; 22-9 Caso 37-9; 22-10 Caso 37-10; 22-11 Caso 37-11; 22-12 Caso 37-12; 22-13 Caso 37-13; 22-14 Caso 37-14; 22-15 Caso 37-15; 22-16 Caso 37-16							
23	SLU SISMA X v1-2- 3 (SLU Appr.2)	da 23-1 a 23-64	Si	No	Si	No	Non sismico
23-1 Caso 38-1; 23-2 Caso 38-2; 23-3 Caso 38-3; 23-4 Caso 38-4; 23-5 Caso 38-5; 23-6 Caso 38-6; 23-7 Caso 38-7; 23-8 Caso 38-8; 23-9 Caso 38-9; 23-10 Caso 38-10; 23-11 Caso 38-11; 23-12 Caso 38-12; 23-13 Caso 38-13; 23-14 Caso 38-14; 23-15 Caso 38-15; 23-16 Caso 38-16; 23-17 Caso 38-17; 23-18 Caso 38-18; 23-19 Caso 38-19; 23-20 Caso 38-20; 23-21 Caso 38-21; 23-22 Caso 38-22; 23-23 Caso 38-23; 23-24 Caso 38-24; 23-25 Caso 38-25; 23-26 Caso 38-26; 23-27 Caso 38-27; 23-28 Caso 38-28; 23-29 Caso 38-29; 23-30 Caso 38-30; 23-31 Caso 38-31; 23-32 Caso 38-32; 23-33 Caso 38-33; 23-34 Caso 38-34; 23-35 Caso 38-35; 23-36 Caso 38-36; 23-37 Caso 38-37; 23-38 Caso 38-38; 23-39 Caso 38-39; 23-40 Caso 38-40; 23-41 Caso 38-41; 23-42 Caso 38-42; 23-43 Caso 38-43; 23-44 Caso 38-44; 23-45 Caso 38-45; 23-46 Caso 38-46; 23-47 Caso 38-47; 23-48 Caso 38-48; 23-49 Caso 38-49; 23-50 Caso 38-50; 23-51 Caso 38-51; 23-52 Caso 38-52; 23-53 Caso 38-53; 23-54 Caso 38-54; 23-55 Caso 38-55; 23-56 Caso 38-56; 23-57 Caso 38-57; 23-58 Caso 38-58; 23-59 Caso 38-59; 23-60 Caso 38-60; 23-61 Caso 38-61; 23-62 Caso 38-62; 23-63 Caso 38-63; 23-64 Caso 38-64							
24	SLU SISMA Y v1-2- 3 (SLU Appr.2)	da 24-1 a 24-64	Si	No	Si	No	Non sismico
24-1 Caso 39-1; 24-2 Caso 39-2; 24-3 Caso 39-3; 24-4 Caso 39-4; 24-5 Caso 39-5; 24-6 Caso 39-6; 24-7 Caso 39-7; 24-8 Caso 39-8; 24-9 Caso 39-9; 24-10 Caso 39-10; 24-11 Caso 39-11; 24-12 Caso 39-12; 24-13 Caso 39-13; 24-14 Caso 39-14; 24-15 Caso 39-15; 24-16 Caso 39-16; 24-17 Caso 39-17; 24-18 Caso 39-18; 24-19 Caso 39-19; 24-20 Caso 39-20; 24-21 Caso 39-21; 24-22 Caso 39-22; 24-23 Caso 39-23; 24-24 Caso 39-24; 24-25 Caso 39-25; 24-26 Caso 39-26; 24-27 Caso 39-27; 24-28 Caso 39-28; 24-29 Caso 39-29; 24-30 Caso 39-30; 24-31 Caso 39-31; 24-32 Caso 39-32; 24-33 Caso 39-33; 24-34 Caso 39-34; 24-35 Caso 39-35; 24-36 Caso 39-36; 24-37 Caso 39-37; 24-38 Caso 39-38; 24-39 Caso 39-39; 24-40 Caso 39-40; 24-41 Caso 39-41; 24-42 Caso 39-42; 24-43 Caso 39-43; 24-44 Caso 39-44; 24-45 Caso 39-45; 24-46 Caso 39-46; 24-47 Caso 39-47; 24-48 Caso 39-48; 24-49 Caso 39-49; 24-50 Caso 39-50; 24-51 Caso 39-51; 24-52 Caso 39-52; 24-53 Caso 39-53; 24-54 Caso 39-54; 24-55 Caso 39-55; 24-56 Caso 39-56; 24-57 Caso 39-57; 24-58 Caso 39-58; 24-59 Caso 39-59; 24-60 Caso 39-60; 24-61 Caso 39-61; 24-62 Caso 39-62; 24-63 Caso 39-63; 24-64 Caso 39-64							
25	SLD SISMAX P vuoto (SLD)	da 25-1 a 25-16	Si	No	Si	No	$k_{h,x}=0.01, k_{h,y}=0.00$
25-1 Caso 24-1; 25-2 Caso 24-2; 25-3 Caso 24-3; 25-4 Caso 24-4; 25-5 Caso 24-5; 25-6 Caso 24-6; 25-7 Caso 24-7; 25-8 Caso 24-8; 25-9 Caso 24-9; 25-10 Caso 24-10; 25-11 Caso 24-11; 25-12 Caso 24-12; 25-13 Caso 24-13; 25-14 Caso 24-14; 25-15 Caso 24-15; 25-16 Caso 24-16							
26	SLD SISMAX P vuoto (SLD)	da 26-1 a 26-16	Si	No	Si	No	$k_{h,x}=0.00, k_{h,y}=0.01$
26-1 Caso 25-1; 26-2 Caso 25-2; 26-3 Caso 25-3; 26-4 Caso 25-4; 26-5 Caso 25-5; 26-6 Caso 25-6; 26-7 Caso 25-7; 26-8 Caso 25-8; 26-9 Caso 25-9; 26-10 Caso 25-10; 26-11 Caso 25-11; 26-12 Caso 25-12; 26-13 Caso 25-13; 26-14 Caso 25-14; 26-15 Caso 25-15; 26-16 Caso 25-16							
27	SLD SISMA P X v1- 2-3 (SLD)	da 27-1 a 27-64	Si	No	Si	No	$k_{h,x}=0.00, k_{h,y}=0.00$
27-1 Caso 40-1; 27-2 Caso 40-2; 27-3 Caso 40-3; 27-4 Caso 40-4; 27-5 Caso 40-5; 27-6 Caso 40-6; 27-7 Caso 40-7; 27-8 Caso 40-8; 27-9 Caso 40-9; 27-10 Caso 40-10;							

27-11 Caso 40-11; 27-12 Caso 40-12; 27-13 Caso 40-13; 27-14 Caso 40-14; 27-15 Caso 40-15; 27-16 Caso 40-16; 27-17 Caso 40-17; 27-18 Caso 40-18; 27-19 Caso 40-19; 27-20 Caso 40-20; 27-21 Caso 40-21; 27-22 Caso 40-22; 27-23 Caso 40-23; 27-24 Caso 40-24; 27-25 Caso 40-25; 27-26 Caso 40-26; 27-27 Caso 40-27; 27-28 Caso 40-28; 27-29 Caso 40-29; 27-30 Caso 40-30; 27-31 Caso 40-31; 27-32 Caso 40-32; 27-33 Caso 40-33; 27-34 Caso 40-34; 27-35 Caso 40-35; 27-36 Caso 40-36; 27-37 Caso 40-37; 27-38 Caso 40-38; 27-39 Caso 40-39; 27-40 Caso 40-40; 27-41 Caso 40-41; 27-42 Caso 40-42; 27-43 Caso 40-43; 27-44 Caso 40-44; 27-45 Caso 40-45; 27-46 Caso 40-46; 27-47 Caso 40-47; 27-48 Caso 40-48; 27-49 Caso 40-49; 27-50 Caso 40-50; 27-51 Caso 40-51; 27-52 Caso 40-52; 27-53 Caso 40-53; 27-54 Caso 40-54; 27-55 Caso 40-55; 27-56 Caso 40-56; 27-57 Caso 40-57; 27-58 Caso 40-58; 27-59 Caso 40-59; 27-60 Caso 40-60; 27-61 Caso 40-61; 27-62 Caso 40-62; 27-63 Caso 40-63; 27-64 Caso 40-64

28	SLD SISMA P Y v1.2-3 (SLD)	da 28-1 a 28-64	Si	No	Si	No	$k_{hx}=0.00, k_{hy}=0.00$
28-1 Caso 41-1; 28-2 Caso 41-2; 28-3 Caso 41-3; 28-4 Caso 41-4; 28-5 Caso 41-5; 28-6 Caso 41-6; 28-7 Caso 41-7; 28-8 Caso 41-8; 28-9 Caso 41-9; 28-10 Caso 41-10; 28-11 Caso 41-11; 28-12 Caso 41-12; 28-13 Caso 41-13; 28-14 Caso 41-14; 28-15 Caso 41-15; 28-16 Caso 41-16; 28-17 Caso 41-17; 28-18 Caso 41-18; 28-19 Caso 41-19; 28-20 Caso 41-20; 28-21 Caso 41-21; 28-22 Caso 41-22; 28-23 Caso 41-23; 28-24 Caso 41-24; 28-25 Caso 41-25; 28-26 Caso 41-26; 28-27 Caso 41-27; 28-28 Caso 41-28; 28-29 Caso 41-29; 28-30 Caso 41-30; 28-31 Caso 41-31; 28-32 Caso 41-32; 28-33 Caso 41-33; 28-34 Caso 41-34; 28-35 Caso 41-35; 28-36 Caso 41-36; 28-37 Caso 41-37; 28-38 Caso 41-38; 28-39 Caso 41-39; 28-40 Caso 41-40; 28-41 Caso 41-41; 28-42 Caso 41-42; 28-43 Caso 41-43; 28-44 Caso 41-44; 28-45 Caso 41-45; 28-46 Caso 41-46; 28-47 Caso 41-47; 28-48 Caso 41-48; 28-49 Caso 41-49; 28-50 Caso 41-50; 28-51 Caso 41-51; 28-52 Caso 41-52; 28-53 Caso 41-53; 28-54 Caso 41-54; 28-55 Caso 41-55; 28-56 Caso 41-56; 28-57 Caso 41-57; 28-58 Caso 41-58; 28-59 Caso 41-59; 28-60 Caso 41-60; 28-61 Caso 41-61; 28-62 Caso 41-62; 28-63 Caso 41-63; 28-64 Caso 41-64							

La seguente tabella elenca i coefficienti di sicurezza parziali, applicati alle caratteristiche meccaniche del terreno, alla capacità portante, alla resistenza a scorrimento e del terreno, per ciascun Caso di calcolo.

Caso	$\gamma_{G1,fav}$	$\gamma_{G1,sfa}$	$\gamma_{G2,fav}$	$\gamma_{G2,sfa}$	$\gamma_{Q1,fav}$	$\gamma_{Q1,sfa}$
1	1.00	1.30	0.80	1.50	0.00	1.50
2	1.00	1.30	0.80	1.50	0.00	1.50
3	1.00	1.30	0.80	1.50	0.00	1.50
4	1.00	1.30	0.80	1.50	0.00	1.50
5	1.00	1.30	0.80	1.50	0.00	1.50
6	1.00	1.30	0.80	1.50	0.00	1.50
7	1.00	1.30	0.80	1.50	0.00	1.50
8	1.00	1.30	0.80	1.50	0.00	1.50
9	1.00	1.00	1.00	1.00	1.00	1.00
10	1.00	1.00	1.00	1.00	1.00	1.00
11	1.00	1.30	0.80	1.50	0.00	1.50
12	1.00	1.30	0.80	1.50	0.00	1.50
13	1.00	1.30	0.80	1.50	0.00	1.50
14	1.00	1.30	0.80	1.50	0.00	1.50
15	1.00	1.30	0.80	1.50	0.00	1.50
16	1.00	1.30	0.80	1.50	0.00	1.50
17	1.00	1.30	0.80	1.50	0.00	1.50
18	1.00	1.30	0.80	1.50	0.00	1.50
19	1.00	1.30	0.80	1.50	0.00	1.50
20	1.00	1.30	0.80	1.50	0.00	1.50
21	1.00	1.30	0.80	1.50	0.00	1.50
22	1.00	1.30	0.80	1.50	0.00	1.50
23	1.00	1.30	0.80	1.50	0.00	1.50
24	1.00	1.30	0.80	1.50	0.00	1.50
25	-	-	-	-	-	-
26	-	-	-	-	-	-
27	-	-	-	-	-	-
28	-	-	-	-	-	-

Caso	γ_r	γ_{ϕ}	γ_c	γ_{Rv}	γ_{Rh}	γ_{R_s}	$\gamma_{R_{req}}$	$\gamma_{R_{upl}}$
1	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
2	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
3	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
4	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
5	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
6	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
7	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
8	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
9	-	-	-	1.80	1.10	1.30	1.00	1.00
10	-	-	-	1.80	1.10	1.30	1.00	1.00
11	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
12	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
13	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
14	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
15	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
16	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
17	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
18	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
19	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
20	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00

21	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
22	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
23	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
24	1.00	1.00	1.00	2.30	1.10	1.00	1.00	1.00
25	-	-	-	2.30	1.10	1.30	-	-
26	-	-	-	2.30	1.10	1.30	-	-
27	-	-	-	2.30	1.10	1.30	-	-
28	-	-	-	2.30	1.10	1.30	-	-

Segue la tabella riassuntiva di tutte le verifiche a **ribaltamento**.

Caso	Fondazione			Fondazione e Sottofondo		
	R_d [daN*cm]	E_d [daN*cm]	Verifica	R_d [daN*cm]	E_d [daN*cm]	Verifica
1-1	182165300	58927770	SI (182165300/58927770 = 3.09 >= 1.0)	216342590	63328470	SI (216342590/63328470 = 3.42 >= 1.0)
2-1	229039780	58902490	SI (229039780/58902490 = 3.89 >= 1.0)	266241230	63303190	SI (266241230/63303190 = 4.21 >= 1.0)
3-1	218496370	50088510	SI (218496370/50088510 = 4.36 >= 1.0)	255017600	54489210	SI (255017600/54489210 = 4.68 >= 1.0)
4-1	216406040	68781150	SI (216406040/68781150 = 3.15 >= 1.0)	252792410	73181850	SI (252792410/73181850 = 3.45 >= 1.0)
5-1	265371160	50063230	SI (265371160/50063230 = 5.30 >= 1.0)	304916570	54463930	SI (304916570/54463930 = 5.60 >= 1.0)
6-1	263280830	68755870	SI (263280830/68755870 = 3.83 >= 1.0)	302691380	73156570	SI (302691380/73156570 = 4.14 >= 1.0)
7-1	252737420	59941890	SI (252737420/59941890 = 4.22 >= 1.0)	291467750	64342590	SI (291467750/64342590 = 4.53 >= 1.0)
8-1	299611900	59916610	SI (299611900/59916610 = 5.00 >= 1.0)	341366390	64317310	SI (341366390/64317310 = 5.31 >= 1.0)
9-1	131829050	37359200	SI (131829050/37359200 = 3.53 >= 1.0)	157583910	40227150	SI (157583910/40227150 = 3.92 >= 1.0)
9-2	131829050	37359020	SI (131829050/37359020 = 3.53 >= 1.0)	157583910	40226970	SI (157583910/40226970 = 3.92 >= 1.0)
9-3	131825330	43980160	SI (131825330/43980160 = 3.00 >= 1.0)	157579950	47084980	SI (157579950/47084980 = 3.35 >= 1.0)
9-4	131825330	43979990	SI (131825330/43979990 = 3.00 >= 1.0)	157579950	47084800	SI (157579950/47084800 = 3.35 >= 1.0)
9-5	131829050	37359290	SI (131829050/37359290 = 3.53 >= 1.0)	157583910	40227240	SI (157583910/40227240 = 3.92 >= 1.0)
9-6	131829050	37359110	SI (131829050/37359110 = 3.53 >= 1.0)	157583910	40227060	SI (157583910/40227060 = 3.92 >= 1.0)
9-7	131825330	43980260	SI (131825330/43980260 = 3.00 >= 1.0)	157579950	47085080	SI (157579950/47085080 = 3.35 >= 1.0)
9-8	131825330	43980080	SI (131825330/43980080 = 3.00 >= 1.0)	157579950	47084900	SI (157579950/47084900 = 3.35 >= 1.0)
9-9	131827190	37336250	SI (131827190/37336250 = 3.53 >= 1.0)	157581930	40204200	SI (157581930/40204200 = 3.92 >= 1.0)
9-10	131827190	37336070	SI (131827190/37336070 = 3.53 >= 1.0)	157581930	40204020	SI (157581930/40204020 = 3.92 >= 1.0)
9-11	131834320	43946700	SI (131834320/43946700 = 3.00 >= 1.0)	157589520	47051520	SI (157589520/47051520 = 3.35 >= 1.0)
9-12	131834630	43946290	SI (131834630/43946290 = 3.00 >= 1.0)	157589850	47051110	SI (157589850/47051110 = 3.35 >= 1.0)
9-13	131827190	37336340	SI (131827190/37336340 = 3.53 >= 1.0)	157581930	40204290	SI (157581930/40204290 = 3.92 >= 1.0)
9-14	131827190	37336160	SI (131827190/37336160 = 3.53 >= 1.0)	157581930	40204110	SI (157581930/40204110 = 3.92 >= 1.0)
9-15	131834630	43946700	SI (131834630/43946700 = 3.00 >= 1.0)	157589850	47051510	SI (157589850/47051510 = 3.35 >= 1.0)
9-16	131834630	43946290	SI (131834630/43946290 = 3.00 >= 1.0)	157589850	47051100	SI (157589850/47051100 = 3.35 >= 1.0)
10-1	131830290	30873980	SI (131830290/30873980 = 4.27 >= 1.0)	157585230	33588270	SI (157585230/33588270 = 4.69 >= 1.0)
10-2	131830290	30874010	SI (131830290/30874010 = 4.27 >= 1.0)	157585230	33588300	SI (157585230/33588300 = 4.69 >= 1.0)
10-3	131829670	30867090	SI (131829670/30867090 = 4.27 >= 1.0)	157584570	33581390	SI (157584570/33581390 = 4.69 >= 1.0)
10-4	131829670	30867120	SI (131829670/30867120 = 4.27 >= 1.0)	157584570	33581420	SI (157584570/33581420 = 4.69 >= 1.0)
10-5	131830290	30873380	SI (131830290/30873380 = 4.27 >= 1.0)	157585230	33587680	SI (157585230/33587680 = 4.69 >= 1.0)
10-6	131830290	30873410	SI (131830290/30873410 = 4.27 >= 1.0)	157585230	33587710	SI (157585230/33587710 = 4.69 >= 1.0)
10-7	131829670	30866500	SI (131829670/30866500 = 4.27 >= 1.0)	157584570	33580800	SI (157584570/33580800 = 4.69 >= 1.0)
10-8	131829670	30866530	SI (131829670/30866530 = 4.27 >= 1.0)	157584570	33580820	SI (157584570/33580820 = 4.69 >= 1.0)
10-9	131894150	52882690	SI (131894150/52882690 = 2.49 >= 1.0)	157653210	56386530	SI (157653210/56386530 = 2.80 >= 1.0)
10-10	131894460	52882450	SI (131894460/52882450 = 2.49 >= 1.0)	157653540	56386300	SI (157653540/56386300 = 2.80 >= 1.0)
10-11	131869970	52898250	SI (131869970/52898250 = 2.49 >= 1.0)	157627470	56402100	SI (157627470/56402100 = 2.79 >= 1.0)
10-12	131870280	52898080	SI (131870280/52898080 = 2.49 >= 1.0)	157627800	56401930	SI (157627800/56401930 = 2.79 >= 1.0)
10-13	131891050	52885260	SI (131891050/52885260 = 2.49 >= 1.0)	157649910	56389100	SI (157649910/56389100 = 2.80 >= 1.0)
10-14	131891360	52885020	SI (131891360/52885020 = 2.49 >= 1.0)	157650240	56388870	SI (157650240/56388870 = 2.80 >= 1.0)
10-15	131868420	52899280	SI (131868420/52899280 = 2.49 >= 1.0)	157625820	56403130	SI (157625820/56403130 = 2.79 >= 1.0)
10-16	131868730	52899110	SI (131868730/52899110 = 2.49 >= 1.0)	157626150	56402960	SI (157626150/56402960 = 2.79 >= 1.0)
11-1	162963590	39230920	SI (162963590/39230920 = 4.15 >= 1.0)	195902060	42064930	SI (195902060/42064930 = 4.66 >= 1.0)
11-2	163195780	39222850	SI (163195780/39222850 = 4.16 >= 1.0)	196149230	42056860	SI (196149230/42056860 = 4.66 >= 1.0)
11-3	162962970	40991750	SI (162962970/40991750 = 3.98 >= 1.0)	195901400	44025350	SI (195901400/44025350 = 4.45 >= 1.0)
11-4	163194850	40983690	SI (163194850/40983690 = 3.98 >= 1.0)	196148240	44017280	SI (196148240/44017280 = 4.46 >= 1.0)
12-1	163046050	37173780	SI (163046050/37173780 = 4.39 >= 1.0)	195989840	39774940	SI (195989840/39774940 = 4.93 >= 1.0)
12-2	163042950	43043240	SI (163042950/43043240 = 3.79 >= 1.0)	195986540	46309690	SI (195986540/46309690 = 4.23 >= 1.0)
12-3	163115490	37171360	SI (163115490/37171360 = 4.39 >= 1.0)	196063760	39772520	SI (196063760/39772520 = 4.93 >= 1.0)
12-4	163112700	43040820	SI (163112700/43040820 = 3.79 >= 1.0)	196060790	46307270	SI (196060790/46307270 = 4.23 >= 1.0)
13-1	155954180	33551910	SI (155954180/33551910 = 4.65 >= 1.0)	188440430	36400510	SI (188440430/36400510 = 5.18 >= 1.0)
13-2	156138940	33500260	SI (156138940/33500260 = 4.66 >= 1.0)	188637110	36348860	SI (188637110/36348860 = 5.19 >= 1.0)
13-3	155961930	34962380	SI (155961930/34962380 = 4.46 >= 1.0)	188448680	37981380	SI (188448680/37981380 = 4.96 >= 1.0)
13-4	156146690	34910720	SI (156146690/34910720 = 4.47 >= 1.0)	188645360	37929720	SI (188645360/37929720 = 4.97 >= 1.0)
14-1	156009670	31888290	SI (156009670/31888290 = 4.89 >= 1.0)	188499500	34538100	SI (188499500/34538100 = 5.46 >= 1.0)
14-2	156035400	36589840	SI (156035400/36589840 = 4.26 >= 1.0)	188526890	39807640	SI (188526890/39807640 = 4.74 >= 1.0)
14-3	156065160	31872790	SI (156065160/31872790 = 4.90 >= 1.0)	188558570	34522600	SI (188558570/34522600 = 5.46 >= 1.0)
14-4	156090890	36574350	SI (156090890/36574350 = 4.27 >= 1.0)	188585960	39792140	SI (188585960/39792140 = 4.74 >= 1.0)
15-1	154572510	45996690	SI (154572510/45996690 = 3.36 >= 1.0)	186996920	48848330	SI (186996920/48848330 = 3.83 >= 1.0)
15-2	154743630	46039920	SI (154743630/46039920 = 3.36 >= 1.0)	187151780	48891560	SI (187151780/48891560 = 3.83 >= 1.0)

15-3	154570030	47346230	SI (154570030/47346230 = 3.26 >= 1.0)	186966980	50362200	SI (186966980/50362200 = 3.71 >= 1.0)
15-4	154741150	47389460	SI (154741150/47389460 = 3.27 >= 1.0)	187149140	50405430	SI (187149140/50405430 = 3.71 >= 1.0)
16-1	154635130	44437360	SI (154635130/44437360 = 3.48 >= 1.0)	187036280	47097270	SI (187036280/47097270 = 3.97 >= 1.0)
16-2	154627070	48935830	SI (154627070/48935830 = 3.16 >= 1.0)	187027700	52143520	SI (187027700/52143520 = 3.59 >= 1.0)
16-3	154686280	44450330	SI (154686280/44450330 = 3.48 >= 1.0)	187090730	47110240	SI (187090730/47110240 = 3.97 >= 1.0)
16-4	154678530	48948800	SI (154678530/48948800 = 3.16 >= 1.0)	187082480	52156490	SI (187082480/52156490 = 3.59 >= 1.0)
17-1	187088410	32658670	SI (187088410/32658670 = 5.73 >= 1.0)	221583320	35407480	SI (221583320/35407480 = 6.26 >= 1.0)
17-2	187320290	32650600	SI (187320290/32650600 = 5.74 >= 1.0)	221830160	35399410	SI (221830160/35399410 = 6.27 >= 1.0)
17-3	187087480	34419510	SI (187087480/34419510 = 5.44 >= 1.0)	221582330	37367900	SI (221582330/37367900 = 5.93 >= 1.0)
17-4	187319360	34411440	SI (187319360/34411440 = 5.44 >= 1.0)	221829170	37359840	SI (221829170/37359840 = 5.94 >= 1.0)
17-5	187272860	32607020	SI (187272860/32607020 = 5.74 >= 1.0)	221779670	35355830	SI (221779670/35355830 = 6.27 >= 1.0)
17-6	187505050	32598950	SI (187505050/32598950 = 5.75 >= 1.0)	222026840	35347760	SI (222026840/35347760 = 6.28 >= 1.0)
17-7	187272240	34367860	SI (187272240/34367860 = 5.45 >= 1.0)	221779010	37316250	SI (221779010/37316250 = 5.94 >= 1.0)
17-8	187504120	34359790	SI (187504120/34359790 = 5.46 >= 1.0)	222025850	37308180	SI (222025850/37308180 = 5.95 >= 1.0)
17-9	187096160	34069140	SI (187096160/34069140 = 5.49 >= 1.0)	221591570	36988340	SI (221591570/36988340 = 5.99 >= 1.0)
17-10	187328040	34061070	SI (187328040/34061070 = 5.50 >= 1.0)	221838410	36980270	SI (221838410/36980270 = 6.00 >= 1.0)
17-11	187095230	35829970	SI (187095230/35829970 = 5.22 >= 1.0)	221590580	38948760	SI (221590580/38948760 = 5.69 >= 1.0)
17-12	187327110	35821900	SI (187327110/35821900 = 5.23 >= 1.0)	221837420	38940700	SI (221837420/38940700 = 5.70 >= 1.0)
17-13	187280610	34017480	SI (187280610/34017480 = 5.51 >= 1.0)	221787920	36936690	SI (221787920/36936690 = 6.00 >= 1.0)
17-14	187512800	34009420	SI (187512800/34009420 = 5.51 >= 1.0)	222035090	36928620	SI (222035090/36928620 = 6.01 >= 1.0)
17-15	187279990	35778320	SI (187279990/35778320 = 5.23 >= 1.0)	221877260	38897110	SI (221877260/38897110 = 5.70 >= 1.0)
17-16	187511870	35770250	SI (187511870/35770250 = 5.24 >= 1.0)	222034100	38889040	SI (222034100/38889040 = 5.71 >= 1.0)
18-1	486183780	75241290	SI (486183780/75241290 = 6.46 >= 1.0)	221729840	31255080	SI (221729840/31255080 = 7.09 >= 1.0)
18-2	187223260	34807370	SI (187223260/34807370 = 5.38 >= 1.0)	221726870	37789820	SI (221726870/37789820 = 5.87 >= 1.0)
18-3	486364900	77133570	SI (486364900/77133570 = 6.31 >= 1.0)	221804090	31252660	SI (221804090/31252660 = 7.10 >= 1.0)
18-4	187293010	34804950	SI (187293010/34804950 = 5.38 >= 1.0)	221801120	37787400	SI (221801120/37787400 = 5.87 >= 1.0)
18-5	187251780	33639460	SI (187251780/33639460 = 5.57 >= 1.0)	221757230	36524620	SI (221757230/36524620 = 6.07 >= 1.0)
18-6	187248990	39508920	SI (187248990/39508920 = 4.74 >= 1.0)	221754260	43059360	SI (221754260/43059360 = 5.15 >= 1.0)
18-7	187321530	33637040	SI (187321530/33637040 = 5.57 >= 1.0)	221831480	36522200	SI (221831480/36522200 = 6.07 >= 1.0)
18-8	187318740	39506500	SI (187318740/39506500 = 4.74 >= 1.0)	221828510	43056940	SI (221828510/43056940 = 5.15 >= 1.0)
18-9	486327870	76708840	SI (486327870/76708840 = 6.34 >= 1.0)	221788910	31239580	SI (221788910/31239580 = 7.10 >= 1.0)
18-10	187278750	34791880	SI (187278750/34791880 = 5.38 >= 1.0)	221785940	37774330	SI (221785940/37774330 = 5.87 >= 1.0)
18-11	486509000	78601110	SI (486509000/78601110 = 6.19 >= 1.0)	554657900	79037610	SI (554657900/79037610 = 7.02 >= 1.0)
18-12	187348190	34789460	SI (187348190/34789460 = 5.39 >= 1.0)	221859860	37771910	SI (221859860/37771910 = 5.87 >= 1.0)
18-13	187307270	33623970	SI (187307270/33623970 = 5.57 >= 1.0)	221816300	36509120	SI (221816300/36509120 = 6.08 >= 1.0)
18-14	187304480	39493430	SI (187304480/39493430 = 4.74 >= 1.0)	221813330	43043870	SI (221813330/43043870 = 5.15 >= 1.0)
18-15	187377020	33621550	SI (187377020/33621550 = 5.57 >= 1.0)	221890550	36506700	SI (221890550/36506700 = 6.08 >= 1.0)
18-16	187374230	39491010	SI (187374230/39491010 = 4.74 >= 1.0)	221887580	43041450	SI (221887580/43041450 = 5.16 >= 1.0)
19-1	185706430	45103450	SI (185706430/45103450 = 4.12 >= 1.0)	220112180	47855290	SI (220112180/47855290 = 4.60 >= 1.0)
19-2	185938620	45095380	SI (185938620/45095380 = 4.12 >= 1.0)	220359350	47847220	SI (220359350/47847220 = 4.61 >= 1.0)
19-3	185705810	46864290	SI (185705810/46864290 = 3.96 >= 1.0)	220111520	49815710	SI (220111520/49815710 = 4.42 >= 1.0)
19-4	185937690	46856220	SI (185937690/46856220 = 3.97 >= 1.0)	220358360	49807650	SI (220358360/49807650 = 4.42 >= 1.0)
19-5	185877860	45146680	SI (185877860/45146680 = 4.12 >= 1.0)	220294670	47898520	SI (220294670/47898520 = 4.60 >= 1.0)
19-6	186109740	45138610	SI (186109740/45138610 = 4.12 >= 1.0)	220541510	47890450	SI (220541510/47890450 = 4.61 >= 1.0)
19-7	185876930	46907520	SI (185876930/46907520 = 3.96 >= 1.0)	220293680	49858940	SI (220293680/49858940 = 4.42 >= 1.0)
19-8	186108810	46899450	SI (186108810/46899450 = 3.97 >= 1.0)	220540520	49850880	SI (220540520/49850880 = 4.42 >= 1.0)
19-9	185704260	46452990	SI (185704260/46452990 = 4.00 >= 1.0)	220109870	49369170	SI (220109870/49369170 = 4.46 >= 1.0)
19-10	185936140	46444920	SI (185936140/46444920 = 4.00 >= 1.0)	220356710	49361100	SI (220356710/49361100 = 4.46 >= 1.0)
19-11	185703330	48213830	SI (185703330/48213830 = 3.85 >= 1.0)	220108880	51329590	SI (220108880/51329590 = 4.29 >= 1.0)
19-12	185935520	48205760	SI (185935520/48205760 = 3.86 >= 1.0)	220356050	51321520	SI (220356050/51321520 = 4.29 >= 1.0)
19-13	185875380	46496220	SI (185875380/46496220 = 4.00 >= 1.0)	220292030	49412400	SI (220292030/49412400 = 4.46 >= 1.0)
19-14	186107570	46488150	SI (186107570/46488150 = 4.00 >= 1.0)	220539200	49404330	SI (220539200/49404330 = 4.46 >= 1.0)
19-15	185874450	48257060	SI (185874450/48257060 = 3.85 >= 1.0)	220291040	51372820	SI (220291040/51372820 = 4.29 >= 1.0)
19-16	186106640	48248990	SI (186106640/48248990 = 3.86 >= 1.0)	220538210	51364750	SI (220538210/51364750 = 4.29 >= 1.0)
20-1	185851510	41486980	SI (185851510/41486980 = 4.48 >= 1.0)	220266620	43814250	SI (220266620/43814250 = 5.03 >= 1.0)
20-2	185848720	47356440	SI (185848720/47356440 = 3.92 >= 1.0)	220263650	50348990	SI (220263650/50348990 = 4.37 >= 1.0)
20-3	185920950	41484560	SI (185920950/41484560 = 4.48 >= 1.0)	220340540	43811830	SI (220340540/43811830 = 5.03 >= 1.0)
20-4	185918160	47354020	SI (185918160/47354020 = 3.93 >= 1.0)	220337570	50346570	SI (220337570/50346570 = 4.38 >= 1.0)
20-5	185843450	45985450	SI (185843450/45985450 = 4.04 >= 1.0)	220258040	48860500	SI (220258040/48860500 = 4.51 >= 1.0)
20-6	185840660	51854910	SI (185840660/51854910 = 3.58 >= 1.0)	220255070	55395240	SI (220255070/55395240 = 3.98 >= 1.0)
20-7	185913200	45983030	SI (185913200/45983030 = 4.04 >= 1.0)	220332290	48858080	SI (220332290/48858080 = 4.51 >= 1.0)
20-8	185910410	51852490	SI (185910410/51852490 = 3.59 >= 1.0)	220329320	55392820	SI (220329320/55392820 = 3.98 >= 1.0)
20-9	185902660	41499950	SI (185902660/41499950 = 4.48 >= 1.0)	220321070	43827220	SI (220321070/43827220 = 5.03 >= 1.0)
20-10	185899870	47369410	SI (185899870/47369410 = 3.92 >= 1.0)	220318100	50361960	SI (220318100/50361960 = 4.37 >= 1.0)
20-11	185972410	41497530	SI (185972410/41497530 = 4.48 >= 1.0)	220395320	43824800	SI (220395320/43824800 = 5.03 >= 1.0)
20-12	185969620	47366920	SI (185969620/47366920 = 3.93 >= 1.0)	220392350	50359540	SI (220392350/50359540 = 4.38 >= 1.0)
20-13	185894910	45998490	SI (185894910/45998490 = 4.04 >= 1.0)	220312820	48873470	SI (220312820/48873470 = 4.51 >= 1.0)
20-14	185892120	51867880	SI (185892120/51867880 = 3.58 >= 1.0)	220309850	55408210	SI (220309850/55408210 = 3.98 >= 1.0)
20-15	185964660	45996000	SI (185964660/45996000 = 4.04 >= 1.0)	220387070	48871050	SI (220387070/48871050 = 4.51 >= 1.0)
20-16	185961560	51865460	SI (185961560/51865460 = 3.59 >= 1.0)	220383770	55405790	SI (220383770/55405790 = 3.98 >= 1.0)
21-1	178697020	39424450	SI (178697020/39424450 = 4.53 >= 1.0)	212650550	42190880	SI (212650550/42190880 = 5.04 >= 1.0)

21-2	178881780	39372790	SI (178881780/39372790 = 4.54 >= 1.0)	212847230	42139230	SI (212847230/42139230 = 5.05 >= 1.0)
21-3	178704770	40834910	SI (178704770/40834910 = 4.38 >= 1.0)	212658800	43771740	SI (212658800/43771740 = 4.86 >= 1.0)
21-4	178889530	40783260	SI (178889530/40783260 = 4.39 >= 1.0)	212855480	43720090	SI (212855480/43720090 = 4.87 >= 1.0)
21-5	178868140	39467680	SI (178868140/39467680 = 4.53 >= 1.0)	212832710	42234110	SI (212832710/42234110 = 5.04 >= 1.0)
21-6	179052900	39416020	SI (179052900/39416020 = 4.54 >= 1.0)	213029390	42182460	SI (213029390/42182460 = 5.05 >= 1.0)
21-7	178875890	40878140	SI (178875890/40878140 = 4.38 >= 1.0)	212840960	43814970	SI (212840960/43814970 = 4.86 >= 1.0)
21-8	179060650	40826490	SI (179060650/40826490 = 4.39 >= 1.0)	213037640	43763320	SI (213037640/43763320 = 4.87 >= 1.0)
21-9	178694540	40773980	SI (178694540/40773980 = 4.38 >= 1.0)	212647910	43704760	SI (212647910/43704760 = 4.87 >= 1.0)
21-10	178879300	40722330	SI (178879300/40722330 = 4.39 >= 1.0)	212844590	43653100	SI (212844590/43653100 = 4.88 >= 1.0)
21-11	178702290	42184450	SI (178702290/42184450 = 4.24 >= 1.0)	212656160	45285620	SI (212656160/45285620 = 4.70 >= 1.0)
21-12	178887050	42132800	SI (178887050/42132800 = 4.25 >= 1.0)	212852840	45233960	SI (212852840/45233960 = 4.71 >= 1.0)
21-13	178865660	40817220	SI (178865660/40817220 = 4.38 >= 1.0)	212830070	43747980	SI (212830070/43747980 = 4.86 >= 1.0)
21-14	179050420	40765560	SI (179050420/40765560 = 4.39 >= 1.0)	213026750	43696330	SI (213026750/43696330 = 4.88 >= 1.0)
21-15	178873410	42227680	SI (178873410/42227680 = 4.24 >= 1.0)	212838320	45328850	SI (212838320/45328850 = 4.70 >= 1.0)
21-16	179058170	42176030	SI (179058170/42176030 = 4.25 >= 1.0)	213035000	45277190	SI (213035000/45277190 = 4.71 >= 1.0)
22-1	178815130	36201490	SI (178815130/36201490 = 4.94 >= 1.0)	212776280	38577410	SI (212776280/38577410 = 5.52 >= 1.0)
22-2	178841170	40903040	SI (178841170/40903040 = 4.37 >= 1.0)	212804000	43846940	SI (212804000/43846940 = 4.85 >= 1.0)
22-3	178870620	36186000	SI (178870620/36186000 = 4.94 >= 1.0)	212835350	38561910	SI (212835350/38561910 = 5.52 >= 1.0)
22-4	178896350	40887550	SI (178896350/40887550 = 4.38 >= 1.0)	212862740	43831450	SI (212862740/43831450 = 4.86 >= 1.0)
22-5	178807380	40699960	SI (178807380/40699960 = 4.39 >= 1.0)	212768030	43623660	SI (212768030/43623660 = 4.88 >= 1.0)
22-6	178833110	45401510	SI (178833110/45401510 = 3.94 >= 1.0)	212795420	48893200	SI (212795420/48893200 = 4.35 >= 1.0)
22-7	178862870	40684460	SI (178862870/40684460 = 4.40 >= 1.0)	212827100	43608160	SI (212827100/43608160 = 4.88 >= 1.0)
22-8	178888600	45386010	SI (178888600/45386010 = 3.94 >= 1.0)	212854490	48877700	SI (212854490/48877700 = 4.35 >= 1.0)
22-9	178866590	36214460	SI (178866590/36214460 = 4.94 >= 1.0)	212831060	38590370	SI (212831060/38590370 = 5.52 >= 1.0)
22-10	178892320	40916010	SI (178892320/40916010 = 4.37 >= 1.0)	212858450	43859910	SI (212858450/43859910 = 4.85 >= 1.0)
22-11	178922080	36198960	SI (178922080/36198960 = 4.94 >= 1.0)	212890130	38574880	SI (212890130/38574880 = 5.52 >= 1.0)
22-12	178947810	40900520	SI (178947810/40900520 = 4.38 >= 1.0)	212917520	43844420	SI (212917520/43844420 = 4.86 >= 1.0)
22-13	178858840	40712930	SI (178858840/40712930 = 4.39 >= 1.0)	212822810	43636630	SI (212822810/43636630 = 4.88 >= 1.0)
22-14	178884570	45414480	SI (178884570/45414480 = 3.94 >= 1.0)	212850200	48906160	SI (212850200/48906160 = 4.35 >= 1.0)
22-15	178914020	40697430	SI (178914020/40697430 = 4.40 >= 1.0)	212881550	43621130	SI (212881550/43621130 = 4.88 >= 1.0)
22-16	178940060	45398980	SI (178940060/45398980 = 3.94 >= 1.0)	212909270	48890670	SI (212909270/48890670 = 4.35 >= 1.0)
23-1	209831250	38531200	SI (209831250/38531200 = 5.45 >= 1.0)	245793440	41197850	SI (245793440/41197850 = 5.97 >= 1.0)
23-2	210016010	38479550	SI (210016010/38479550 = 5.46 >= 1.0)	245990120	41146190	SI (245990120/41146190 = 5.98 >= 1.0)
23-3	209839000	39941670	SI (209839000/39941670 = 5.25 >= 1.0)	245801690	42778710	SI (245801690/42778710 = 5.75 >= 1.0)
23-4	210023450	39890020	SI (210023450/39890020 = 5.27 >= 1.0)	245998040	42727050	SI (245998040/42727050 = 5.76 >= 1.0)
23-5	210022370	38574430	SI (210022370/38574430 = 5.44 >= 1.0)	245975600	41241070	SI (245975600/41241070 = 5.96 >= 1.0)
23-6	210187130	38522780	SI (210187130/38522780 = 5.46 >= 1.0)	246172280	41189420	SI (246172280/41189420 = 5.98 >= 1.0)
23-7	210010120	39984900	SI (210010120/39984900 = 5.25 >= 1.0)	245983850	42821940	SI (245983850/42821940 = 5.74 >= 1.0)
23-8	210194880	39933250	SI (210194880/39933250 = 5.26 >= 1.0)	246180530	42770280	SI (246180530/42770280 = 5.76 >= 1.0)
23-9	209828770	39880740	SI (209828770/39880740 = 5.26 >= 1.0)	245790800	42711720	SI (245790800/42711720 = 5.75 >= 1.0)
23-10	210013530	39829090	SI (210013530/39829090 = 5.27 >= 1.0)	245987480	42660070	SI (245987480/42660070 = 5.77 >= 1.0)
23-11	209836520	41291210	SI (209836520/41291210 = 5.08 >= 1.0)	245799050	44292580	SI (245799050/44292580 = 5.55 >= 1.0)
23-12	210021280	41239560	SI (210021280/41239560 = 5.09 >= 1.0)	245995730	44240930	SI (245995730/44240930 = 5.56 >= 1.0)
23-13	209999890	39923970	SI (209999890/39923970 = 5.26 >= 1.0)	245972960	42754950	SI (245972960/42754950 = 5.75 >= 1.0)
23-14	210184650	39872320	SI (210184650/39872320 = 5.27 >= 1.0)	246169640	42703300	SI (246169640/42703300 = 5.76 >= 1.0)
23-15	210007640	41334440	SI (210007640/41334440 = 5.08 >= 1.0)	245981210	44335810	SI (245981210/44335810 = 5.55 >= 1.0)
23-16	210192400	41282790	SI (210192400/41282790 = 5.09 >= 1.0)	246177890	44284160	SI (246177890/44284160 = 5.56 >= 1.0)
23-17	210063130	38523140	SI (210063130/38523140 = 5.45 >= 1.0)	246040280	41189780	SI (246040280/41189780 = 5.97 >= 1.0)
23-18	210247890	38471480	SI (210247890/38471480 = 5.47 >= 1.0)	246236960	41138130	SI (246236960/41138130 = 5.99 >= 1.0)
23-19	210070880	39933600	SI (210070880/39933600 = 5.26 >= 1.0)	246048530	42770640	SI (246048530/42770640 = 5.75 >= 1.0)
23-20	210255640	39881950	SI (210255640/39881950 = 5.27 >= 1.0)	246245210	42718990	SI (246245210/42718990 = 5.76 >= 1.0)
23-21	210234250	38566370	SI (210234250/38566370 = 5.45 >= 1.0)	246222440	41233010	SI (246222440/41233010 = 5.97 >= 1.0)
23-22	210419010	38514710	SI (210419010/38514710 = 5.46 >= 1.0)	246419120	41181360	SI (246419120/41181360 = 5.98 >= 1.0)
23-23	210242000	39976830	SI (210242000/39976830 = 5.26 >= 1.0)	246230690	42813870	SI (246230690/42813870 = 5.75 >= 1.0)
23-24	210426760	39925180	SI (210426760/39925180 = 5.27 >= 1.0)	246427370	42762220	SI (246427370/42762220 = 5.76 >= 1.0)
23-25	210060960	39872680	SI (210060960/39872680 = 5.27 >= 1.0)	246037970	42703650	SI (246037970/42703650 = 5.76 >= 1.0)
23-26	210245720	39821020	SI (210245720/39821020 = 5.28 >= 1.0)	246234650	42652000	SI (246234650/42652000 = 5.77 >= 1.0)
23-27	210068710	41283140	SI (210068710/41283140 = 5.09 >= 1.0)	246046220	44284510	SI (246046220/44284510 = 5.56 >= 1.0)
23-28	210253160	41231490	SI (210253160/41231490 = 5.10 >= 1.0)	246242570	44232860	SI (246242570/44232860 = 5.57 >= 1.0)
23-29	210232080	39915910	SI (210232080/39915910 = 5.27 >= 1.0)	246220130	42746880	SI (246220130/42746880 = 5.76 >= 1.0)
23-30	210416840	39864250	SI (210416840/39864250 = 5.28 >= 1.0)	246416810	42695230	SI (246416810/42695230 = 5.77 >= 1.0)
23-31	210239830	41326370	SI (210239830/41326370 = 5.09 >= 1.0)	246228380	44327740	SI (246228380/44327740 = 5.55 >= 1.0)
23-32	210424590	41274720	SI (210424590/41274720 = 5.10 >= 1.0)	246425060	44276090	SI (246425060/44276090 = 5.57 >= 1.0)
23-33	209830320	40292040	SI (209830320/40292040 = 5.21 >= 1.0)	245792450	43158270	SI (245792450/43158270 = 5.70 >= 1.0)
23-34	210015080	40240390	SI (210015080/40240390 = 5.22 >= 1.0)	245989130	43106620	SI (245989130/43106620 = 5.71 >= 1.0)
23-35	209838070	41702510	SI (209838070/41702510 = 5.03 >= 1.0)	245800700	44739130	SI (245800700/44739130 = 5.49 >= 1.0)
23-36	210022830	41650860	SI (210022830/41650860 = 5.04 >= 1.0)	245997380	44687480	SI (245997380/44687480 = 5.50 >= 1.0)
23-37	210001440	40335270	SI (210001440/40335270 = 5.21 >= 1.0)	245974610	43201500	SI (245974610/43201500 = 5.69 >= 1.0)
23-38	210186200	40283620	SI (210186200/40283620 = 5.22 >= 1.0)	246171290	43149850	SI (246171290/43149850 = 5.71 >= 1.0)
23-39	210009190	41745740	SI (210009190/41745740 = 5.03 >= 1.0)	245982860	44782360	SI (245982860/44782360 = 5.49 >= 1.0)
23-40	210193950	41694080	SI (210193950/41694080 = 5.04 >= 1.0)	246179540	44730710	SI (246179540/44730710 = 5.50 >= 1.0)

23-41	209827840	41641580	SI (209827840/41641580 = 5.04 >= 1.0)	245789810	44672140	SI (245789810/44672140 = 5.50 >= 1.0)
23-42	210012600	41589930	SI (210012600/41589930 = 5.05 >= 1.0)	245986490	44620490	SI (245986490/44620490 = 5.51 >= 1.0)
23-43	209835590	43052050	SI (209835590/43052050 = 4.87 >= 1.0)	245798060	46253010	SI (245798060/46253010 = 5.31 >= 1.0)
23-44	210020350	43000400	SI (210020350/43000400 = 4.88 >= 1.0)	245994740	46201350	SI (245994740/46201350 = 5.32 >= 1.0)
23-45	209998960	41684810	SI (209998960/41684810 = 5.04 >= 1.0)	245971970	44715370	SI (245971970/44715370 = 5.50 >= 1.0)
23-46	210183720	41633160	SI (210183720/41633160 = 5.05 >= 1.0)	246168650	44663720	SI (246168650/44663720 = 5.51 >= 1.0)
23-47	210006710	43095280	SI (210006710/43095280 = 4.87 >= 1.0)	245980220	46296240	SI (245980220/46296240 = 5.31 >= 1.0)
23-48	210191470	43043620	SI (210191470/43043620 = 4.88 >= 1.0)	246176900	46244580	SI (246176900/46244580 = 5.32 >= 1.0)
23-49	210062200	40283970	SI (210062200/40283970 = 5.21 >= 1.0)	246039290	43150200	SI (246039290/43150200 = 5.70 >= 1.0)
23-50	210246960	40232320	SI (210246960/40232320 = 5.23 >= 1.0)	246235970	43098550	SI (246235970/43098550 = 5.71 >= 1.0)
23-51	210069950	41694440	SI (210069950/41694440 = 5.04 >= 1.0)	246047540	44731060	SI (246047540/44731060 = 5.50 >= 1.0)
23-52	210254710	41642790	SI (210254710/41642790 = 5.05 >= 1.0)	246244220	44679410	SI (246244220/44679410 = 5.51 >= 1.0)
23-53	210233630	40327200	SI (210233630/40327200 = 5.21 >= 1.0)	246221780	43193430	SI (246221780/43193430 = 5.70 >= 1.0)
23-54	210418390	40275550	SI (210418390/40275550 = 5.22 >= 1.0)	246418460	43141780	SI (246418460/43141780 = 5.71 >= 1.0)
23-55	210241380	41737670	SI (210241380/41737670 = 5.04 >= 1.0)	246230030	44774290	SI (246230030/44774290 = 5.50 >= 1.0)
23-56	210425830	41686020	SI (210425830/41686020 = 5.05 >= 1.0)	246426380	44722640	SI (246426380/44722640 = 5.51 >= 1.0)
23-57	210060030	41633510	SI (210060030/41633510 = 5.05 >= 1.0)	246036980	44664080	SI (246036980/44664080 = 5.51 >= 1.0)
23-58	210244790	41581860	SI (210244790/41581860 = 5.06 >= 1.0)	246233660	44612420	SI (246233660/44612420 = 5.52 >= 1.0)
23-59	210067780	43043980	SI (210067780/43043980 = 4.88 >= 1.0)	246045230	46244940	SI (246045230/46244940 = 5.32 >= 1.0)
23-60	210252540	42992330	SI (210252540/42992330 = 4.89 >= 1.0)	246241910	46193290	SI (246241910/46193290 = 5.33 >= 1.0)
23-61	210231150	41676740	SI (210231150/41676740 = 5.04 >= 1.0)	246219140	44707310	SI (246219140/44707310 = 5.51 >= 1.0)
23-62	210415910	41625090	SI (210415910/41625090 = 5.06 >= 1.0)	246415820	44655650	SI (246415820/44655650 = 5.52 >= 1.0)
23-63	210238900	43087210	SI (210238900/43087210 = 4.88 >= 1.0)	246227390	46288170	SI (246227390/46288170 = 5.32 >= 1.0)
23-64	210423660	43035560	SI (210423660/43035560 = 4.89 >= 1.0)	246424070	46236520	SI (246424070/46236520 = 5.33 >= 1.0)
24-1	210031510	33251120	SI (210031510/33251120 = 6.32 >= 1.0)	246006620	35294390	SI (246006620/35294390 = 6.97 >= 1.0)
24-2	210057550	37952670	SI (210057550/37952670 = 5.53 >= 1.0)	246034340	40563920	SI (246034340/40563920 = 6.07 >= 1.0)
24-3	210087000	33235620	SI (210087000/33235620 = 6.32 >= 1.0)	246065690	35278890	SI (246065690/35278890 = 6.97 >= 1.0)
24-4	210112730	37937170	SI (210112730/37937170 = 5.54 >= 1.0)	246093080	40548430	SI (246093080/40548430 = 6.07 >= 1.0)
24-5	210023760	37749580	SI (210023760/37749580 = 5.56 >= 1.0)	245998370	40340640	SI (245998370/40340640 = 6.10 >= 1.0)
24-6	210049490	42451130	SI (210049490/42451130 = 4.95 >= 1.0)	246025760	45610180	SI (246025760/45610180 = 5.39 >= 1.0)
24-7	210079250	37734090	SI (210079250/37734090 = 5.57 >= 1.0)	246057440	40325140	SI (246057440/40325140 = 6.10 >= 1.0)
24-8	210104980	42435640	SI (210104980/42435640 = 4.95 >= 1.0)	246084830	45594680	SI (246084830/45594680 = 5.40 >= 1.0)
24-9	210082970	33264080	SI (210082970/33264080 = 6.32 >= 1.0)	246061400	35307360	SI (246061400/35307360 = 6.97 >= 1.0)
24-10	210108700	37965640	SI (210108700/37965640 = 5.53 >= 1.0)	246088790	40576890	SI (246088790/40576890 = 6.06 >= 1.0)
24-11	210138460	33248590	SI (210138460/33248590 = 6.32 >= 1.0)	246120470	35291860	SI (246120470/35291860 = 6.97 >= 1.0)
24-12	210164190	37950140	SI (210164190/37950140 = 5.54 >= 1.0)	246147860	40561400	SI (246147860/40561400 = 6.07 >= 1.0)
24-13	210075220	37762550	SI (210075220/37762550 = 5.56 >= 1.0)	246053150	40353610	SI (246053150/40353610 = 6.10 >= 1.0)
24-14	210100950	42464100	SI (210100950/42464100 = 4.95 >= 1.0)	246080540	45623140	SI (246080540/45623140 = 5.39 >= 1.0)
24-15	210130400	37747060	SI (210130400/37747060 = 5.57 >= 1.0)	246111890	40338110	SI (246111890/40338110 = 6.10 >= 1.0)
24-16	210156440	42448610	SI (210156440/42448610 = 4.95 >= 1.0)	246139610	45607650	SI (246139610/45607650 = 5.40 >= 1.0)
24-17	210028720	39120580	SI (210028720/39120580 = 5.37 >= 1.0)	246003650	41829130	SI (246003650/41829130 = 5.88 >= 1.0)
24-18	210054450	43822130	SI (210054450/43822130 = 4.79 >= 1.0)	246031040	47098670	SI (246031040/47098670 = 5.22 >= 1.0)
24-19	210084210	39105080	SI (210084210/39105080 = 5.37 >= 1.0)	246062720	41813640	SI (246062720/41813640 = 5.88 >= 1.0)
24-20	210109940	43806630	SI (210109940/43806630 = 4.80 >= 1.0)	246090110	47083170	SI (246090110/47083170 = 5.23 >= 1.0)
24-21	210020970	43619040	SI (210020970/43619040 = 4.81 >= 1.0)	245995400	46875380	SI (245995400/46875380 = 5.25 >= 1.0)
24-22	210046700	48320590	SI (210046700/48320590 = 4.35 >= 1.0)	246022790	52144920	SI (246022790/52144920 = 4.72 >= 1.0)
24-23	210076460	43603540	SI (210076460/43603540 = 4.82 >= 1.0)	246054470	46859890	SI (246054470/46859890 = 5.25 >= 1.0)
24-24	210102190	48305100	SI (210102190/48305100 = 4.35 >= 1.0)	246081860	52129430	SI (246081860/52129430 = 4.72 >= 1.0)
24-25	210080180	39133540	SI (210080180/39133540 = 5.37 >= 1.0)	246058430	41842100	SI (246058430/41842100 = 5.88 >= 1.0)
24-26	210105910	43835100	SI (210105910/43835100 = 4.79 >= 1.0)	246085820	47111640	SI (246085820/47111640 = 5.22 >= 1.0)
24-27	210135670	39118050	SI (210135670/39118050 = 5.37 >= 1.0)	246117500	41826610	SI (246117500/41826610 = 5.88 >= 1.0)
24-28	210161400	43819600	SI (210161400/43819600 = 4.80 >= 1.0)	246144890	47096140	SI (246144890/47096140 = 5.23 >= 1.0)
24-29	210072120	43632010	SI (210072120/43632010 = 4.81 >= 1.0)	246049850	46888350	SI (246049850/46888350 = 5.25 >= 1.0)
24-30	210098160	48333560	SI (210098160/48333560 = 4.35 >= 1.0)	246077570	52157890	SI (246077570/52157890 = 4.72 >= 1.0)
24-31	210127610	43616510	SI (210127610/43616510 = 4.82 >= 1.0)	246108920	46872860	SI (246108920/46872860 = 5.25 >= 1.0)
24-32	210153340	48318070	SI (210153340/48318070 = 4.35 >= 1.0)	246136310	52142390	SI (246136310/52142390 = 4.72 >= 1.0)
24-33	210101260	33248700	SI (210101260/33248700 = 6.32 >= 1.0)	246080870	35291970	SI (246080870/35291970 = 6.97 >= 1.0)
24-34	210126990	37950250	SI (210126990/37950250 = 5.54 >= 1.0)	246108260	40561500	SI (246108260/40561500 = 6.07 >= 1.0)
24-35	210156750	33233200	SI (210156750/33233200 = 6.32 >= 1.0)	246139940	35276470	SI (246139940/35276470 = 6.98 >= 1.0)
24-36	210182480	37934750	SI (210182480/37934750 = 5.54 >= 1.0)	246167330	40546010	SI (246167330/40546010 = 6.07 >= 1.0)
24-37	210093510	37747160	SI (210093510/37747160 = 5.57 >= 1.0)	246072620	40338220	SI (246072620/40338220 = 6.10 >= 1.0)
24-38	210119240	42448710	SI (210119240/42448710 = 4.95 >= 1.0)	246100010	45607760	SI (246100010/45607760 = 5.40 >= 1.0)
24-39	210148690	37731670	SI (210148690/37731670 = 5.57 >= 1.0)	246131360	40322720	SI (246131360/40322720 = 6.10 >= 1.0)
24-40	210174730	42433220	SI (210174730/42433220 = 4.95 >= 1.0)	246159080	45592260	SI (246159080/45592260 = 5.40 >= 1.0)
24-41	210152720	33261660	SI (210152720/33261660 = 6.32 >= 1.0)	246135650	35304940	SI (246135650/35304940 = 6.97 >= 1.0)
24-42	210178450	37963220	SI (210178450/37963220 = 5.54 >= 1.0)	246163040	40574470	SI (246163040/40574470 = 6.07 >= 1.0)
24-43	210207900	33246170	SI (210207900/33246170 = 6.32 >= 1.0)	246194390	35289440	SI (246194390/35289440 = 6.98 >= 1.0)
24-44	210233940	37947720	SI (210233940/37947720 = 5.54 >= 1.0)	246222110	40558980	SI (246222110/40558980 = 6.07 >= 1.0)
24-45	210144660	37760130	SI (210144660/37760130 = 5.57 >= 1.0)	246127070	40351190	SI (246127070/40351190 = 6.10 >= 1.0)
24-46	210170700	42461680	SI (210170700/42461680 = 4.95 >= 1.0)	246154790	45620720	SI (246154790/45620720 = 5.40 >= 1.0)
24-47	210200150	37744630	SI (210200150/37744630 = 5.57 >= 1.0)	246186140	40335690	SI (246186140/40335690 = 6.10 >= 1.0)

24-48	210225880	42446190	SI (210225880/42446190 = 4.95 >= 1.0)	246213530	45605230	SI (246213530/45605230 = 5.40 >= 1.0)
24-49	210098470	39118160	SI (210098470/39118160 = 5.37 >= 1.0)	246077900	41826710	SI (246077900/41826710 = 5.88 >= 1.0)
24-50	210124200	43819710	SI (210124200/43819710 = 4.80 >= 1.0)	246105290	47096250	SI (246105290/47096250 = 5.23 >= 1.0)
24-51	210153960	39102660	SI (210153960/39102660 = 5.37 >= 1.0)	246136970	41811220	SI (246136970/41811220 = 5.89 >= 1.0)
24-52	210179690	43804210	SI (210179690/43804210 = 4.80 >= 1.0)	246164360	47080750	SI (246164360/47080750 = 5.23 >= 1.0)
24-53	210090410	43616620	SI (210090410/43616620 = 4.82 >= 1.0)	246069320	46872960	SI (246069320/46872960 = 5.25 >= 1.0)
24-54	210116450	48318170	SI (210116450/48318170 = 4.35 >= 1.0)	246097040	52142500	SI (246097040/52142500 = 4.72 >= 1.0)
24-55	210145900	43601120	SI (210145900/43601120 = 4.82 >= 1.0)	246128390	46857470	SI (246128390/46857470 = 5.25 >= 1.0)
24-56	210171630	48302680	SI (210171630/48302680 = 4.35 >= 1.0)	246155780	52127000	SI (246155780/52127000 = 4.72 >= 1.0)
24-57	210149620	39131120	SI (210149620/39131120 = 5.37 >= 1.0)	246132350	41839680	SI (246132350/41839680 = 5.88 >= 1.0)
24-58	210175660	43832680	SI (210175660/43832680 = 4.79 >= 1.0)	246160070	47109220	SI (246160070/47109220 = 5.23 >= 1.0)
24-59	210205110	39115630	SI (210205110/39115630 = 5.37 >= 1.0)	246191420	41824190	SI (246191420/41824190 = 5.89 >= 1.0)
24-60	210230840	43817180	SI (210230840/43817180 = 4.80 >= 1.0)	246218810	47093720	SI (246218810/47093720 = 5.23 >= 1.0)
24-61	210141870	43629590	SI (210141870/43629590 = 4.82 >= 1.0)	246124100	46885930	SI (246124100/46885930 = 5.25 >= 1.0)
24-62	210167600	48331140	SI (210167600/48331140 = 4.35 >= 1.0)	246151490	52155470	SI (246151490/52155470 = 4.72 >= 1.0)
24-63	210197360	43614090	SI (210197360/43614090 = 4.82 >= 1.0)	246183170	46870440	SI (246183170/46870440 = 5.25 >= 1.0)
24-64	210223090	48315650	SI (210223090/48315650 = 4.35 >= 1.0)	246210560	52139970	SI (246210560/52139970 = 4.72 >= 1.0)
25-1	131829360	38130620	SI (131829360/38130620 = 3.46 >= 1.0)	157584240	41016940	SI (157584240/41016940 = 3.84 >= 1.0)
25-2	131829360	38130490	SI (131829360/38130490 = 3.46 >= 1.0)	157584240	41016810	SI (157584240/41016810 = 3.84 >= 1.0)
25-3	131826570	42904340	SI (131826570/42904340 = 3.07 >= 1.0)	157581270	45961440	SI (157581270/45961440 = 3.43 >= 1.0)
25-4	131826570	42904210	SI (131826570/42904210 = 3.07 >= 1.0)	157581270	45961310	SI (157581270/45961310 = 3.43 >= 1.0)
25-5	131829360	38130690	SI (131829360/38130690 = 3.46 >= 1.0)	157584240	41017010	SI (157584240/41017010 = 3.84 >= 1.0)
25-6	131829360	38130560	SI (131829360/38130560 = 3.46 >= 1.0)	157584240	41016880	SI (157584240/41016880 = 3.84 >= 1.0)
25-7	131826570	42904410	SI (131826570/42904410 = 3.07 >= 1.0)	157581270	45961510	SI (157581270/45961510 = 3.43 >= 1.0)
25-8	131826570	42904280	SI (131826570/42904280 = 3.07 >= 1.0)	157581270	45961380	SI (157581270/45961380 = 3.43 >= 1.0)
25-9	131827810	38114080	SI (131827810/38114080 = 3.46 >= 1.0)	157582590	41000400	SI (157582590/41000400 = 3.84 >= 1.0)
25-10	131827810	38113950	SI (131827810/38113950 = 3.46 >= 1.0)	157582590	41000270	SI (157582590/41000270 = 3.84 >= 1.0)
25-11	131825330	42887460	SI (131825330/42887460 = 3.07 >= 1.0)	157579950	45944570	SI (157579950/45944570 = 3.43 >= 1.0)
25-12	131825640	42887310	SI (131825640/42887310 = 3.07 >= 1.0)	157580280	45944410	SI (157580280/45944410 = 3.43 >= 1.0)
25-13	131827810	38114140	SI (131827810/38114140 = 3.46 >= 1.0)	157582590	41000470	SI (157582590/41000470 = 3.84 >= 1.0)
25-14	131827810	38114020	SI (131827810/38114020 = 3.46 >= 1.0)	157582590	41000340	SI (157582590/41000340 = 3.84 >= 1.0)
25-15	131825330	42887520	SI (131825330/42887520 = 3.07 >= 1.0)	157579950	45944620	SI (157579950/45944620 = 3.43 >= 1.0)
25-16	131825640	42887360	SI (131825640/42887360 = 3.07 >= 1.0)	157580280	45944470	SI (157580280/45944470 = 3.43 >= 1.0)
26-1	131829980	33454780	SI (131829980/33454780 = 3.94 >= 1.0)	157584900	36230320	SI (157584900/36230320 = 4.35 >= 1.0)
26-2	131829980	33454800	SI (131829980/33454800 = 3.94 >= 1.0)	157584900	36230340	SI (157584900/36230340 = 4.35 >= 1.0)
26-3	131829670	33449820	SI (131829670/33449820 = 3.94 >= 1.0)	157584570	36225350	SI (157584570/36225350 = 4.35 >= 1.0)
26-4	131829670	33449840	SI (131829670/33449840 = 3.94 >= 1.0)	157584570	36225370	SI (157584570/36225370 = 4.35 >= 1.0)
26-5	131829980	33454350	SI (131829980/33454350 = 3.94 >= 1.0)	157584900	36229890	SI (157584900/36229890 = 4.35 >= 1.0)
26-6	131829980	33454370	SI (131829980/33454370 = 3.94 >= 1.0)	157584900	36229910	SI (157584900/36229910 = 4.35 >= 1.0)
26-7	131829670	33449390	SI (131829670/33449390 = 3.94 >= 1.0)	157584570	36224920	SI (157584570/36224920 = 4.35 >= 1.0)
26-8	131829670	33449410	SI (131829670/33449410 = 3.94 >= 1.0)	157584570	36224950	SI (157584570/36224950 = 4.35 >= 1.0)
26-9	131821610	49365520	SI (131821610/49365520 = 2.67 >= 1.0)	157575990	52710320	SI (157575990/52710320 = 2.99 >= 1.0)
26-10	131821610	49365460	SI (131821610/49365460 = 2.67 >= 1.0)	157575990	52710270	SI (157575990/52710270 = 2.99 >= 1.0)
26-11	131827500	49355030	SI (131827500/49355030 = 2.67 >= 1.0)	157582260	52699840	SI (157582260/52699840 = 2.99 >= 1.0)
26-12	131827500	49354980	SI (131827500/49354980 = 2.67 >= 1.0)	157582260	52699780	SI (157582260/52699780 = 2.99 >= 1.0)
26-13	131821610	49365290	SI (131821610/49365290 = 2.67 >= 1.0)	157575990	52710100	SI (157575990/52710100 = 2.99 >= 1.0)
26-14	131821610	49365240	SI (131821610/49365240 = 2.67 >= 1.0)	157575990	52710040	SI (157575990/52710040 = 2.99 >= 1.0)
26-15	131827500	49354700	SI (131827500/49354700 = 2.67 >= 1.0)	157582260	52699500	SI (157582260/52699500 = 2.99 >= 1.0)
26-16	131827500	49354640	SI (131827500/49354640 = 2.67 >= 1.0)	157582260	52699450	SI (157582260/52699450 = 2.99 >= 1.0)
27-1	209913710	39159560	SI (209913710/39159560 = 5.36 >= 1.0)	240706290	41900740	SI (240706290/41900740 = 5.74 >= 1.0)
27-2	210081110	39153740	SI (210081110/39153740 = 5.37 >= 1.0)	240884490	41894920	SI (240884490/41894920 = 5.75 >= 1.0)
27-3	210047010	39122320	SI (210047010/39122320 = 5.37 >= 1.0)	240848190	41863500	SI (240848190/41863500 = 5.75 >= 1.0)
27-4	210214410	39116500	SI (210214410/39116500 = 5.37 >= 1.0)	241026390	41857680	SI (241026390/41857680 = 5.76 >= 1.0)
27-5	210037090	39190730	SI (210037090/39190730 = 5.36 >= 1.0)	240837630	41931910	SI (240837630/41931910 = 5.74 >= 1.0)
27-6	210204490	39184910	SI (210204490/39184910 = 5.36 >= 1.0)	241015830	41926090	SI (241015830/41926090 = 5.75 >= 1.0)
27-7	210170390	39153490	SI (210170390/39153490 = 5.37 >= 1.0)	240979530	41894670	SI (240979530/41894670 = 5.75 >= 1.0)
27-8	210337790	39147670	SI (210337790/39147670 = 5.37 >= 1.0)	241157730	41888850	SI (241157730/41888850 = 5.76 >= 1.0)
27-9	209913090	40429120	SI (209913090/40429120 = 5.19 >= 1.0)	240705630	43314200	SI (240705630/43314200 = 5.56 >= 1.0)
27-10	210080490	40423310	SI (210080490/40423310 = 5.20 >= 1.0)	240883830	43308390	SI (240883830/43308390 = 5.56 >= 1.0)
27-11	210046390	40391880	SI (210046390/40391880 = 5.20 >= 1.0)	240847530	43276960	SI (240847530/43276960 = 5.57 >= 1.0)
27-12	210213790	40386070	SI (210213790/40386070 = 5.21 >= 1.0)	241025730	43271150	SI (241025730/43271150 = 5.57 >= 1.0)
27-13	210036470	40460290	SI (210036470/40460290 = 5.19 >= 1.0)	240836970	43345370	SI (240836970/43345370 = 5.56 >= 1.0)
27-14	210203870	40454480	SI (210203870/40454480 = 5.20 >= 1.0)	241015170	43339560	SI (241015170/43339560 = 5.56 >= 1.0)
27-15	210169770	40423050	SI (210169770/40423050 = 5.20 >= 1.0)	240978870	43308130	SI (240978870/43308130 = 5.56 >= 1.0)
27-16	210337170	40417240	SI (210337170/40417240 = 5.20 >= 1.0)	241157070	43302320	SI (241157070/43302320 = 5.57 >= 1.0)
27-17	209919290	40176510	SI (209919290/40176510 = 5.22 >= 1.0)	240712230	43040540	SI (240712230/43040540 = 5.59 >= 1.0)
27-18	210086690	40170690	SI (210086690/40170690 = 5.23 >= 1.0)	240890430	43034720	SI (240890430/43034720 = 5.60 >= 1.0)
27-19	210052590	40139270	SI (210052590/40139270 = 5.23 >= 1.0)	240854130	43003300	SI (240854130/43003300 = 5.60 >= 1.0)
27-20	210219990	40133450	SI (210219990/40133450 = 5.24 >= 1.0)	241032330	42997480	SI (241032330/42997480 = 5.61 >= 1.0)
27-21	210042670	40207680	SI (210042670/40207680 = 5.22 >= 1.0)	240843570	43071710	SI (240843570/43071710 = 5.59 >= 1.0)
27-22	210210070	40201860	SI (210210070/40201860 = 5.23 >= 1.0)	241021770	43065890	SI (241021770/43065890 = 5.60 >= 1.0)

27-23	210175970	40170430	SI (210175970/40170430 = 5.23 >= 1.0)	240985470	43034470	SI (240985470/43034470 = 5.60 >= 1.0)
27-24	210343370	40164620	SI (210343370/40164620 = 5.24 >= 1.0)	241163670	43028650	SI (241163670/43028650 = 5.60 >= 1.0)
27-25	209918670	41446070	SI (209918670/41446070 = 5.06 >= 1.0)	240711570	44454010	SI (240711570/44454010 = 5.41 >= 1.0)
27-26	210086070	41440250	SI (210086070/41440250 = 5.07 >= 1.0)	240889770	44448190	SI (240889770/44448190 = 5.42 >= 1.0)
27-27	210051970	41408830	SI (210051970/41408830 = 5.07 >= 1.0)	240853470	44416770	SI (240853470/44416770 = 5.42 >= 1.0)
27-28	210219370	41403010	SI (210219370/41403010 = 5.08 >= 1.0)	241031670	44410950	SI (241031670/44410950 = 5.43 >= 1.0)
27-29	210042050	41477240	SI (210042050/41477240 = 5.06 >= 1.0)	240842910	44485180	SI (240842910/44485180 = 5.41 >= 1.0)
27-30	210209450	41471420	SI (210209450/41471420 = 5.07 >= 1.0)	241021110	44479360	SI (241021110/44479360 = 5.42 >= 1.0)
27-31	210175350	41440000	SI (210175350/41440000 = 5.07 >= 1.0)	240984810	44447930	SI (240984810/44447930 = 5.42 >= 1.0)
27-32	210342750	41434180	SI (210342750/41434180 = 5.08 >= 1.0)	241163010	44442120	SI (241163010/44442120 = 5.43 >= 1.0)
27-33	209912160	40132580	SI (209912160/40132580 = 5.23 >= 1.0)	240704640	42992240	SI (240704640/42992240 = 5.60 >= 1.0)
27-34	210079250	40126760	SI (210079250/40126760 = 5.24 >= 1.0)	240882510	42986430	SI (240882510/42986430 = 5.60 >= 1.0)
27-35	210045150	40095340	SI (210045150/40095340 = 5.24 >= 1.0)	240846210	42955000	SI (240846210/42955000 = 5.61 >= 1.0)
27-36	210212550	40089520	SI (210212550/40089520 = 5.24 >= 1.0)	241024410	42949190	SI (241024410/42949190 = 5.61 >= 1.0)
27-37	210035540	40163750	SI (210035540/40163750 = 5.23 >= 1.0)	240835980	43023410	SI (240835980/43023410 = 5.60 >= 1.0)
27-38	210202940	40157930	SI (210202940/40157930 = 5.23 >= 1.0)	241014180	43017600	SI (241014180/43017600 = 5.60 >= 1.0)
27-39	210168840	40126510	SI (210168840/40126510 = 5.24 >= 1.0)	240977880	42986170	SI (240977880/42986170 = 5.61 >= 1.0)
27-40	210335930	40120690	SI (210335930/40120690 = 5.24 >= 1.0)	241155750	42980360	SI (241155750/42980360 = 5.61 >= 1.0)
27-41	209911540	41402140	SI (209911540/41402140 = 5.07 >= 1.0)	240703980	44405710	SI (240703980/44405710 = 5.42 >= 1.0)
27-42	210078630	41396330	SI (210078630/41396330 = 5.07 >= 1.0)	240881850	44399890	SI (240881850/44399890 = 5.43 >= 1.0)
27-43	210044530	41364900	SI (210044530/41364900 = 5.08 >= 1.0)	240845550	44368470	SI (240845550/44368470 = 5.43 >= 1.0)
27-44	210211930	41359090	SI (210211930/41359090 = 5.08 >= 1.0)	241023750	44362650	SI (241023750/44362650 = 5.43 >= 1.0)
27-45	210034920	41433310	SI (210034920/41433310 = 5.07 >= 1.0)	240835320	44436880	SI (240835320/44436880 = 5.42 >= 1.0)
27-46	210202320	41427500	SI (210202320/41427500 = 5.07 >= 1.0)	241013520	44431060	SI (241013520/44431060 = 5.42 >= 1.0)
27-47	210168220	41396070	SI (210168220/41396070 = 5.08 >= 1.0)	240977220	44399640	SI (240977220/44399640 = 5.43 >= 1.0)
27-48	210335310	41390260	SI (210335310/41390260 = 5.08 >= 1.0)	241155090	44393820	SI (241155090/44393820 = 5.43 >= 1.0)
27-49	209917740	41149520	SI (209917740/41149520 = 5.10 >= 1.0)	240710580	44132040	SI (240710580/44132040 = 5.45 >= 1.0)
27-50	210084830	41143710	SI (210084830/41143710 = 5.11 >= 1.0)	240888450	44126230	SI (240888450/44126230 = 5.46 >= 1.0)
27-51	210050730	41112280	SI (210050730/41112280 = 5.11 >= 1.0)	240852150	44094800	SI (240852150/44094800 = 5.46 >= 1.0)
27-52	210218130	41106470	SI (210218130/41106470 = 5.11 >= 1.0)	241030350	44088990	SI (241030350/44088990 = 5.47 >= 1.0)
27-53	210041120	41180690	SI (210041120/41180690 = 5.10 >= 1.0)	240841920	44163210	SI (240841920/44163210 = 5.45 >= 1.0)
27-54	210208520	41174880	SI (210208520/41174880 = 5.11 >= 1.0)	241020120	44157400	SI (241020120/44157400 = 5.46 >= 1.0)
27-55	210174420	41143450	SI (210174420/41143450 = 5.11 >= 1.0)	240983820	44125970	SI (240983820/44125970 = 5.46 >= 1.0)
27-56	210341510	41137640	SI (210341510/41137640 = 5.11 >= 1.0)	241161690	44120160	SI (241161690/44120160 = 5.47 >= 1.0)
27-57	209917120	42419090	SI (209917120/42419090 = 4.95 >= 1.0)	240709920	45545510	SI (240709920/45545510 = 5.29 >= 1.0)
27-58	210084210	42413270	SI (210084210/42413270 = 4.95 >= 1.0)	240887790	45539690	SI (240887790/45539690 = 5.29 >= 1.0)
27-59	210050110	42381850	SI (210050110/42381850 = 4.96 >= 1.0)	240851490	45508270	SI (240851490/45508270 = 5.29 >= 1.0)
27-60	210217510	42376030	SI (210217510/42376030 = 4.96 >= 1.0)	241029690	45502450	SI (241029690/45502450 = 5.30 >= 1.0)
27-61	210040500	42450260	SI (210040500/42450260 = 4.95 >= 1.0)	240841260	45576680	SI (240841260/45576680 = 5.28 >= 1.0)
27-62	210207900	42444440	SI (210207900/42444440 = 4.95 >= 1.0)	241019460	45570860	SI (241019460/45570860 = 5.29 >= 1.0)
27-63	210173800	42413020	SI (210173800/42413020 = 4.96 >= 1.0)	240983160	45539440	SI (240983160/45539440 = 5.29 >= 1.0)
27-64	210340890	42407200	SI (210340890/42407200 = 4.96 >= 1.0)	241161030	45533620	SI (241161030/45533620 = 5.30 >= 1.0)
28-1	210058480	35352620	SI (210058480/35352620 = 5.94 >= 1.0)	240860400	37644350	SI (240860400/37644350 = 6.40 >= 1.0)
28-2	210056310	39584500	SI (210056310/39584500 = 5.31 >= 1.0)	240858090	42355900	SI (240858090/42355900 = 5.69 >= 1.0)
28-3	210077080	38742440	SI (210077080/38742440 = 5.42 >= 1.0)	240880200	41443680	SI (240880200/41443680 = 5.81 >= 1.0)
28-4	210074910	42974320	SI (210074910/42974320 = 4.89 >= 1.0)	240877890	46155230	SI (240877890/46155230 = 5.22 >= 1.0)
28-5	210052590	38596010	SI (210052590/38596010 = 5.44 >= 1.0)	240854130	41282690	SI (240854130/41282690 = 5.83 >= 1.0)
28-6	210050730	42827890	SI (210050730/42827890 = 4.90 >= 1.0)	240852150	45994240	SI (240852150/45994240 = 5.24 >= 1.0)
28-7	210071190	41985830	SI (210071190/41985830 = 5.00 >= 1.0)	240873930	45082030	SI (240873930/45082030 = 5.34 >= 1.0)
28-8	210069330	46217710	SI (210069330/46217710 = 4.55 >= 1.0)	240871950	49793580	SI (240871950/49793580 = 4.84 >= 1.0)
28-9	210108700	35350870	SI (210108700/35350870 = 5.94 >= 1.0)	240913860	37642600	SI (240913860/37642600 = 6.40 >= 1.0)
28-10	210106530	39582750	SI (210106530/39582750 = 5.31 >= 1.0)	240911550	42354150	SI (240911550/42354150 = 5.69 >= 1.0)
28-11	210127300	38740690	SI (210127300/38740690 = 5.42 >= 1.0)	240933660	41441940	SI (240933660/41441940 = 5.81 >= 1.0)
28-12	210125130	42972570	SI (210125130/42972570 = 4.89 >= 1.0)	240931350	46153490	SI (240931350/46153490 = 5.22 >= 1.0)
28-13	210102810	38594270	SI (210102810/38594270 = 5.44 >= 1.0)	240907590	41280950	SI (240907590/41280950 = 5.84 >= 1.0)
28-14	210100950	42826150	SI (210100950/42826150 = 4.91 >= 1.0)	240905610	45992500	SI (240905610/45992500 = 5.24 >= 1.0)
28-15	210121410	41984080	SI (210121410/41984080 = 5.00 >= 1.0)	240927390	45080280	SI (240927390/45080280 = 5.34 >= 1.0)
28-16	210119550	46215970	SI (210119550/46215970 = 4.55 >= 1.0)	240925410	49791840	SI (240925410/49791840 = 4.84 >= 1.0)
28-17	210098160	35341440	SI (210098160/35341440 = 5.94 >= 1.0)	240902640	37633170	SI (240902640/37633170 = 6.40 >= 1.0)
28-18	210096300	39573320	SI (210096300/39573320 = 5.31 >= 1.0)	240900660	42344720	SI (240900660/42344720 = 5.69 >= 1.0)
28-19	210116760	38731260	SI (210116760/38731260 = 5.42 >= 1.0)	240922440	41432510	SI (240922440/41432510 = 5.81 >= 1.0)
28-20	210114900	42963140	SI (210114900/42963140 = 4.89 >= 1.0)	240920460	46144060	SI (240920460/46144060 = 5.22 >= 1.0)
28-21	210092580	38584840	SI (210092580/38584840 = 5.44 >= 1.0)	240896700	41271520	SI (240896700/41271520 = 5.84 >= 1.0)
28-22	210090720	42816720	SI (210090720/42816720 = 4.91 >= 1.0)	240894720	45983070	SI (240894720/45983070 = 5.24 >= 1.0)
28-23	210111180	41974660	SI (210111180/41974660 = 5.01 >= 1.0)	240916500	45070860	SI (240916500/45070860 = 5.35 >= 1.0)
28-24	210109320	46206540	SI (210109320/46206540 = 4.55 >= 1.0)	240914520	49782410	SI (240914520/49782410 = 4.84 >= 1.0)
28-25	210148380	35339700	SI (210148380/35339700 = 5.95 >= 1.0)	240956100	37631430	SI (240956100/37631430 = 6.40 >= 1.0)
28-26	210146520	39571580	SI (210146520/39571580 = 5.31 >= 1.0)	240954120	42342980	SI (240954120/42342980 = 5.69 >= 1.0)
28-27	210166980	38729520	SI (210166980/38729520 = 5.43 >= 1.0)	240975900	41430770	SI (240975900/41430770 = 5.82 >= 1.0)
28-28	210165120	42961400	SI (210165120/42961400 = 4.89 >= 1.0)	240973920	46142320	SI (240973920/46142320 = 5.22 >= 1.0)
28-29	210142800	38583090	SI (210142800/38583090 = 5.45 >= 1.0)	240950160	41269780	SI (240950160/41269780 = 5.84 >= 1.0)

28-30	210140630	42814980	SI (210140630/42814980 = 4.91 >= 1.0)	240947850	45981330	SI (240947850/45981330 = 5.24 >= 1.0)
28-31	210161400	41972910	SI (210161400/41972910 = 5.01 >= 1.0)	240969960	45069110	SI (240969960/45069110 = 5.35 >= 1.0)
28-32	210159230	46204790	SI (210159230/46204790 = 4.55 >= 1.0)	240967650	49780660	SI (240967650/49780660 = 4.84 >= 1.0)
28-33	210095370	35361970	SI (210095370/35361970 = 5.94 >= 1.0)	240899670	37653700	SI (240899670/37653700 = 6.40 >= 1.0)
28-34	210093200	39593850	SI (210093200/39593850 = 5.31 >= 1.0)	240897360	42365250	SI (240897360/42365250 = 5.69 >= 1.0)
28-35	210113970	38751790	SI (210113970/38751790 = 5.42 >= 1.0)	240919470	41453030	SI (240919470/41453030 = 5.81 >= 1.0)
28-36	210111800	42983670	SI (210111800/42983670 = 4.89 >= 1.0)	240917160	46164580	SI (240917160/46164580 = 5.22 >= 1.0)
28-37	210089790	38605360	SI (210089790/38605360 = 5.44 >= 1.0)	240893730	41292040	SI (240893730/41292040 = 5.83 >= 1.0)
28-38	210087620	42837240	SI (210087620/42837240 = 4.90 >= 1.0)	240891420	46003590	SI (240891420/46003590 = 5.24 >= 1.0)
28-39	210108390	41995180	SI (210108390/41995180 = 5.00 >= 1.0)	240913530	45091380	SI (240913530/45091380 = 5.34 >= 1.0)
28-40	210106220	46227060	SI (210106220/46227060 = 4.55 >= 1.0)	240911220	49802930	SI (240911220/49802930 = 4.84 >= 1.0)
28-41	210145590	35360220	SI (210145590/35360220 = 5.94 >= 1.0)	240953130	37651950	SI (240953130/37651950 = 6.40 >= 1.0)
28-42	210143420	39592100	SI (210143420/39592100 = 5.31 >= 1.0)	240950820	42363500	SI (240950820/42363500 = 5.69 >= 1.0)
28-43	210164190	38750040	SI (210164190/38750040 = 5.42 >= 1.0)	240972930	41451290	SI (240972930/41451290 = 5.81 >= 1.0)
28-44	210162020	42981920	SI (210162020/42981920 = 4.89 >= 1.0)	240970620	46162840	SI (240970620/46162840 = 5.22 >= 1.0)
28-45	210140010	38603620	SI (210140010/38603620 = 5.44 >= 1.0)	240947190	41290300	SI (240947190/41290300 = 5.84 >= 1.0)
28-46	210137840	42835500	SI (210137840/42835500 = 4.91 >= 1.0)	240944880	46001850	SI (240944880/46001850 = 5.24 >= 1.0)
28-47	210158610	41993440	SI (210158610/41993440 = 5.00 >= 1.0)	240966990	45089640	SI (240966990/45089640 = 5.34 >= 1.0)
28-48	210156440	46225320	SI (210156440/46225320 = 4.55 >= 1.0)	240964680	49801190	SI (240964680/49801190 = 4.84 >= 1.0)
28-49	210135360	35350800	SI (210135360/35350800 = 5.94 >= 1.0)	240942240	37642520	SI (240942240/37642520 = 6.40 >= 1.0)
28-50	210133190	39582680	SI (210133190/39582680 = 5.31 >= 1.0)	240939930	42354080	SI (240939930/42354080 = 5.69 >= 1.0)
28-51	210153960	38740610	SI (210153960/38740610 = 5.42 >= 1.0)	240962040	41441860	SI (240962040/41441860 = 5.81 >= 1.0)
28-52	210151790	42972500	SI (210151790/42972500 = 4.89 >= 1.0)	240959730	46153410	SI (240959730/46153410 = 5.22 >= 1.0)
28-53	210129780	38594190	SI (210129780/38594190 = 5.44 >= 1.0)	240936300	41280870	SI (240936300/41280870 = 5.84 >= 1.0)
28-54	210127610	42826070	SI (210127610/42826070 = 4.91 >= 1.0)	240933990	45992420	SI (240933990/45992420 = 5.24 >= 1.0)
28-55	210148380	41984010	SI (210148380/41984010 = 5.01 >= 1.0)	240956100	45080210	SI (240956100/45080210 = 5.35 >= 1.0)
28-56	210146210	46215890	SI (210146210/46215890 = 4.55 >= 1.0)	240953790	49791760	SI (240953790/49791760 = 4.84 >= 1.0)
28-57	210185580	35349050	SI (210185580/35349050 = 5.95 >= 1.0)	240995700	37640780	SI (240995700/37640780 = 6.40 >= 1.0)
28-58	210183410	39580930	SI (210183410/39580930 = 5.31 >= 1.0)	240993390	42352330	SI (240993390/42352330 = 5.69 >= 1.0)
28-59	210204180	38738870	SI (210204180/38738870 = 5.43 >= 1.0)	241015500	41440120	SI (241015500/41440120 = 5.82 >= 1.0)
28-60	210202010	42970750	SI (210202010/42970750 = 4.89 >= 1.0)	241013190	46151670	SI (241013190/46151670 = 5.22 >= 1.0)
28-61	210180000	38592440	SI (210180000/38592440 = 5.45 >= 1.0)	240989760	41279130	SI (240989760/41279130 = 5.84 >= 1.0)
28-62	210177830	42824320	SI (210177830/42824320 = 4.91 >= 1.0)	240987450	45990680	SI (240987450/45990680 = 5.24 >= 1.0)
28-63	210198600	41982260	SI (210198600/41982260 = 5.01 >= 1.0)	241009560	45078460	SI (241009560/45078460 = 5.35 >= 1.0)
28-64	210196430	46214140	SI (210196430/46214140 = 4.55 >= 1.0)	241007250	49790010	SI (241007250/49790010 = 4.84 >= 1.0)

Segue la tabella riassuntiva di tutte le verifiche di *capacità portante*, i dettagli sono riportati nei paragrafi successivi.

Caso	Cond. drenate			Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica	E_d [daN]	R_d [daN]	Verifica
1-1	655583.6	3220947.2	SI (3220947.2/655583.6 = 4.91 >= 1.0)	Verifica non richiesta.		
2-1	806791.6	3730877.5	SI (3730877.5/806791.6 = 4.62 >= 1.0)	Verifica non richiesta.		
3-1	772780.6	4386697.2	SI (4386697.2/772780.6 = 5.68 >= 1.0)	Verifica non richiesta.		
4-1	766037.6	3653615.2	SI (3653615.2/766037.6 = 4.77 >= 1.0)	Verifica non richiesta.		
5-1	923989.6	4708738.7	SI (4708738.7/923989.6 = 5.10 >= 1.0)	Verifica non richiesta.		
6-1	917246.6	4355297.7	SI (4355297.7/917246.6 = 4.75 >= 1.0)	Verifica non richiesta.		
7-1	883235.6	4739844.2	SI (4739844.2/883235.6 = 5.37 >= 1.0)	Verifica non richiesta.		
8-1	1034443.6	5257931.9	SI (5257931.9/1034443.6 = 5.08 >= 1.0)	Verifica non richiesta.		
9-1	477527	5277714.7	SI (5277714.7/477527 = 11.05 >= 1.0)	Verifica non richiesta.		
9-2	477527	5277731.1	SI (5277731.1/477527 = 11.05 >= 1.0)	Verifica non richiesta.		
9-3	477515	4445806.2	SI (4445806.2/477515 = 9.31 >= 1.0)	Verifica non richiesta.		
9-4	477515	4445820.9	SI (4445820.9/477515 = 9.31 >= 1.0)	Verifica non richiesta.		
9-5	477527	5277688.4	SI (5277688.4/477527 = 11.05 >= 1.0)	Verifica non richiesta.		
9-6	477527	5277704.8	SI (5277704.8/477527 = 11.05 >= 1.0)	Verifica non richiesta.		
9-7	477515	4445783.3	SI (4445783.3/477515 = 9.31 >= 1.0)	Verifica non richiesta.		
9-8	477515	4445798.1	SI (4445798.1/477515 = 9.31 >= 1.0)	Verifica non richiesta.		
9-9	477521	4701070.7	SI (4701070.7/477521 = 9.84 >= 1.0)	Verifica non richiesta.		
9-10	477521	4701085.4	SI (4701085.4/477521 = 9.84 >= 1.0)	Verifica non richiesta.		
9-11	477544	3958040.8	SI (3958040.8/477544 = 8.29 >= 1.0)	Verifica non richiesta.		
9-12	477545	3958084.9	SI (3958084.9/477545 = 8.29 >= 1.0)	Verifica non richiesta.		
9-13	477521	4701046.2	SI (4701046.2/477521 = 9.84 >= 1.0)	Verifica non richiesta.		
9-14	477521	4701060.9	SI (4701060.9/477521 = 9.84 >= 1.0)	Verifica non richiesta.		
9-15	477545	3958039.6	SI (3958039.6/477545 = 8.29 >= 1.0)	Verifica non richiesta.		
9-16	477545	3958071.4	SI (3958071.4/477545 = 8.29 >= 1.0)	Verifica non richiesta.		
10-1	477531	5881673.6	SI (5881673.6/477531 = 12.32 >= 1.0)	Verifica non richiesta.		
10-2	477531	5881664.9	SI (5881664.9/477531 = 12.32 >= 1.0)	Verifica non richiesta.		
10-3	477529	5671903.5	SI (5671903.5/477529 = 11.88 >= 1.0)	Verifica non richiesta.		
10-4	477529	5671894.9	SI (5671894.9/477529 = 11.88 >= 1.0)	Verifica non richiesta.		
10-5	477531	5881731.7	SI (5881731.7/477531 = 12.32 >= 1.0)	Verifica non richiesta.		

10-6	477531	5881722.9	SI (5881722.9/477531 = 12.32 >= 1.0)	Verifica non richiesta.
10-7	477529	5671959.5	SI (5671959.5/477529 = 11.88 >= 1.0)	Verifica non richiesta.
10-8	477529	5671951	SI (5671951/477529 = 11.88 >= 1.0)	Verifica non richiesta.
10-9	477737	3288402	SI (3288402/477737 = 6.88 >= 1.0)	Verifica non richiesta.
10-10	477738	3288423.5	SI (3288423.5/477738 = 6.88 >= 1.0)	Verifica non richiesta.
10-11	477659	3166386.2	SI (3166386.2/477659 = 6.63 >= 1.0)	Verifica non richiesta.
10-12	477660	3166404.2	SI (3166404.2/477660 = 6.63 >= 1.0)	Verifica non richiesta.
10-13	477727	3288193.9	SI (3288193.9/477727 = 6.88 >= 1.0)	Verifica non richiesta.
10-14	477728	3288215.4	SI (3288215.4/477728 = 6.88 >= 1.0)	Verifica non richiesta.
10-15	477654	3166301.3	SI (3166301.3/477654 = 6.63 >= 1.0)	Verifica non richiesta.
10-16	477655	3166319.3	SI (3166319.3/477655 = 6.63 >= 1.0)	Verifica non richiesta.
11-1	593642.6	4633411.4	SI (4633411.4/593642.6 = 7.81 >= 1.0)	Verifica non richiesta.
11-2	594391.6	4313979.8	SI (4313979.8/594391.6 = 7.26 >= 1.0)	Verifica non richiesta.
11-3	593640.6	4365598.9	SI (4365598.9/593640.6 = 7.35 >= 1.0)	Verifica non richiesta.
11-4	594388.6	4064952.5	SI (4064952.5/594388.6 = 6.84 >= 1.0)	Verifica non richiesta.
12-1	593908.6	4897693.1	SI (4897693.1/593908.6 = 8.25 >= 1.0)	Verifica non richiesta.
12-2	593898.6	4015866.3	SI (4015866.3/593898.6 = 6.76 >= 1.0)	Verifica non richiesta.
12-3	594132.6	4767429.7	SI (4767429.7/594132.6 = 8.02 >= 1.0)	Verifica non richiesta.
12-4	594123.6	3909533	SI (3909533/594123.6 = 6.58 >= 1.0)	Verifica non richiesta.
13-1	571031.6	5395156.8	SI (5395156.8/571031.6 = 9.45 >= 1.0)	Verifica non richiesta.
13-2	571627.6	5050185.3	SI (5050185.3/571627.6 = 8.83 >= 1.0)	Verifica non richiesta.
13-3	571056.6	5132649.3	SI (5132649.3/571056.6 = 8.99 >= 1.0)	Verifica non richiesta.
13-4	571652.6	4804702.3	SI (4804702.3/571652.6 = 8.40 >= 1.0)	Verifica non richiesta.
14-1	571210.6	5604041.4	SI (5604041.4/571210.6 = 9.81 >= 1.0)	Verifica non richiesta.
14-2	571293.6	4745655.6	SI (4745655.6/571293.6 = 8.31 >= 1.0)	Verifica non richiesta.
14-3	571389.6	5484832.1	SI (5484832.1/571389.6 = 9.60 >= 1.0)	Verifica non richiesta.
14-4	571472.6	4644973.9	SI (4644973.9/571472.6 = 8.13 >= 1.0)	Verifica non richiesta.
15-1	566574.6	4576840.8	SI (4576840.8/566574.6 = 8.08 >= 1.0)	Verifica non richiesta.
15-2	567126.6	4380790.7	SI (4380790.7/567126.6 = 7.72 >= 1.0)	Verifica non richiesta.
15-3	566566.6	4349883.9	SI (4349883.9/566566.6 = 7.68 >= 1.0)	Verifica non richiesta.
15-4	567118.6	4164449.8	SI (4164449.8/567118.6 = 7.34 >= 1.0)	Verifica non richiesta.
16-1	566776.6	4789487.6	SI (4789487.6/566776.6 = 8.45 >= 1.0)	Verifica non richiesta.
16-2	566750.6	4043455.3	SI (4043455.3/566750.6 = 7.13 >= 1.0)	Verifica non richiesta.
16-3	566941.6	4721603.3	SI (4721603.3/566941.6 = 8.33 >= 1.0)	Verifica non richiesta.
16-4	566916.6	3987032.1	SI (3987032.1/566916.6 = 7.03 >= 1.0)	Verifica non richiesta.
17-1	671464.6	5549668.4	SI (5549668.4/671464.6 = 8.27 >= 1.0)	Verifica non richiesta.
17-2	672212.6	5507522.2	SI (5507522.2/672212.6 = 8.19 >= 1.0)	Verifica non richiesta.
17-3	671461.6	5276948.3	SI (5276948.3/671461.6 = 7.86 >= 1.0)	Verifica non richiesta.
17-4	672209.6	5236673.8	SI (5236673.8/672209.6 = 7.79 >= 1.0)	Verifica non richiesta.
17-5	672059.6	5590570.7	SI (5590570.7/672059.6 = 8.32 >= 1.0)	Verifica non richiesta.
17-6	672808.6	5150715.9	SI (5150715.9/672808.6 = 7.66 >= 1.0)	Verifica non richiesta.
17-7	672057.6	5315608.7	SI (5315608.7/672057.6 = 7.91 >= 1.0)	Verifica non richiesta.
17-8	672805.6	4897849.2	SI (4897849.2/672805.6 = 7.28 >= 1.0)	Verifica non richiesta.
17-9	671489.6	5321685.5	SI (5321685.5/671489.6 = 7.93 >= 1.0)	Verifica non richiesta.
17-10	672237.6	5281094.8	SI (5281094.8/672237.6 = 7.86 >= 1.0)	Verifica non richiesta.
17-11	671486.6	5056995.9	SI (5056995.9/671486.6 = 7.53 >= 1.0)	Verifica non richiesta.
17-12	672234.6	5018233.6	SI (5018233.6/672234.6 = 7.47 >= 1.0)	Verifica non richiesta.
17-13	672084.6	5360694.1	SI (5360694.1/672084.6 = 7.98 >= 1.0)	Verifica non richiesta.
17-14	672833.6	4939340.6	SI (4939340.6/672833.6 = 7.34 >= 1.0)	Verifica non richiesta.
17-15	672082.6	5093838.5	SI (5093838.5/672082.6 = 7.58 >= 1.0)	Verifica non richiesta.
17-16	672830.6	4693931.7	SI (4693931.7/672830.6 = 6.98 >= 1.0)	Verifica non richiesta.
18-1	671908.6	6302626.1	SI (6302626.1/671908.6 = 9.38 >= 1.0)	Verifica non richiesta.
18-2	671899.6	5339479	SI (5339479/671899.6 = 7.95 >= 1.0)	Verifica non richiesta.
18-3	672133.6	6152178.3	SI (6152178.3/672133.6 = 9.15 >= 1.0)	Verifica non richiesta.
18-4	672124.6	5212464.3	SI (5212464.3/672124.6 = 7.76 >= 1.0)	Verifica non richiesta.
18-5	671991.6	5492010.7	SI (5492010.7/671991.6 = 8.17 >= 1.0)	Verifica non richiesta.
18-6	671982.6	4620286.9	SI (4620286.9/671982.6 = 6.88 >= 1.0)	Verifica non richiesta.
18-7	672216.6	5361307.4	SI (5361307.4/672216.6 = 7.98 >= 1.0)	Verifica non richiesta.
18-8	672207.6	4510804.7	SI (4510804.7/672207.6 = 6.71 >= 1.0)	Verifica non richiesta.
18-9	672087.6	6179885	SI (6179885/672087.6 = 9.20 >= 1.0)	Verifica non richiesta.
18-10	672078.6	5235908.4	SI (5235908.4/672078.6 = 7.79 >= 1.0)	Verifica non richiesta.
18-11	672312.6	6031055.4	SI (6031055.4/672312.6 = 8.97 >= 1.0)	Verifica non richiesta.
18-12	672302.6	5110247.9	SI (5110247.9/672302.6 = 7.60 >= 1.0)	Verifica non richiesta.
18-13	672170.6	5385422.9	SI (5385422.9/672170.6 = 8.01 >= 1.0)	Verifica non richiesta.
18-14	672161.6	4531054.1	SI (4531054.1/672161.6 = 6.74 >= 1.0)	Verifica non richiesta.
18-15	672395.6	5256121.4	SI (5256121.4/672395.6 = 7.82 >= 1.0)	Verifica non richiesta.
18-16	672386.6	4422740.4	SI (4422740.4/672386.6 = 6.58 >= 1.0)	Verifica non richiesta.
19-1	667006.6	5187427.6	SI (5187427.6/667006.6 = 7.78 >= 1.0)	Verifica non richiesta.
19-2	667755.6	5142125.3	SI (5142125.3/667755.6 = 7.70 >= 1.0)	Verifica non richiesta.
19-3	667004.6	4923322.3	SI (4923322.3/667004.6 = 7.38 >= 1.0)	Verifica non richiesta.
19-4	667752.6	4880193.4	SI (4880193.4/667752.6 = 7.31 >= 1.0)	Verifica non richiesta.

19-5	667559.6	5228335.1	SI (5228335.1/667559.6 = 7.83 >= 1.0)	Verifica non richiesta.
19-6	668307.6	4827775.1	SI (4827775.1/668307.6 = 7.22 >= 1.0)	Verifica non richiesta.
19-7	667556.6	4961887.5	SI (4961887.5/667556.6 = 7.43 >= 1.0)	Verifica non richiesta.
19-8	668304.6	4582219.7	SI (4582219.7/668304.6 = 6.86 >= 1.0)	Verifica non richiesta.
19-9	666999.6	4974906.5	SI (4974906.5/666999.6 = 7.46 >= 1.0)	Verifica non richiesta.
19-10	667747.6	4931339.4	SI (4931339.4/667747.6 = 7.39 >= 1.0)	Verifica non richiesta.
19-11	666996.6	4718541.1	SI (4718541.1/666996.6 = 7.07 >= 1.0)	Verifica non richiesta.
19-12	667745.6	4677108.1	SI (4677108.1/667745.6 = 7.00 >= 1.0)	Verifica non richiesta.
19-13	667551.6	5013915.3	SI (5013915.3/667551.6 = 7.51 >= 1.0)	Verifica non richiesta.
19-14	668300.6	4630181.7	SI (4630181.7/668300.6 = 6.93 >= 1.0)	Verifica non richiesta.
19-15	667548.6	4755293	SI (4755293/667548.6 = 7.12 >= 1.0)	Verifica non richiesta.
19-16	668297.6	4391841.5	SI (4391841.5/668297.6 = 6.57 >= 1.0)	Verifica non richiesta.
20-1	667474.6	5895583.2	SI (5895583.2/667474.6 = 8.83 >= 1.0)	Verifica non richiesta.
20-2	667465.6	4964158.8	SI (4964158.8/667465.6 = 7.44 >= 1.0)	Verifica non richiesta.
20-3	667698.6	5758462.6	SI (5758462.6/667698.6 = 8.62 >= 1.0)	Verifica non richiesta.
20-4	667689.6	4849154.6	SI (4849154.6/667689.6 = 7.26 >= 1.0)	Verifica non richiesta.
20-5	667448.6	5139837.8	SI (5139837.8/667448.6 = 7.70 >= 1.0)	Verifica non richiesta.
20-6	667439.6	4296491.4	SI (4296491.4/667439.6 = 6.44 >= 1.0)	Verifica non richiesta.
20-7	667673.6	5020674.5	SI (5020674.5/667673.6 = 7.52 >= 1.0)	Verifica non richiesta.
20-8	667664.6	4197365.9	SI (4197365.9/667664.6 = 6.29 >= 1.0)	Verifica non richiesta.
20-9	667639.6	5787336.7	SI (5787336.7/667639.6 = 8.67 >= 1.0)	Verifica non richiesta.
20-10	667630.6	4873355.3	SI (4873355.3/667630.6 = 7.30 >= 1.0)	Verifica non richiesta.
20-11	667864.6	5651615.1	SI (5651615.1/667864.6 = 8.46 >= 1.0)	Verifica non richiesta.
20-12	667855.6	4759521.7	SI (4759521.7/667855.6 = 7.13 >= 1.0)	Verifica non richiesta.
20-13	667614.6	5045756.9	SI (5045756.9/667614.6 = 7.56 >= 1.0)	Verifica non richiesta.
20-14	667605.6	4218214.8	SI (4218214.8/667605.6 = 6.32 >= 1.0)	Verifica non richiesta.
20-15	667839.6	4927800	SI (4927800/667839.6 = 7.38 >= 1.0)	Verifica non richiesta.
20-16	667829.6	4120080.4	SI (4120080.4/667829.6 = 6.17 >= 1.0)	Verifica non richiesta.
21-1	644395.6	5548207.5	SI (5548207.5/644395.6 = 8.61 >= 1.0)	Verifica non richiesta.
21-2	644991.6	5631946	SI (5631946/644991.6 = 8.73 >= 1.0)	Verifica non richiesta.
21-3	644420.6	5308209	SI (5308209/644420.6 = 8.24 >= 1.0)	Verifica non richiesta.
21-4	645016.6	5388936.7	SI (5388936.7/645016.6 = 8.35 >= 1.0)	Verifica non richiesta.
21-5	644947.6	5632267.8	SI (5632267.8/644947.6 = 8.73 >= 1.0)	Verifica non richiesta.
21-6	645543.6	5388100.4	SI (5388100.4/645543.6 = 8.35 >= 1.0)	Verifica non richiesta.
21-7	644972.6	5389102.4	SI (5389102.4/644972.6 = 8.36 >= 1.0)	Verifica non richiesta.
21-8	645568.6	5156466.8	SI (5156466.8/645568.6 = 7.99 >= 1.0)	Verifica non richiesta.
21-9	644387.6	5317047.3	SI (5317047.3/644387.6 = 8.25 >= 1.0)	Verifica non richiesta.
21-10	644983.6	5397891	SI (5397891/644983.6 = 8.37 >= 1.0)	Verifica non richiesta.
21-11	644412.6	5084159.8	SI (5084159.8/644412.6 = 7.89 >= 1.0)	Verifica non richiesta.
21-12	645008.6	5162058.6	SI (5162058.6/645008.6 = 8.00 >= 1.0)	Verifica non richiesta.
21-13	644939.6	5398062.2	SI (5398062.2/644939.6 = 8.37 >= 1.0)	Verifica non richiesta.
21-14	645535.6	5164997.2	SI (5164997.2/645535.6 = 8.00 >= 1.0)	Verifica non richiesta.
21-15	644964.6	5162082.8	SI (5162082.8/644964.6 = 8.00 >= 1.0)	Verifica non richiesta.
21-16	645560.6	4940186.2	SI (4940186.2/645560.6 = 7.65 >= 1.0)	Verifica non richiesta.
22-1	644776.6	6300060.6	SI (6300060.6/644776.6 = 9.77 >= 1.0)	Verifica non richiesta.
22-2	644860.6	5449050.2	SI (5449050.2/644860.6 = 8.45 >= 1.0)	Verifica non richiesta.
22-3	644955.6	6217393.6	SI (6217393.6/644955.6 = 9.64 >= 1.0)	Verifica non richiesta.
22-4	645038.6	5378553.3	SI (5378553.3/645038.6 = 8.34 >= 1.0)	Verifica non richiesta.
22-5	644751.6	5479348.5	SI (5479348.5/644751.6 = 8.50 >= 1.0)	Verifica non richiesta.
22-6	644834.6	4709348.2	SI (4709348.2/644834.6 = 7.30 >= 1.0)	Verifica non richiesta.
22-7	644930.6	5408422.1	SI (5408422.1/644930.6 = 8.39 >= 1.0)	Verifica non richiesta.
22-8	645013.6	4649360.3	SI (4649360.3/645013.6 = 7.21 >= 1.0)	Verifica non richiesta.
22-9	644942.6	6217609.9	SI (6217609.9/644942.6 = 9.64 >= 1.0)	Verifica non richiesta.
22-10	645025.6	5378602.6	SI (5378602.6/645025.6 = 8.34 >= 1.0)	Verifica non richiesta.
22-11	645121.6	6135432.7	SI (6135432.7/645121.6 = 9.51 >= 1.0)	Verifica non richiesta.
22-12	645204.6	5308505	SI (5308505/645204.6 = 8.23 >= 1.0)	Verifica non richiesta.
22-13	644917.6	5408476.8	SI (5408476.8/644917.6 = 8.39 >= 1.0)	Verifica non richiesta.
22-14	645000.6	4649278.4	SI (4649278.4/645000.6 = 7.21 >= 1.0)	Verifica non richiesta.
22-15	645095.6	5337938.5	SI (5337938.5/645095.6 = 8.27 >= 1.0)	Verifica non richiesta.
22-16	645179.6	4589601.2	SI (4589601.2/645179.6 = 7.11 >= 1.0)	Verifica non richiesta.
23-1	744828.6	6015474.6	SI (6015474.6/744828.6 = 8.08 >= 1.0)	Verifica non richiesta.
23-2	745424.6	6278627.8	SI (6278627.8/745424.6 = 8.42 >= 1.0)	Verifica non richiesta.
23-3	744853.6	5793524	SI (5793524/744853.6 = 7.78 >= 1.0)	Verifica non richiesta.
23-4	745448.6	6046498.1	SI (6046498.1/745448.6 = 8.11 >= 1.0)	Verifica non richiesta.
23-5	745380.6	6265668.2	SI (6265668.2/745380.6 = 8.41 >= 1.0)	Verifica non richiesta.
23-6	745976.6	6013566.9	SI (6013566.9/745976.6 = 8.06 >= 1.0)	Verifica non richiesta.
23-7	745405.6	6033995.9	SI (6033995.9/745405.6 = 8.09 >= 1.0)	Verifica non richiesta.
23-8	746001.6	5791451.8	SI (5791451.8/746001.6 = 7.76 >= 1.0)	Verifica non richiesta.
23-9	744820.6	5801714.2	SI (5801714.2/744820.6 = 7.79 >= 1.0)	Verifica non richiesta.
23-10	745416.6	6055075.6	SI (6055075.6/745416.6 = 8.12 >= 1.0)	Verifica non richiesta.
23-11	744845.6	5585423.7	SI (5585423.7/744845.6 = 7.50 >= 1.0)	Verifica non richiesta.

23-12	745441.6	5828879.9	SI (5828879.9/745441.6 = 7.82 >= 1.0)	Verifica non richiesta.
23-13	745372.6	6042550.4	SI (6042550.4/745372.6 = 8.11 >= 1.0)	Verifica non richiesta.
23-14	745968.6	5799644.8	SI (5799644.8/745968.6 = 7.77 >= 1.0)	Verifica non richiesta.
23-15	745397.6	5816795.2	SI (5816795.2/745397.6 = 7.80 >= 1.0)	Verifica non richiesta.
23-16	745993.6	5583203.9	SI (5583203.9/745993.6 = 7.48 >= 1.0)	Verifica non richiesta.
23-17	745576.6	6279887.8	SI (6279887.8/745576.6 = 8.42 >= 1.0)	Verifica non richiesta.
23-18	746172.6	5921595.3	SI (5921595.3/746172.6 = 7.94 >= 1.0)	Verifica non richiesta.
23-19	745601.6	6047641.7	SI (6047641.7/745601.6 = 8.11 >= 1.0)	Verifica non richiesta.
23-20	746197.6	5702976.2	SI (5702976.2/746197.6 = 7.64 >= 1.0)	Verifica non richiesta.
23-21	746128.6	5933234.1	SI (5933234.1/746128.6 = 7.95 >= 1.0)	Verifica non richiesta.
23-22	746724.6	5586082.2	SI (5586082.2/746724.6 = 7.48 >= 1.0)	Verifica non richiesta.
23-23	746153.6	5714126.4	SI (5714126.4/746153.6 = 7.66 >= 1.0)	Verifica non richiesta.
23-24	746749.6	5380165.6	SI (5380165.6/746749.6 = 7.20 >= 1.0)	Verifica non richiesta.
23-25	745569.6	6056223.3	SI (6056223.3/745569.6 = 8.12 >= 1.0)	Verifica non richiesta.
23-26	746165.6	5711043.3	SI (5711043.3/746165.6 = 7.65 >= 1.0)	Verifica non richiesta.
23-27	745594.6	5829910.8	SI (5829910.8/745594.6 = 7.82 >= 1.0)	Verifica non richiesta.
23-28	746189.6	5498003	SI (5498003/746189.6 = 7.37 >= 1.0)	Verifica non richiesta.
23-29	746121.6	5722211.9	SI (5722211.9/746121.6 = 7.67 >= 1.0)	Verifica non richiesta.
23-30	746717.6	5387753.4	SI (5387753.4/746717.6 = 7.22 >= 1.0)	Verifica non richiesta.
23-31	746146.6	5508703	SI (5508703/746146.6 = 7.38 >= 1.0)	Verifica non richiesta.
23-32	746742.6	5187098.2	SI (5187098.2/746742.6 = 6.95 >= 1.0)	Verifica non richiesta.
23-33	744825.6	5749911.4	SI (5749911.4/744825.6 = 7.72 >= 1.0)	Verifica non richiesta.
23-34	745421.6	6000926.3	SI (6000926.3/745421.6 = 8.05 >= 1.0)	Verifica non richiesta.
23-35	744850.6	5535007.9	SI (5535007.9/744850.6 = 7.43 >= 1.0)	Verifica non richiesta.
23-36	745446.6	5776182.5	SI (5776182.5/745446.6 = 7.75 >= 1.0)	Verifica non richiesta.
23-37	745377.6	5988504	SI (5988504/745377.6 = 8.03 >= 1.0)	Verifica non richiesta.
23-38	745973.6	5747824.8	SI (5747824.8/745973.6 = 7.71 >= 1.0)	Verifica non richiesta.
23-39	745402.6	5764198.2	SI (5764198.2/745402.6 = 7.73 >= 1.0)	Verifica non richiesta.
23-40	745998.6	5532774	SI (5532774/745998.6 = 7.42 >= 1.0)	Verifica non richiesta.
23-41	744817.6	5542927.2	SI (5542927.2/744817.6 = 7.44 >= 1.0)	Verifica non richiesta.
23-42	745413.6	5784469.8	SI (5784469.8/745413.6 = 7.76 >= 1.0)	Verifica non richiesta.
23-43	744842.6	5333577	SI (5333577/744842.6 = 7.16 >= 1.0)	Verifica non richiesta.
23-44	745438.6	5565541.8	SI (5565541.8/745438.6 = 7.47 >= 1.0)	Verifica non richiesta.
23-45	745369.6	5772469.2	SI (5772469.2/745369.6 = 7.74 >= 1.0)	Verifica non richiesta.
23-46	745965.6	5540695.4	SI (5540695.4/745965.6 = 7.43 >= 1.0)	Verifica non richiesta.
23-47	745394.6	5553968.8	SI (5553968.8/745394.6 = 7.45 >= 1.0)	Verifica non richiesta.
23-48	745990.6	5331211.3	SI (5331211.3/745990.6 = 7.15 >= 1.0)	Verifica non richiesta.
23-49	745573.6	6002042.3	SI (6002042.3/745573.6 = 8.05 >= 1.0)	Verifica non richiesta.
23-50	746169.6	5660031.7	SI (5660031.7/746169.6 = 7.59 >= 1.0)	Verifica non richiesta.
23-51	745598.6	5777182.8	SI (5777182.8/745598.6 = 7.75 >= 1.0)	Verifica non richiesta.
23-52	746194.6	5448365.9	SI (5448365.9/746194.6 = 7.30 >= 1.0)	Verifica non richiesta.
23-53	746126.6	5671091.7	SI (5671091.7/746126.6 = 7.60 >= 1.0)	Verifica non richiesta.
23-54	746722.6	5339701.2	SI (5339701.2/746722.6 = 7.15 >= 1.0)	Verifica non richiesta.
23-55	746151.6	5458954.4	SI (5458954.4/746151.6 = 7.32 >= 1.0)	Verifica non richiesta.
23-56	746746.6	5140329	SI (5140329/746746.6 = 6.88 >= 1.0)	Verifica non richiesta.
23-57	745566.6	5785480.3	SI (5785480.3/745566.6 = 7.76 >= 1.0)	Verifica non richiesta.
23-58	746162.6	5456165.9	SI (5456165.9/746162.6 = 7.31 >= 1.0)	Verifica non richiesta.
23-59	745591.6	5566442.4	SI (5566442.4/745591.6 = 7.47 >= 1.0)	Verifica non richiesta.
23-60	746187.6	5249979.2	SI (5249979.2/746187.6 = 7.04 >= 1.0)	Verifica non richiesta.
23-61	746118.6	5466765.9	SI (5466765.9/746118.6 = 7.33 >= 1.0)	Verifica non richiesta.
23-62	746714.6	5147665.6	SI (5147665.6/746714.6 = 6.89 >= 1.0)	Verifica non richiesta.
23-63	746143.6	5260121	SI (5260121/746143.6 = 7.05 >= 1.0)	Verifica non richiesta.
23-64	746739.6	4953460.5	SI (4953460.5/746739.6 = 6.63 >= 1.0)	Verifica non richiesta.
24-1	745474.6	7219371.9	SI (7219371.9/745474.6 = 9.68 >= 1.0)	Verifica non richiesta.
24-2	745558.6	6388589.3	SI (6388589.3/745558.6 = 8.57 >= 1.0)	Verifica non richiesta.
24-3	745653.6	7111851.3	SI (7111851.3/745653.6 = 9.54 >= 1.0)	Verifica non richiesta.
24-4	745736.6	6293728.6	SI (6293728.6/745736.6 = 8.44 >= 1.0)	Verifica non richiesta.
24-5	745449.6	6418430.1	SI (6418430.1/745449.6 = 8.61 >= 1.0)	Verifica non richiesta.
24-6	745532.6	5655281.7	SI (5655281.7/745532.6 = 7.59 >= 1.0)	Verifica non richiesta.
24-7	745628.6	6323109.6	SI (6323109.6/745628.6 = 8.48 >= 1.0)	Verifica non richiesta.
24-8	745711.6	5571600.2	SI (5571600.2/745711.6 = 7.47 >= 1.0)	Verifica non richiesta.
24-9	745640.6	7115993	SI (7115993/745640.6 = 9.54 >= 1.0)	Verifica non richiesta.
24-10	745723.6	6297334.1	SI (6297334.1/745723.6 = 8.44 >= 1.0)	Verifica non richiesta.
24-11	745819.6	6991815.1	SI (6991815.1/745819.6 = 9.37 >= 1.0)	Verifica non richiesta.
24-12	745902.6	6187800.2	SI (6187800.2/745902.6 = 8.30 >= 1.0)	Verifica non richiesta.
24-13	745615.6	6326734.8	SI (6326734.8/745615.6 = 8.49 >= 1.0)	Verifica non richiesta.
24-14	745698.6	5574736.7	SI (5574736.7/745698.6 = 7.48 >= 1.0)	Verifica non richiesta.
24-15	745793.6	6216656.9	SI (6216656.9/745793.6 = 8.34 >= 1.0)	Verifica non richiesta.
24-16	745877.6	5478118.3	SI (5478118.3/745877.6 = 7.34 >= 1.0)	Verifica non richiesta.
24-17	745465.6	6231365.6	SI (6231365.6/745465.6 = 8.36 >= 1.0)	Verifica non richiesta.
24-18	745548.6	5484427	SI (5484427/745548.6 = 7.36 >= 1.0)	Verifica non richiesta.

24-19	745644.6	6138891.1	SI (6138891.1/745644.6 = 8.23 >= 1.0)	Verifica non richiesta.
24-20	745727.6	5403345.6	SI (5403345.6/745727.6 = 7.25 >= 1.0)	Verifica non richiesta.
24-21	745440.6	5511101.3	SI (5511101.3/745440.6 = 7.39 >= 1.0)	Verifica non richiesta.
24-22	745523.6	4827642	SI (4827642/745523.6 = 6.48 >= 1.0)	Verifica non richiesta.
24-23	745619.6	5429603.9	SI (5429603.9/745619.6 = 7.28 >= 1.0)	Verifica non richiesta.
24-24	745702.6	4756567.1	SI (4756567.1/745702.6 = 6.38 >= 1.0)	Verifica non richiesta.
24-25	745631.6	6142395	SI (6142395/745631.6 = 8.24 >= 1.0)	Verifica non richiesta.
24-26	745714.6	5406372.2	SI (5406372.2/745714.6 = 7.25 >= 1.0)	Verifica non richiesta.
24-27	745810.6	6035611.2	SI (6035611.2/745810.6 = 8.09 >= 1.0)	Verifica non richiesta.
24-28	745893.6	5312757.3	SI (5312757.3/745893.6 = 7.12 >= 1.0)	Verifica non richiesta.
24-29	745605.6	5432641.4	SI (5432641.4/745605.6 = 7.29 >= 1.0)	Verifica non richiesta.
24-30	745689.6	4759178.4	SI (4759178.4/745689.6 = 6.38 >= 1.0)	Verifica non richiesta.
24-31	745784.6	5338546	SI (5338546/745784.6 = 7.16 >= 1.0)	Verifica non richiesta.
24-32	745867.6	4677120.7	SI (4677120.7/745867.6 = 6.27 >= 1.0)	Verifica non richiesta.
24-33	745699.6	7083630.9	SI (7083630.9/745699.6 = 9.50 >= 1.0)	Verifica non richiesta.
24-34	745782.6	6268787.7	SI (6268787.7/745782.6 = 8.41 >= 1.0)	Verifica non richiesta.
24-35	745878.6	6959757.1	SI (6959757.1/745878.6 = 9.33 >= 1.0)	Verifica non richiesta.
24-36	745961.6	6159521.2	SI (6159521.2/745961.6 = 8.26 >= 1.0)	Verifica non richiesta.
24-37	745674.6	6298048	SI (6298048/745674.6 = 8.45 >= 1.0)	Verifica non richiesta.
24-38	745757.6	5549556.1	SI (5549556.1/745757.6 = 7.44 >= 1.0)	Verifica non richiesta.
24-39	745852.6	6188238.8	SI (6188238.8/745852.6 = 8.30 >= 1.0)	Verifica non richiesta.
24-40	745936.6	5453172.6	SI (5453172.6/745936.6 = 7.31 >= 1.0)	Verifica non richiesta.
24-41	745865.6	6963866.5	SI (6963866.5/745865.6 = 9.34 >= 1.0)	Verifica non richiesta.
24-42	745948.6	6163099.4	SI (6163099.4/745948.6 = 8.26 >= 1.0)	Verifica non richiesta.
24-43	746043.6	6841146.7	SI (6841146.7/746043.6 = 9.17 >= 1.0)	Verifica non richiesta.
24-44	746127.6	6054852.7	SI (6054852.7/746127.6 = 8.12 >= 1.0)	Verifica non richiesta.
24-45	745839.6	6191836.6	SI (6191836.6/745839.6 = 8.30 >= 1.0)	Verifica non richiesta.
24-46	745923.6	5456286.2	SI (5456286.2/745923.6 = 7.31 >= 1.0)	Verifica non richiesta.
24-47	746018.6	6083058.5	SI (6083058.5/746018.6 = 8.15 >= 1.0)	Verifica non richiesta.
24-48	746101.6	5360792.7	SI (5360792.7/746101.6 = 7.19 >= 1.0)	Verifica non richiesta.
24-49	745690.6	6114566.6	SI (6114566.6/745690.6 = 8.20 >= 1.0)	Verifica non richiesta.
24-50	745773.6	5381975.9	SI (5381975.9/745773.6 = 7.22 >= 1.0)	Verifica non richiesta.
24-51	745869.6	6008043.2	SI (6008043.2/745869.6 = 8.06 >= 1.0)	Verifica non richiesta.
24-52	745952.6	5288588.2	SI (5288588.2/745952.6 = 7.09 >= 1.0)	Verifica non richiesta.
24-53	745664.6	5408119.7	SI (5408119.7/745664.6 = 7.25 >= 1.0)	Verifica non richiesta.
24-54	745748.6	4737796.3	SI (4737796.3/745748.6 = 6.35 >= 1.0)	Verifica non richiesta.
24-55	745843.6	5314252.7	SI (5314252.7/745843.6 = 7.13 >= 1.0)	Verifica non richiesta.
24-56	745926.6	4655936.8	SI (4655936.8/745926.6 = 6.24 >= 1.0)	Verifica non richiesta.
24-57	745855.6	6011514.7	SI (6011514.7/745855.6 = 8.06 >= 1.0)	Verifica non richiesta.
24-58	745939.6	5291592.9	SI (5291592.9/745939.6 = 7.09 >= 1.0)	Verifica non richiesta.
24-59	746034.6	5905984.9	SI (5905984.9/746034.6 = 7.92 >= 1.0)	Verifica non richiesta.
24-60	746117.6	5199066.5	SI (5199066.5/746117.6 = 6.97 >= 1.0)	Verifica non richiesta.
24-61	745830.6	5317274.7	SI (5317274.7/745830.6 = 7.13 >= 1.0)	Verifica non richiesta.
24-62	745913.6	4658530	SI (4658530/745913.6 = 6.25 >= 1.0)	Verifica non richiesta.
24-63	746009.6	5224280	SI (5224280/746009.6 = 7.00 >= 1.0)	Verifica non richiesta.
24-64	746092.6	4577434	SI (4577434/746092.6 = 6.14 >= 1.0)	Verifica non richiesta.
25-1	477528	4133818.8	SI (4133818.8/477528 = 8.66 >= 1.0)	Verifica non richiesta.
25-2	477528	4133828.2	SI (4133828.2/477528 = 8.66 >= 1.0)	Verifica non richiesta.
25-3	477519	3655364.9	SI (3655364.9/477519 = 7.65 >= 1.0)	Verifica non richiesta.
25-4	477519	3655373.5	SI (3655373.5/477519 = 7.65 >= 1.0)	Verifica non richiesta.
25-5	477528	4133803.9	SI (4133803.9/477528 = 8.66 >= 1.0)	Verifica non richiesta.
25-6	477528	4133813.2	SI (4133813.2/477528 = 8.66 >= 1.0)	Verifica non richiesta.
25-7	477519	3655351.4	SI (3655351.4/477519 = 7.65 >= 1.0)	Verifica non richiesta.
25-8	477519	3655360.1	SI (3655360.1/477519 = 7.65 >= 1.0)	Verifica non richiesta.
25-9	477523	3787052.6	SI (3787052.6/477523 = 7.93 >= 1.0)	Verifica non richiesta.
25-10	477523	3787061.2	SI (3787061.2/477523 = 7.93 >= 1.0)	Verifica non richiesta.
25-11	477515	3347418.6	SI (3347418.6/477515 = 7.01 >= 1.0)	Verifica non richiesta.
25-12	477516	3347438.4	SI (3347438.4/477516 = 7.01 >= 1.0)	Verifica non richiesta.
25-13	477523	3787038.4	SI (3787038.4/477523 = 7.93 >= 1.0)	Verifica non richiesta.
25-14	477523	3787047.1	SI (3787047.1/477523 = 7.93 >= 1.0)	Verifica non richiesta.
25-15	477515	3347406.6	SI (3347406.6/477515 = 7.01 >= 1.0)	Verifica non richiesta.
25-16	477516	3347426.4	SI (3347426.4/477516 = 7.01 >= 1.0)	Verifica non richiesta.
26-1	477530	4453885.8	SI (4453885.8/477530 = 9.33 >= 1.0)	Verifica non richiesta.
26-2	477530	4453881	SI (4453881/477530 = 9.33 >= 1.0)	Verifica non richiesta.
26-3	477529	4338902.7	SI (4338902.7/477529 = 9.09 >= 1.0)	Verifica non richiesta.
26-4	477529	4338897.9	SI (4338897.9/477529 = 9.09 >= 1.0)	Verifica non richiesta.
26-5	477530	4453918.1	SI (4453918.1/477530 = 9.33 >= 1.0)	Verifica non richiesta.
26-6	477530	4453913.3	SI (4453913.3/477530 = 9.33 >= 1.0)	Verifica non richiesta.
26-7	477529	4338934.2	SI (4338934.2/477529 = 9.09 >= 1.0)	Verifica non richiesta.
26-8	477529	4338929.4	SI (4338929.4/477529 = 9.09 >= 1.0)	Verifica non richiesta.
26-9	477503	2938793.8	SI (2938793.8/477503 = 6.15 >= 1.0)	Verifica non richiesta.

26-10	477503	2938794.4	SI (2938794.4/477503 = 6.15 >= 1.0)	Verifica non richiesta.
26-11	477522	2862339	SI (2862339/477522 = 5.99 >= 1.0)	Verifica non richiesta.
26-12	477522	2862339.7	SI (2862339.7/477522 = 5.99 >= 1.0)	Verifica non richiesta.
26-13	477503	2938813.9	SI (2938813.9/477503 = 6.15 >= 1.0)	Verifica non richiesta.
26-14	477503	2938814.5	SI (2938814.5/477503 = 6.15 >= 1.0)	Verifica non richiesta.
26-15	477522	2862365.5	SI (2862365.5/477522 = 5.99 >= 1.0)	Verifica non richiesta.
26-16	477522	2862366.2	SI (2862366.2/477522 = 5.99 >= 1.0)	Verifica non richiesta.
27-1	729413	5931900.2	SI (5931900.2/729413 = 8.13 >= 1.0)	Verifica non richiesta.
27-2	729953	6042112.8	SI (6042112.8/729953 = 8.28 >= 1.0)	Verifica non richiesta.
27-3	729843	6100797.6	SI (6100797.6/729843 = 8.36 >= 1.0)	Verifica non richiesta.
27-4	730383	5787559.5	SI (5787559.5/730383 = 7.92 >= 1.0)	Verifica non richiesta.
27-5	729811	6109201.4	SI (6109201.4/729811 = 8.37 >= 1.0)	Verifica non richiesta.
27-6	730351	5795811.1	SI (5795811.1/730351 = 7.94 >= 1.0)	Verifica non richiesta.
27-7	730241	5853125.3	SI (5853125.3/730241 = 8.02 >= 1.0)	Verifica non richiesta.
27-8	730781	5547055.6	SI (5547055.6/730781 = 7.59 >= 1.0)	Verifica non richiesta.
27-9	729411	5736809.8	SI (5736809.8/729411 = 7.86 >= 1.0)	Verifica non richiesta.
27-10	729951	5843163	SI (5843163/729951 = 8.00 >= 1.0)	Verifica non richiesta.
27-11	729841	5899894.5	SI (5899894.5/729841 = 8.08 >= 1.0)	Verifica non richiesta.
27-12	730381	5597218.3	SI (5597218.3/730381 = 7.66 >= 1.0)	Verifica non richiesta.
27-13	729809	5907981.5	SI (5907981.5/729809 = 8.10 >= 1.0)	Verifica non richiesta.
27-14	730349	5605160.1	SI (5605160.1/730349 = 7.67 >= 1.0)	Verifica non richiesta.
27-15	730239	5660566.9	SI (5660566.9/730239 = 7.75 >= 1.0)	Verifica non richiesta.
27-16	730779	5364811.7	SI (5364811.7/730779 = 7.34 >= 1.0)	Verifica non richiesta.
27-17	729431	5768970.6	SI (5768970.6/729431 = 7.91 >= 1.0)	Verifica non richiesta.
27-18	729971	5875948.5	SI (5875948.5/729971 = 8.05 >= 1.0)	Verifica non richiesta.
27-19	729861	5932999.8	SI (5932999.8/729861 = 8.13 >= 1.0)	Verifica non richiesta.
27-20	730401	5628594.3	SI (5628594.3/730401 = 7.71 >= 1.0)	Verifica non richiesta.
27-21	729829	5941139.2	SI (5941139.2/729829 = 8.14 >= 1.0)	Verifica non richiesta.
27-22	730369	5636587.4	SI (5636587.4/730369 = 7.72 >= 1.0)	Verifica non richiesta.
27-23	730259	5692306.6	SI (5692306.6/730259 = 7.79 >= 1.0)	Verifica non richiesta.
27-24	730799	5394862.4	SI (5394862.4/730799 = 7.38 >= 1.0)	Verifica non richiesta.
27-25	729429	5577716.5	SI (5577716.5/729429 = 7.65 >= 1.0)	Verifica non richiesta.
27-26	729969	5680915.6	SI (5680915.6/729969 = 7.78 >= 1.0)	Verifica non richiesta.
27-27	729859	5736051.2	SI (5736051.2/729859 = 7.86 >= 1.0)	Verifica non richiesta.
27-28	730399	5442000.4	SI (5442000.4/730399 = 7.45 >= 1.0)	Verifica non richiesta.
27-29	729827	5743880.6	SI (5743880.6/729827 = 7.87 >= 1.0)	Verifica non richiesta.
27-30	730367	5449690.5	SI (5449690.5/730367 = 7.46 >= 1.0)	Verifica non richiesta.
27-31	730257	5503539	SI (5503539/730257 = 7.54 >= 1.0)	Verifica non richiesta.
27-32	730797	5216207	SI (5216207/730797 = 7.14 >= 1.0)	Verifica non richiesta.
27-33	729408	5775007.8	SI (5775007.8/729408 = 7.92 >= 1.0)	Verifica non richiesta.
27-34	729947	5882100.2	SI (5882100.2/729947 = 8.06 >= 1.0)	Verifica non richiesta.
27-35	729837	5939213.5	SI (5939213.5/729837 = 8.14 >= 1.0)	Verifica non richiesta.
27-36	730377	5634473.3	SI (5634473.3/730377 = 7.71 >= 1.0)	Verifica non richiesta.
27-37	729806	5947369.3	SI (5947369.3/729806 = 8.15 >= 1.0)	Verifica non richiesta.
27-38	730346	5642482.7	SI (5642482.7/730346 = 7.73 >= 1.0)	Verifica non richiesta.
27-39	730236	5698262.3	SI (5698262.3/730236 = 7.80 >= 1.0)	Verifica non richiesta.
27-40	730775	5400485.1	SI (5400485.1/730775 = 7.39 >= 1.0)	Verifica non richiesta.
27-41	729406	5583606	SI (5583606/729406 = 7.66 >= 1.0)	Verifica non richiesta.
27-42	729945	5686916.4	SI (5686916.4/729945 = 7.79 >= 1.0)	Verifica non richiesta.
27-43	729835	5742112.5	SI (5742112.5/729835 = 7.87 >= 1.0)	Verifica non richiesta.
27-44	730375	5447735.2	SI (5447735.2/730375 = 7.46 >= 1.0)	Verifica non richiesta.
27-45	729804	5749958.2	SI (5749958.2/729804 = 7.88 >= 1.0)	Verifica non richiesta.
27-46	730344	5455441.3	SI (5455441.3/730344 = 7.47 >= 1.0)	Verifica non richiesta.
27-47	730234	5509348.9	SI (5509348.9/730234 = 7.54 >= 1.0)	Verifica non richiesta.
27-48	730773	5221691.8	SI (5221691.8/730773 = 7.15 >= 1.0)	Verifica non richiesta.
27-49	729426	5615157.9	SI (5615157.9/729426 = 7.70 >= 1.0)	Verifica non richiesta.
27-50	729965	5719080.4	SI (5719080.4/729965 = 7.83 >= 1.0)	Verifica non richiesta.
27-51	729855	5774590.4	SI (5774590.4/729855 = 7.91 >= 1.0)	Verifica non richiesta.
27-52	730395	5478516.4	SI (5478516.4/730395 = 7.50 >= 1.0)	Verifica non richiesta.
27-53	729824	5782487.4	SI (5782487.4/729824 = 7.92 >= 1.0)	Verifica non richiesta.
27-54	730364	5486272.6	SI (5486272.6/730364 = 7.51 >= 1.0)	Verifica non richiesta.
27-55	730254	5540486.8	SI (5540486.8/730254 = 7.59 >= 1.0)	Verifica non richiesta.
27-56	730793	5251172.6	SI (5251172.6/730793 = 7.19 >= 1.0)	Verifica non richiesta.
27-57	729424	5427549.6	SI (5427549.6/729424 = 7.44 >= 1.0)	Verifica non richiesta.
27-58	729963	5527769.6	SI (5527769.6/729963 = 7.57 >= 1.0)	Verifica non richiesta.
27-59	729853	5581399.9	SI (5581399.9/729853 = 7.65 >= 1.0)	Verifica non richiesta.
27-60	730393	5295483.6	SI (5295483.6/730393 = 7.25 >= 1.0)	Verifica non richiesta.
27-61	729822	5588993.5	SI (5588993.5/729822 = 7.66 >= 1.0)	Verifica non richiesta.
27-62	730362	5302943.3	SI (5302943.3/730362 = 7.26 >= 1.0)	Verifica non richiesta.
27-63	730252	5355321.9	SI (5355321.9/730252 = 7.33 >= 1.0)	Verifica non richiesta.
27-64	730791	5075927.3	SI (5075927.3/730791 = 6.95 >= 1.0)	Verifica non richiesta.

28-1	729880	6715194.6	SI (6715194.6/729880 = 9.20 >= 1.0)	Verifica non richiesta.
28-2	729873	6018204.1	SI (6018204.1/729873 = 8.25 >= 1.0)	Verifica non richiesta.
28-3	729940	6130463.4	SI (6130463.4/729940 = 8.40 >= 1.0)	Verifica non richiesta.
28-4	729933	5477770.2	SI (5477770.2/729933 = 7.50 >= 1.0)	Verifica non richiesta.
28-5	729861	6151675.3	SI (6151675.3/729861 = 8.43 >= 1.0)	Verifica non richiesta.
28-6	729855	5497302	SI (5497302/729855 = 7.53 >= 1.0)	Verifica non richiesta.
28-7	729921	5602617.7	SI (5602617.7/729921 = 7.68 >= 1.0)	Verifica non richiesta.
28-8	729915	4990915.4	SI (4990915.4/729915 = 6.84 >= 1.0)	Verifica non richiesta.
28-9	730042	6610244.9	SI (6610244.9/730042 = 9.05 >= 1.0)	Verifica non richiesta.
28-10	730035	5924381.9	SI (5924381.9/730035 = 8.12 >= 1.0)	Verifica non richiesta.
28-11	730102	6034860.5	SI (6034860.5/730102 = 8.27 >= 1.0)	Verifica non richiesta.
28-12	730095	5392591	SI (5392591/730095 = 7.39 >= 1.0)	Verifica non richiesta.
28-13	730023	6055725.4	SI (6055725.4/730023 = 8.30 >= 1.0)	Verifica non richiesta.
28-14	730017	5411803.4	SI (5411803.4/730017 = 7.41 >= 1.0)	Verifica non richiesta.
28-15	730083	5515447.5	SI (5515447.5/730083 = 7.55 >= 1.0)	Verifica non richiesta.
28-16	730077	4913515.6	SI (4913515.6/730077 = 6.73 >= 1.0)	Verifica non richiesta.
28-17	730008	6629574.3	SI (6629574.3/730008 = 9.08 >= 1.0)	Verifica non richiesta.
28-18	730002	5941692.9	SI (5941692.9/730002 = 8.14 >= 1.0)	Verifica non richiesta.
28-19	730068	6052489.2	SI (6052489.2/730068 = 8.29 >= 1.0)	Verifica non richiesta.
28-20	730062	5408327.8	SI (5408327.8/730062 = 7.41 >= 1.0)	Verifica non richiesta.
28-21	729990	6073423.6	SI (6073423.6/729990 = 8.32 >= 1.0)	Verifica non richiesta.
28-22	729984	5427598.4	SI (5427598.4/729984 = 7.44 >= 1.0)	Verifica non richiesta.
28-23	730050	5531547	SI (5531547/730050 = 7.58 >= 1.0)	Verifica non richiesta.
28-24	730044	4927834	SI (4927834/730044 = 6.75 >= 1.0)	Verifica non richiesta.
28-25	730170	6525359.6	SI (6525359.6/730170 = 8.94 >= 1.0)	Verifica non richiesta.
28-26	730164	5848525.8	SI (5848525.8/730164 = 8.01 >= 1.0)	Verifica non richiesta.
28-27	730230	5957554.2	SI (5957554.2/730230 = 8.16 >= 1.0)	Verifica non richiesta.
28-28	730224	5323741.4	SI (5323741.4/730224 = 7.29 >= 1.0)	Verifica non richiesta.
28-29	730152	5978144.1	SI (5978144.1/730152 = 8.19 >= 1.0)	Verifica non richiesta.
28-30	730145	5342688.4	SI (5342688.4/730145 = 7.32 >= 1.0)	Verifica non richiesta.
28-31	730212	5444983.9	SI (5444983.9/730212 = 7.46 >= 1.0)	Verifica non richiesta.
28-32	730205	4850964.5	SI (4850964.5/730205 = 6.64 >= 1.0)	Verifica non richiesta.
28-33	729999	6632388.5	SI (6632388.5/729999 = 9.09 >= 1.0)	Verifica non richiesta.
28-34	729992	5944170.8	SI (5944170.8/729992 = 8.14 >= 1.0)	Verifica non richiesta.
28-35	730059	6055026.7	SI (6055026.7/730059 = 8.29 >= 1.0)	Verifica non richiesta.
28-36	730052	5410551.6	SI (5410551.6/730052 = 7.41 >= 1.0)	Verifica non richiesta.
28-37	729981	6075971.4	SI (6075971.4/729981 = 8.32 >= 1.0)	Verifica non richiesta.
28-38	729974	5429831.6	SI (5429831.6/729974 = 7.44 >= 1.0)	Verifica non richiesta.
28-39	730041	5533836.4	SI (5533836.4/730041 = 7.58 >= 1.0)	Verifica non richiesta.
28-40	730034	4929830.8	SI (4929830.8/730034 = 6.75 >= 1.0)	Verifica non richiesta.
28-41	730161	6528158	SI (6528158/730161 = 8.94 >= 1.0)	Verifica non richiesta.
28-42	730154	5850990.2	SI (5850990.2/730154 = 8.01 >= 1.0)	Verifica non richiesta.
28-43	730221	5960077.8	SI (5960077.8/730221 = 8.16 >= 1.0)	Verifica non richiesta.
28-44	730214	5325953.5	SI (5325953.5/730214 = 7.29 >= 1.0)	Verifica non richiesta.
28-45	730143	5980678	SI (5980678/730143 = 8.19 >= 1.0)	Verifica non richiesta.
28-46	730136	5344916.4	SI (5344916.4/730136 = 7.32 >= 1.0)	Verifica non richiesta.
28-47	730203	5447261.2	SI (5447261.2/730203 = 7.46 >= 1.0)	Verifica non richiesta.
28-48	730196	4852957.6	SI (4852957.6/730196 = 6.65 >= 1.0)	Verifica non richiesta.
28-49	730128	6547356.9	SI (6547356.9/730128 = 8.97 >= 1.0)	Verifica non richiesta.
28-50	730121	5868178.8	SI (5868178.8/730121 = 8.04 >= 1.0)	Verifica non richiesta.
28-51	730188	5977588.3	SI (5977588.3/730188 = 8.19 >= 1.0)	Verifica non richiesta.
28-52	730181	5341579.1	SI (5341579.1/730181 = 7.32 >= 1.0)	Verifica non richiesta.
28-53	730110	5998251.2	SI (5998251.2/730110 = 8.22 >= 1.0)	Verifica non richiesta.
28-54	730103	5360599.8	SI (5360599.8/730103 = 7.34 >= 1.0)	Verifica non richiesta.
28-55	730170	5463247	SI (5463247/730170 = 7.48 >= 1.0)	Verifica non richiesta.
28-56	730163	4867175.1	SI (4867175.1/730163 = 6.67 >= 1.0)	Verifica non richiesta.
28-57	730290	6443860.3	SI (6443860.3/730290 = 8.82 >= 1.0)	Verifica non richiesta.
28-58	730283	5775652.3	SI (5775652.3/730283 = 7.91 >= 1.0)	Verifica non richiesta.
28-59	730350	5883306.1	SI (5883306.1/730350 = 8.06 >= 1.0)	Verifica non richiesta.
28-60	730343	5257572.9	SI (5257572.9/730343 = 7.20 >= 1.0)	Verifica non richiesta.
28-61	730272	5903627.1	SI (5903627.1/730272 = 8.08 >= 1.0)	Verifica non richiesta.
28-62	730265	5276278.9	SI (5276278.9/730265 = 7.23 >= 1.0)	Verifica non richiesta.
28-63	730332	5377278.1	SI (5377278.1/730332 = 7.36 >= 1.0)	Verifica non richiesta.
28-64	730325	4790837.9	SI (4790837.9/730325 = 6.56 >= 1.0)	Verifica non richiesta.

Segue la tabella riassuntiva di tutte le verifiche di *resistenza a scorrimento*, i dettagli sono riportati nei paragrafi successivi.

Caso	Cond. drenate			Cond. non drenate		
	E_d [daN]	R_d [daN]	Verifica	E_d [daN]	R_d [daN]	Verifica
1-1	220848.2	244595.2	SI (244595.2/220848.2 = 1.11 >= 1.0)			Verifica non richiesta.
2-1	220847.4	295307.2	SI (295307.2/220847.4 = 1.34 >= 1.0)			Verifica non richiesta.
3-1	220848.2	283900.9	SI (283900.9/220848.2 = 1.29 >= 1.0)			Verifica non richiesta.
4-1	220837.5	281635.3	SI (281635.3/220837.5 = 1.28 >= 1.0)			Verifica non richiesta.
5-1	220847.4	334613.2	SI (334613.2/220847.4 = 1.52 >= 1.0)			Verifica non richiesta.
6-1	220836.7	332347.6	SI (332347.6/220836.7 = 1.50 >= 1.0)			Verifica non richiesta.
7-1	220837.5	320941.3	SI (320941.3/220837.5 = 1.45 >= 1.0)			Verifica non richiesta.
8-1	220836.7	371653.3	SI (371653.3/220836.7 = 1.68 >= 1.0)			Verifica non richiesta.
9-1	143403.2	178682.7	SI (178682.7/143403.2 = 1.25 >= 1.0)			Verifica non richiesta.
9-2	143403.2	178682.7	SI (178682.7/143403.2 = 1.25 >= 1.0)			Verifica non richiesta.
9-3	155246	178673.8	SI (178673.8/155246 = 1.15 >= 1.0)			Verifica non richiesta.
9-4	155246	178673.8	SI (178673.8/155246 = 1.15 >= 1.0)			Verifica non richiesta.
9-5	143403.2	178682.7	SI (178682.7/143403.2 = 1.25 >= 1.0)			Verifica non richiesta.
9-6	143403.2	178682.7	SI (178682.7/143403.2 = 1.25 >= 1.0)			Verifica non richiesta.
9-7	155246	178673.8	SI (178673.8/155246 = 1.15 >= 1.0)			Verifica non richiesta.
9-8	155246	178673.8	SI (178673.8/155246 = 1.15 >= 1.0)			Verifica non richiesta.
9-9	146111.2	179665.1	SI (179665.1/146111.2 = 1.23 >= 1.0)			Verifica non richiesta.
9-10	146111.2	179665.1	SI (179665.1/146111.2 = 1.23 >= 1.0)			Verifica non richiesta.
9-11	157750.9	179619.3	SI (179619.3/157750.9 = 1.14 >= 1.0)			Verifica non richiesta.
9-12	157750.9	179619.3	SI (179619.3/157750.9 = 1.14 >= 1.0)			Verifica non richiesta.
9-13	146111.2	179665.1	SI (179665.1/146111.2 = 1.23 >= 1.0)			Verifica non richiesta.
9-14	146111.2	179665.1	SI (179665.1/146111.2 = 1.23 >= 1.0)			Verifica non richiesta.
9-15	157750.9	179619.3	SI (179619.3/157750.9 = 1.14 >= 1.0)			Verifica non richiesta.
9-16	157750.9	179619.3	SI (179619.3/157750.9 = 1.14 >= 1.0)			Verifica non richiesta.
10-1	135977.8	179035.3	SI (179035.3/135977.8 = 1.32 >= 1.0)			Verifica non richiesta.
10-2	135977.8	179035.3	SI (179035.3/135977.8 = 1.32 >= 1.0)			Verifica non richiesta.
10-3	136806	179386.4	SI (179386.4/136806 = 1.31 >= 1.0)			Verifica non richiesta.
10-4	136806	179386.4	SI (179386.4/136806 = 1.31 >= 1.0)			Verifica non richiesta.
10-5	135977.8	179035.3	SI (179035.3/135977.8 = 1.32 >= 1.0)			Verifica non richiesta.
10-6	135977.8	179035.3	SI (179035.3/135977.8 = 1.32 >= 1.0)			Verifica non richiesta.
10-7	136806	179386.4	SI (179386.4/136806 = 1.31 >= 1.0)			Verifica non richiesta.
10-8	136806	179386.4	SI (179386.4/136806 = 1.31 >= 1.0)			Verifica non richiesta.
10-9	175396.2	179017.3	SI (179017.3/175396.2 = 1.02 >= 1.0)			Verifica non richiesta.
10-10	175396.2	179017.3	SI (179017.3/175396.2 = 1.02 >= 1.0)			Verifica non richiesta.
10-11	176039.1	179284.7	SI (179284.7/176039.1 = 1.02 >= 1.0)			Verifica non richiesta.
10-12	176039.1	179284.7	SI (179284.7/176039.1 = 1.02 >= 1.0)			Verifica non richiesta.
10-13	175396.2	179014	SI (179014/175396.2 = 1.02 >= 1.0)			Verifica non richiesta.
10-14	175396.2	179014.3	SI (179014.3/175396.2 = 1.02 >= 1.0)			Verifica non richiesta.
10-15	176039.1	179283.1	SI (179283.1/176039.1 = 1.02 >= 1.0)			Verifica non richiesta.
10-16	176039.1	179283.1	SI (179283.1/176039.1 = 1.02 >= 1.0)			Verifica non richiesta.
11-1	141761.9	223368.5	SI (223368.5/141761.9 = 1.58 >= 1.0)			Verifica non richiesta.
11-2	144719.4	224767.6	SI (224767.6/144719.4 = 1.55 >= 1.0)			Verifica non richiesta.
11-3	151737.1	223350.9	SI (223350.9/151737.1 = 1.47 >= 1.0)			Verifica non richiesta.
11-4	154503.8	224707.2	SI (224707.2/154503.8 = 1.45 >= 1.0)			Verifica non richiesta.
12-1	130278.6	223698.5	SI (223698.5/130278.6 = 1.72 >= 1.0)			Verifica non richiesta.
12-2	163498	223598.5	SI (223598.5/163498 = 1.37 >= 1.0)			Verifica non richiesta.
12-3	131250.5	224315.7	SI (224315.7/131250.5 = 1.71 >= 1.0)			Verifica non richiesta.
12-4	164273.5	224136.9	SI (224136.9/164273.5 = 1.36 >= 1.0)			Verifica non richiesta.
13-1	142436	215602.1	SI (215602.1/142436 = 1.51 >= 1.0)			Verifica non richiesta.
13-2	144879.7	217038.5	SI (217038.5/144879.7 = 1.50 >= 1.0)			Verifica non richiesta.
13-3	150955.4	215605.8	SI (215605.8/150955.4 = 1.43 >= 1.0)			Verifica non richiesta.
13-4	153263.4	216996	SI (216996/153263.4 = 1.42 >= 1.0)			Verifica non richiesta.
14-1	132759.7	216129.6	SI (216129.6/132759.7 = 1.63 >= 1.0)			Verifica non richiesta.
14-2	161111.5	216067.5	SI (216067.5/161111.5 = 1.34 >= 1.0)			Verifica non richiesta.
14-3	133550.6	216633.2	SI (216633.2/133550.6 = 1.62 >= 1.0)			Verifica non richiesta.
14-4	161763.9	216515.1	SI (216515.1/161763.9 = 1.34 >= 1.0)			Verifica non richiesta.
15-1	142584	214077	SI (214077/142584 = 1.50 >= 1.0)			Verifica non richiesta.
15-2	144914.4	215506.9	SI (215506.9/144914.4 = 1.49 >= 1.0)			Verifica non richiesta.
15-3	150800.6	214071.4	SI (214071.4/150800.6 = 1.42 >= 1.0)			Verifica non richiesta.
15-4	153005.9	215455.2	SI (215455.2/153005.9 = 1.41 >= 1.0)			Verifica non richiesta.
16-1	133268.8	214645.4	SI (214645.4/133268.8 = 1.61 >= 1.0)			Verifica non richiesta.
16-2	160611.4	214549.3	SI (214549.3/160611.4 = 1.34 >= 1.0)			Verifica non richiesta.
16-3	134020.8	215126.8	SI (215126.8/134020.8 = 1.61 >= 1.0)			Verifica non richiesta.
16-4	161235.9	214978.8	SI (214978.8/161235.9 = 1.33 >= 1.0)			Verifica non richiesta.
17-1	138624.5	250226	SI (250226/138624.5 = 1.81 >= 1.0)			Verifica non richiesta.
17-2	138311.7	250357.7	SI (250357.7/138311.7 = 1.81 >= 1.0)			Verifica non richiesta.

17-3	148524.2	250169.6	SI (250169.6/148524.2 = 1.68 >= 1.0)	Verifica non richiesta.
17-4	148232.4	250305.6	SI (250305.6/148232.4 = 1.69 >= 1.0)	Verifica non richiesta.
17-5	137784.7	250007	SI (250007/137784.7 = 1.81 >= 1.0)	Verifica non richiesta.
17-6	144103.5	251376	SI (251376/144103.5 = 1.74 >= 1.0)	Verifica non richiesta.
17-7	147740.8	249969.3	SI (249969.3/147740.8 = 1.69 >= 1.0)	Verifica non richiesta.
17-8	153650.6	251335.4	SI (251335.4/153650.6 = 1.64 >= 1.0)	Verifica non richiesta.
17-9	147075.7	250186.7	SI (250186.7/147075.7 = 1.70 >= 1.0)	Verifica non richiesta.
17-10	146781	250322.1	SI (250322.1/146781 = 1.71 >= 1.0)	Verifica non richiesta.
17-11	156984.1	250134.9	SI (250134.9/156984.1 = 1.59 >= 1.0)	Verifica non richiesta.
17-12	156708	250274.5	SI (250274.5/156708 = 1.60 >= 1.0)	Verifica non richiesta.
17-13	146284.5	249983.5	SI (249983.5/146284.5 = 1.71 >= 1.0)	Verifica non richiesta.
17-14	152250.9	251350.9	SI (251350.9/152250.9 = 1.65 >= 1.0)	Verifica non richiesta.
17-15	156243.1	249949.4	SI (249949.4/156243.1 = 1.60 >= 1.0)	Verifica non richiesta.
17-16	161842.8	251307.1	SI (251307.1/161842.8 = 1.55 >= 1.0)	Verifica non richiesta.
18-1	115908.4	249617.2	SI (249617.2/115908.4 = 2.15 >= 1.0)	Verifica non richiesta.
18-2	149161.5	249556.5	SI (249556.5/149161.5 = 1.67 >= 1.0)	Verifica non richiesta.
18-3	116640	250354.7	SI (250354.7/116640 = 2.15 >= 1.0)	Verifica non richiesta.
18-4	149730.7	250174.2	SI (250174.2/149730.7 = 1.67 >= 1.0)	Verifica non richiesta.
18-5	144297.8	249594.2	SI (249594.2/144297.8 = 1.73 >= 1.0)	Verifica non richiesta.
18-6	177554.5	249551.7	SI (249551.7/177554.5 = 1.41 >= 1.0)	Verifica non richiesta.
18-7	144886.2	250226.8	SI (250226.8/144886.2 = 1.73 >= 1.0)	Verifica non richiesta.
18-8	178033	250095.7	SI (250095.7/178033 = 1.40 >= 1.0)	Verifica non richiesta.
18-9	116452.7	250239.3	SI (250239.3/116452.7 = 2.15 >= 1.0)	Verifica non richiesta.
18-10	149584.9	250073.9	SI (250073.9/149584.9 = 1.67 >= 1.0)	Verifica non richiesta.
18-11	117896.1	250816.3	SI (250816.3/117896.1 = 2.13 >= 1.0)	Verifica non richiesta.
18-12	150711.2	250594.8	SI (250594.8/150711.2 = 1.66 >= 1.0)	Verifica non richiesta.
18-13	144735.4	250124.5	SI (250124.5/144735.4 = 1.73 >= 1.0)	Verifica non richiesta.
18-14	177910.4	250005.5	SI (250005.5/177910.4 = 1.41 >= 1.0)	Verifica non richiesta.
18-15	145899.2	250653.9	SI (250653.9/145899.2 = 1.72 >= 1.0)	Verifica non richiesta.
18-16	178858.4	250481.7	SI (250481.7/178858.4 = 1.40 >= 1.0)	Verifica non richiesta.
19-1	138714.8	248709.2	SI (248709.2/138714.8 = 1.79 >= 1.0)	Verifica non richiesta.
19-2	138515.1	248884.2	SI (248884.2/138515.1 = 1.80 >= 1.0)	Verifica non richiesta.
19-3	148618.7	248653.8	SI (248653.8/148618.7 = 1.67 >= 1.0)	Verifica non richiesta.
19-4	148432.4	248831.3	SI (248831.3/148432.4 = 1.68 >= 1.0)	Verifica non richiesta.
19-5	137892.7	248461.7	SI (248461.7/137892.7 = 1.80 >= 1.0)	Verifica non richiesta.
19-6	144059.5	249858.2	SI (249858.2/144059.5 = 1.73 >= 1.0)	Verifica non richiesta.
19-7	147851.6	248425.6	SI (248425.6/147851.6 = 1.68 >= 1.0)	Verifica non richiesta.
19-8	153619.2	249816	SI (249816/153619.2 = 1.63 >= 1.0)	Verifica non richiesta.
19-9	146868.7	248661.4	SI (248661.4/146868.7 = 1.69 >= 1.0)	Verifica non richiesta.
19-10	146680.2	248838.4	SI (248838.4/146680.2 = 1.70 >= 1.0)	Verifica non richiesta.
19-11	156780.5	248610.2	SI (248610.2/156780.5 = 1.59 >= 1.0)	Verifica non richiesta.
19-12	156604	248790.3	SI (248790.3/156604 = 1.59 >= 1.0)	Verifica non richiesta.
19-13	146092.5	248429.8	SI (248429.8/146092.5 = 1.70 >= 1.0)	Verifica non richiesta.
19-14	151926.9	249822.2	SI (249822.2/151926.9 = 1.64 >= 1.0)	Verifica non richiesta.
19-15	156053.7	248397.1	SI (248397.1/156053.7 = 1.59 >= 1.0)	Verifica non richiesta.
19-16	161528.6	249777.3	SI (249777.3/161528.6 = 1.55 >= 1.0)	Verifica non richiesta.
20-1	116415.6	248135.1	SI (248135.1/116415.6 = 2.13 >= 1.0)	Verifica non richiesta.
20-2	149668.2	248073.5	SI (248073.5/149668.2 = 1.66 >= 1.0)	Verifica non richiesta.
20-3	117151	248868.5	SI (248868.5/117151 = 2.12 >= 1.0)	Verifica non richiesta.
20-4	150241	248688.5	SI (248688.5/150241 = 1.66 >= 1.0)	Verifica non richiesta.
20-5	143794.8	248076.3	SI (248076.3/143794.8 = 1.73 >= 1.0)	Verifica non richiesta.
20-6	177051.1	248032.7	SI (248032.7/177051.1 = 1.40 >= 1.0)	Verifica non richiesta.
20-7	144390.9	248709.5	SI (248709.5/144390.9 = 1.72 >= 1.0)	Verifica non richiesta.
20-8	177535.6	248577.1	SI (248577.1/177535.6 = 1.40 >= 1.0)	Verifica non richiesta.
20-9	116930.5	248729.7	SI (248729.7/116930.5 = 2.13 >= 1.0)	Verifica non richiesta.
20-10	150069.1	248567.7	SI (248567.7/150069.1 = 1.66 >= 1.0)	Verifica non richiesta.
20-11	118346.9	249310.7	SI (249310.7/118346.9 = 2.11 >= 1.0)	Verifica non richiesta.
20-12	151175.3	249091	SI (249091/151175.3 = 1.65 >= 1.0)	Verifica non richiesta.
20-13	144212.1	248585.8	SI (248585.8/144212.1 = 1.72 >= 1.0)	Verifica non richiesta.
20-14	177390.2	248468.1	SI (248468.1/177390.2 = 1.40 >= 1.0)	Verifica non richiesta.
20-15	145362.9	249119.3	SI (249119.3/145362.9 = 1.71 >= 1.0)	Verifica non richiesta.
20-16	178327	248946.8	SI (248946.8/178327 = 1.40 >= 1.0)	Verifica non richiesta.
21-1	139103.2	240986.1	SI (240986.1/139103.2 = 1.73 >= 1.0)	Verifica non richiesta.
21-2	138939.6	241104.3	SI (241104.3/138939.6 = 1.74 >= 1.0)	Verifica non richiesta.
21-3	147577.8	240952.3	SI (240952.3/147577.8 = 1.63 >= 1.0)	Verifica non richiesta.
21-4	147423.7	241073.5	SI (241073.5/147423.7 = 1.64 >= 1.0)	Verifica non richiesta.
21-5	138840.5	241032.7	SI (241032.7/138840.5 = 1.74 >= 1.0)	Verifica non richiesta.
21-6	143934.7	242179.1	SI (242179.1/143934.7 = 1.68 >= 1.0)	Verifica non richiesta.
21-7	147330.3	241004.2	SI (241004.2/147330.3 = 1.64 >= 1.0)	Verifica non richiesta.
21-8	152140.5	242146.9	SI (242146.9/152140.5 = 1.59 >= 1.0)	Verifica non richiesta.
21-9	147276.3	240942.6	SI (240942.6/147276.3 = 1.64 >= 1.0)	Verifica non richiesta.

21-10	147121.9	241063.8	SI (241063.8/147121.9 = 1.64 >= 1.0)	Verifica non richiesta.
21-11	155755.8	240912.5	SI (240912.5/155755.8 = 1.55 >= 1.0)	Verifica non richiesta.
21-12	155609.7	241036.5	SI (241036.5/155609.7 = 1.55 >= 1.0)	Verifica non richiesta.
21-13	147028.3	240994.4	SI (240994.4/147028.3 = 1.64 >= 1.0)	Verifica non richiesta.
21-14	151848	242137.3	SI (242137.3/151848 = 1.59 >= 1.0)	Verifica non richiesta.
21-15	155521.2	240969.3	SI (240969.3/155521.2 = 1.55 >= 1.0)	Verifica non richiesta.
21-16	160085.5	242104.1	SI (242104.1/160085.5 = 1.51 >= 1.0)	Verifica non richiesta.
22-1	118875.7	240580.5	SI (240580.5/118875.7 = 2.02 >= 1.0)	Verifica non richiesta.
22-2	147259.6	240547.6	SI (240547.6/147259.6 = 1.63 >= 1.0)	Verifica non richiesta.
22-3	119473.1	241177.3	SI (241177.3/119473.1 = 2.02 >= 1.0)	Verifica non richiesta.
22-4	147742.3	241060.5	SI (241060.5/147742.3 = 1.63 >= 1.0)	Verifica non richiesta.
22-5	146250	240512.9	SI (240512.9/146250 = 1.64 >= 1.0)	Verifica non richiesta.
22-6	174638.7	240498.2	SI (240498.2/174638.7 = 1.38 >= 1.0)	Verifica non richiesta.
22-7	146736	241028.6	SI (241028.6/146736 = 1.64 >= 1.0)	Verifica non richiesta.
22-8	175045.9	240951.2	SI (240951.2/175045.9 = 1.38 >= 1.0)	Verifica non richiesta.
22-9	119438.6	241154.1	SI (241154.1/119438.6 = 2.02 >= 1.0)	Verifica non richiesta.
22-10	147714.3	241039.8	SI (241039.8/147714.3 = 1.63 >= 1.0)	Verifica non richiesta.
22-11	120588.9	241629.4	SI (241629.4/120588.9 = 2.00 >= 1.0)	Verifica non richiesta.
22-12	148646	241474.1	SI (241474.1/148646 = 1.62 >= 1.0)	Verifica non richiesta.
22-13	146707.8	241007.8	SI (241007.8/146707.8 = 1.64 >= 1.0)	Verifica non richiesta.
22-14	175022.3	240932.5	SI (240932.5/175022.3 = 1.38 >= 1.0)	Verifica non richiesta.
22-15	147645.9	241443.3	SI (241443.3/147645.9 = 1.64 >= 1.0)	Verifica non richiesta.
22-16	175809.4	241329.8	SI (241329.8/175809.4 = 1.37 >= 1.0)	Verifica non richiesta.
23-1	137007	275331.5	SI (275331.5/137007 = 2.01 >= 1.0)	Verifica non richiesta.
23-2	133383.6	274259	SI (274259/133383.6 = 2.06 >= 1.0)	Verifica non richiesta.
23-3	145311.5	275288.3	SI (275288.3/145311.5 = 1.89 >= 1.0)	Verifica non richiesta.
23-4	141900.3	274252.4	SI (274252.4/141900.3 = 1.93 >= 1.0)	Verifica non richiesta.
23-5	133418.6	274315.5	SI (274315.5/133418.6 = 2.06 >= 1.0)	Verifica non richiesta.
23-6	135302.6	275445	SI (275445/135302.6 = 2.04 >= 1.0)	Verifica non richiesta.
23-7	141933.2	274305.3	SI (274305.3/141933.2 = 1.93 >= 1.0)	Verifica non richiesta.
23-8	143705.6	275399.6	SI (275399.6/143705.6 = 1.92 >= 1.0)	Verifica non richiesta.
23-9	145015.7	275279	SI (275279/145015.7 = 1.90 >= 1.0)	Verifica non richiesta.
23-10	141597.4	274242.2	SI (274242.2/141597.4 = 1.94 >= 1.0)	Verifica non richiesta.
23-11	153343	275237.4	SI (275237.4/153343 = 1.79 >= 1.0)	Verifica non richiesta.
23-12	150114.4	274237.5	SI (274237.5/150114.4 = 1.83 >= 1.0)	Verifica non richiesta.
23-13	141630.4	274294.8	SI (274294.8/141630.4 = 1.94 >= 1.0)	Verifica non richiesta.
23-14	143406.5	275390.4	SI (275390.4/143406.5 = 1.92 >= 1.0)	Verifica non richiesta.
23-15	150145.5	274286.6	SI (274286.6/150145.5 = 1.83 >= 1.0)	Verifica non richiesta.
23-16	151822.1	275348.6	SI (275348.6/151822.1 = 1.81 >= 1.0)	Verifica non richiesta.
23-17	133348	274200	SI (274200/133348 = 2.06 >= 1.0)	Verifica non richiesta.
23-18	136637.3	275737.6	SI (275737.6/136637.3 = 2.02 >= 1.0)	Verifica non richiesta.
23-19	141866.8	274199.9	SI (274199.9/141866.8 = 1.93 >= 1.0)	Verifica non richiesta.
23-20	144962.9	275693.1	SI (275693.1/144962.9 = 1.90 >= 1.0)	Verifica non richiesta.
23-21	136401.6	275691	SI (275691/136401.6 = 2.02 >= 1.0)	Verifica non richiesta.
23-22	144842.8	276217.9	SI (276217.9/144842.8 = 1.91 >= 1.0)	Verifica non richiesta.
23-23	144740.8	275645.9	SI (275645.9/144740.8 = 1.90 >= 1.0)	Verifica non richiesta.
23-24	152721.8	276235.4	SI (276235.4/152721.8 = 1.81 >= 1.0)	Verifica non richiesta.
23-25	141563.8	274189.5	SI (274189.5/141563.8 = 1.94 >= 1.0)	Verifica non richiesta.
23-26	144666.5	275684.2	SI (275684.2/144666.5 = 1.91 >= 1.0)	Verifica non richiesta.
23-27	150082.8	274190.4	SI (274190.4/150082.8 = 1.83 >= 1.0)	Verifica non richiesta.
23-28	153012.7	275641.5	SI (275641.5/153012.7 = 1.80 >= 1.0)	Verifica non richiesta.
23-29	144443.8	275637	SI (275637/144443.8 = 1.91 >= 1.0)	Verifica non richiesta.
23-30	152440.4	276224.5	SI (276224.5/152440.4 = 1.81 >= 1.0)	Verifica non richiesta.
23-31	152802.3	275594.3	SI (275594.3/152802.3 = 1.80 >= 1.0)	Verifica non richiesta.
23-32	160382.7	276231	SI (276231/160382.7 = 1.72 >= 1.0)	Verifica non richiesta.
23-33	146736.6	275270.2	SI (275270.2/146736.6 = 1.88 >= 1.0)	Verifica non richiesta.
23-34	143359.3	274241	SI (274241/143359.3 = 1.91 >= 1.0)	Verifica non richiesta.
23-35	155068.3	275229	SI (275229/155068.3 = 1.77 >= 1.0)	Verifica non richiesta.
23-36	151876.4	274236.6	SI (274236.6/151876.4 = 1.81 >= 1.0)	Verifica non richiesta.
23-37	143391.9	274292.9	SI (274292.9/143391.9 = 1.91 >= 1.0)	Verifica non richiesta.
23-38	145146.5	275381.4	SI (275381.4/145146.5 = 1.90 >= 1.0)	Verifica non richiesta.
23-39	151907.2	274285.1	SI (274285.1/151907.2 = 1.81 >= 1.0)	Verifica non richiesta.
23-40	153564.5	275340.4	SI (275340.4/153564.5 = 1.79 >= 1.0)	Verifica non richiesta.
23-41	154771.6	275219.7	SI (275219.7/154771.6 = 1.78 >= 1.0)	Verifica non richiesta.
23-42	151573.5	274226	SI (274226/151573.5 = 1.81 >= 1.0)	Verifica non richiesta.
23-43	163122.1	275180.4	SI (275180.4/163122.1 = 1.69 >= 1.0)	Verifica non richiesta.
23-44	160090.9	274222.8	SI (274222.8/160090.9 = 1.71 >= 1.0)	Verifica non richiesta.
23-45	151604.3	274274.6	SI (274274.6/151604.3 = 1.81 >= 1.0)	Verifica non richiesta.
23-46	153264.9	275331	SI (275331/153264.9 = 1.80 >= 1.0)	Verifica non richiesta.
23-47	160120	274268.3	SI (274268.3/160120 = 1.71 >= 1.0)	Verifica non richiesta.
23-48	161693.2	275293.4	SI (275293.4/161693.2 = 1.70 >= 1.0)	Verifica non richiesta.

23-49	143326.2	274189.2	SI (274189.2/143326.2 = 1.91 >= 1.0)	Verifica non richiesta.
23-50	146391.4	275674.9	SI (275674.9/146391.4 = 1.88 >= 1.0)	Verifica non richiesta.
23-51	151845.1	274190.3	SI (274190.3/151845.1 = 1.81 >= 1.0)	Verifica non richiesta.
23-52	154741.7	275633	SI (275633/154741.7 = 1.78 >= 1.0)	Verifica non richiesta.
23-53	146171.4	275627.9	SI (275627.9/146171.4 = 1.89 >= 1.0)	Verifica non richiesta.
23-54	154078.4	276226.6	SI (276226.6/154078.4 = 1.79 >= 1.0)	Verifica non richiesta.
23-55	154533.6	275585.8	SI (275585.8/154533.6 = 1.78 >= 1.0)	Verifica non richiesta.
23-56	162033	276230.8	SI (276230.8/162033 = 1.70 >= 1.0)	Verifica non richiesta.
23-57	151542.1	274179.8	SI (274179.8/151542.1 = 1.81 >= 1.0)	Verifica non richiesta.
23-58	154444.4	275624	SI (275624/154444.4 = 1.78 >= 1.0)	Verifica non richiesta.
23-59	160061.2	274181.6	SI (274181.6/160061.2 = 1.71 >= 1.0)	Verifica non richiesta.
23-60	162811.7	275584.5	SI (275584.5/162811.7 = 1.69 >= 1.0)	Verifica non richiesta.
23-61	154235.9	275576.5	SI (275576.5/154235.9 = 1.79 >= 1.0)	Verifica non richiesta.
23-62	161749.1	276220.3	SI (276220.3/161749.1 = 1.71 >= 1.0)	Verifica non richiesta.
23-63	162613.9	275536.9	SI (275536.9/162613.9 = 1.69 >= 1.0)	Verifica non richiesta.
23-64	169756.7	276217.1	SI (276217.1/169756.7 = 1.63 >= 1.0)	Verifica non richiesta.
24-1	102165.9	274085.5	SI (274085.5/102165.9 = 2.68 >= 1.0)	Verifica non richiesta.
24-2	130564.7	274100.2	SI (274100.2/130564.7 = 2.10 >= 1.0)	Verifica non richiesta.
24-3	102450.5	274720.9	SI (274720.9/102450.5 = 2.68 >= 1.0)	Verifica non richiesta.
24-4	130787.5	274622	SI (274622/130787.5 = 2.10 >= 1.0)	Verifica non richiesta.
24-5	129554.7	274064	SI (274064/129554.7 = 2.12 >= 1.0)	Verifica non richiesta.
24-6	157953.6	274083	SI (274083/157953.6 = 1.74 >= 1.0)	Verifica non richiesta.
24-7	129779.2	274589.4	SI (274589.4/129779.2 = 2.12 >= 1.0)	Verifica non richiesta.
24-8	158137.8	274531.1	SI (274531.1/158137.8 = 1.74 >= 1.0)	Verifica non richiesta.
24-9	102426.4	274692	SI (274692/102426.4 = 2.68 >= 1.0)	Verifica non richiesta.
24-10	130768.6	274597.4	SI (274597.4/130768.6 = 2.10 >= 1.0)	Verifica non richiesta.
24-11	103359.2	275290.9	SI (275290.9/103359.2 = 2.66 >= 1.0)	Verifica non richiesta.
24-12	131500.6	275119.3	SI (275119.3/131500.6 = 2.09 >= 1.0)	Verifica non richiesta.
24-13	129760.2	274564.7	SI (274564.7/129760.2 = 2.12 >= 1.0)	Verifica non richiesta.
24-14	158122.2	274509.5	SI (274509.5/158122.2 = 1.74 >= 1.0)	Verifica non richiesta.
24-15	130497.8	275088.7	SI (275088.7/130497.8 = 2.11 >= 1.0)	Verifica non richiesta.
24-16	158728.1	274971.9	SI (274971.9/158728.1 = 1.73 >= 1.0)	Verifica non richiesta.
24-17	135429.6	274067.2	SI (274067.2/135429.6 = 2.02 >= 1.0)	Verifica non richiesta.
24-18	163828.6	274086.9	SI (274086.9/163828.6 = 1.67 >= 1.0)	Verifica non richiesta.
24-19	135644.4	274574.2	SI (274574.2/135644.4 = 2.02 >= 1.0)	Verifica non richiesta.
24-20	164006.2	274522.1	SI (274522.1/164006.2 = 1.67 >= 1.0)	Verifica non richiesta.
24-21	162818.5	274050.9	SI (274050.9/162818.5 = 1.68 >= 1.0)	Verifica non richiesta.
24-22	191217.6	274073	SI (274073/191217.6 = 1.43 >= 1.0)	Verifica non richiesta.
24-23	162997.3	274488.3	SI (274488.3/162997.3 = 1.68 >= 1.0)	Verifica non richiesta.
24-24	191369.8	274457.7	SI (274457.7/191369.8 = 1.43 >= 1.0)	Verifica non richiesta.
24-25	135626.2	274550.3	SI (274550.3/135626.2 = 2.02 >= 1.0)	Verifica non richiesta.
24-26	163991.1	274501	SI (274501/163991.1 = 1.67 >= 1.0)	Verifica non richiesta.
24-27	136332.1	275060.6	SI (275060.6/136332.1 = 2.02 >= 1.0)	Verifica non richiesta.
24-28	164575.4	274952.4	SI (274952.4/164575.4 = 1.67 >= 1.0)	Verifica non richiesta.
24-29	162982.1	274466.8	SI (274466.8/162982.1 = 1.68 >= 1.0)	Verifica non richiesta.
24-30	191356.9	274438.8	SI (274438.8/191356.9 = 1.43 >= 1.0)	Verifica non richiesta.
24-31	163570	274920	SI (274920/163570 = 1.68 >= 1.0)	Verifica non richiesta.
24-32	191857.8	274844.9	SI (274844.9/191857.8 = 1.43 >= 1.0)	Verifica non richiesta.
24-33	102594.3	274860.7	SI (274860.7/102594.3 = 2.68 >= 1.0)	Verifica non richiesta.
24-34	130900.2	274740.9	SI (274740.9/130900.2 = 2.10 >= 1.0)	Verifica non richiesta.
24-35	103691.5	275417.3	SI (275417.3/103691.5 = 2.66 >= 1.0)	Verifica non richiesta.
24-36	131761.9	275236.9	SI (275236.9/131761.9 = 2.09 >= 1.0)	Verifica non richiesta.
24-37	129892.8	274708.9	SI (274708.9/129892.8 = 2.11 >= 1.0)	Verifica non richiesta.
24-38	158231.1	274635.2	SI (274635.2/158231.1 = 1.74 >= 1.0)	Verifica non richiesta.
24-39	130761.1	275206.7	SI (275206.7/130761.1 = 2.10 >= 1.0)	Verifica non richiesta.
24-40	158944.6	275080.1	SI (275080.1/158944.6 = 1.73 >= 1.0)	Verifica non richiesta.
24-41	103635.7	275396.6	SI (275396.6/103635.7 = 2.66 >= 1.0)	Verifica non richiesta.
24-42	131718	275217.3	SI (275217.3/131718 = 2.09 >= 1.0)	Verifica non richiesta.
24-43	105358.6	275790.1	SI (275790.1/105358.6 = 2.62 >= 1.0)	Verifica non richiesta.
24-44	133077.8	275612.6	SI (275612.6/133077.8 = 2.07 >= 1.0)	Verifica non richiesta.
24-45	130716.9	275187.1	SI (275187.1/130716.9 = 2.11 >= 1.0)	Verifica non richiesta.
24-46	158908.3	275061.9	SI (275061.9/158908.3 = 1.73 >= 1.0)	Verifica non richiesta.
24-47	132087	275582.9	SI (275582.9/132087 = 2.09 >= 1.0)	Verifica non richiesta.
24-48	160037.2	275437.5	SI (275437.5/160037.2 = 1.72 >= 1.0)	Verifica non richiesta.
24-49	135753.1	274690.2	SI (274690.2/135753.1 = 2.02 >= 1.0)	Verifica non richiesta.
24-50	164096.1	274623.5	SI (274623.5/164096.1 = 1.67 >= 1.0)	Verifica non richiesta.
24-51	136584.2	275176.5	SI (275176.5/136584.2 = 2.01 >= 1.0)	Verifica non richiesta.
24-52	164784.3	275058.6	SI (275058.6/164784.3 = 1.67 >= 1.0)	Verifica non richiesta.
24-53	163087.7	274589.8	SI (274589.8/163087.7 = 1.68 >= 1.0)	Verifica non richiesta.
24-54	191446.9	274548.5	SI (274548.5/191446.9 = 1.43 >= 1.0)	Verifica non richiesta.
24-55	163780.1	275026.5	SI (275026.5/163780.1 = 1.68 >= 1.0)	Verifica non richiesta.

24-56	192037.1	274942.7	SI (274942.7/192037.1 = 1.43 >= 1.0)	Verifica non richiesta.
24-57	136541.8	275156.8	SI (275156.8/136541.8 = 2.02 >= 1.0)	Verifica non richiesta.
24-58	164749.2	275040.7	SI (275040.7/164749.2 = 1.67 >= 1.0)	Verifica non richiesta.
24-59	137854	275549.4	SI (275549.4/137854 = 2.00 >= 1.0)	Verifica non richiesta.
24-60	165838.4	275411.4	SI (275411.4/165838.4 = 1.66 >= 1.0)	Verifica non richiesta.
24-61	163744.8	275008.6	SI (275008.6/163744.8 = 1.68 >= 1.0)	Verifica non richiesta.
24-62	192006.9	274926.1	SI (274926.1/192006.9 = 1.43 >= 1.0)	Verifica non richiesta.
24-63	164840.6	275380.5	SI (275380.5/164840.6 = 1.67 >= 1.0)	Verifica non richiesta.
24-64	192942.3	275273.8	SI (275273.8/192942.3 = 1.43 >= 1.0)	Verifica non richiesta.
25-1	144339.6	178746.9	SI (178746.9/144339.6 = 1.24 >= 1.0)	Verifica non richiesta.
25-2	144339.6	178746.9	SI (178746.9/144339.6 = 1.24 >= 1.0)	Verifica non richiesta.
25-3	152877.3	178736.9	SI (178736.9/152877.3 = 1.17 >= 1.0)	Verifica non richiesta.
25-4	152877.3	178736.9	SI (178736.9/152877.3 = 1.17 >= 1.0)	Verifica non richiesta.
25-5	144339.6	178746.9	SI (178746.9/144339.6 = 1.24 >= 1.0)	Verifica non richiesta.
25-6	144339.6	178746.9	SI (178746.9/144339.6 = 1.24 >= 1.0)	Verifica non richiesta.
25-7	152877.3	178736.9	SI (178736.9/152877.3 = 1.17 >= 1.0)	Verifica non richiesta.
25-8	152877.3	178736.9	SI (178736.9/152877.3 = 1.17 >= 1.0)	Verifica non richiesta.
25-9	146254.2	179549.6	SI (179549.6/146254.2 = 1.23 >= 1.0)	Verifica non richiesta.
25-10	146254.2	179549.6	SI (179549.6/146254.2 = 1.23 >= 1.0)	Verifica non richiesta.
25-11	154686.3	179508.8	SI (179508.8/154686.3 = 1.16 >= 1.0)	Verifica non richiesta.
25-12	154686.3	179509.2	SI (179509.2/154686.3 = 1.16 >= 1.0)	Verifica non richiesta.
25-13	146254.2	179549.6	SI (179549.6/146254.2 = 1.23 >= 1.0)	Verifica non richiesta.
25-14	146254.2	179549.6	SI (179549.6/146254.2 = 1.23 >= 1.0)	Verifica non richiesta.
25-15	154686.3	179508.8	SI (179508.8/154686.3 = 1.16 >= 1.0)	Verifica non richiesta.
25-16	154686.3	179509.2	SI (179509.2/154686.3 = 1.16 >= 1.0)	Verifica non richiesta.
26-1	139109.7	179077	SI (179077/139109.7 = 1.29 >= 1.0)	Verifica non richiesta.
26-2	139109.7	179077	SI (179077/139109.7 = 1.29 >= 1.0)	Verifica non richiesta.
26-3	139691.1	179327	SI (179327/139691.1 = 1.28 >= 1.0)	Verifica non richiesta.
26-4	139691.1	179327	SI (179327/139691.1 = 1.28 >= 1.0)	Verifica non richiesta.
26-5	139109.7	179077	SI (179077/139109.7 = 1.29 >= 1.0)	Verifica non richiesta.
26-6	139109.7	179077	SI (179077/139109.7 = 1.29 >= 1.0)	Verifica non richiesta.
26-7	139691.1	179327	SI (179327/139691.1 = 1.28 >= 1.0)	Verifica non richiesta.
26-8	139691.1	179327	SI (179327/139691.1 = 1.28 >= 1.0)	Verifica non richiesta.
26-9	167516.5	178996.7	SI (178996.7/167516.5 = 1.07 >= 1.0)	Verifica non richiesta.
26-10	167516.5	178996.7	SI (178996.7/167516.5 = 1.07 >= 1.0)	Verifica non richiesta.
26-11	167999.6	179222.5	SI (179222.5/167999.6 = 1.07 >= 1.0)	Verifica non richiesta.
26-12	167999.6	179222.5	SI (179222.5/167999.6 = 1.07 >= 1.0)	Verifica non richiesta.
26-13	167516.5	178996.7	SI (178996.7/167516.5 = 1.07 >= 1.0)	Verifica non richiesta.
26-14	167516.5	178996.7	SI (178996.7/167516.5 = 1.07 >= 1.0)	Verifica non richiesta.
26-15	167999.6	179222.5	SI (179222.5/167999.6 = 1.07 >= 1.0)	Verifica non richiesta.
26-16	167999.6	179222.5	SI (179222.5/167999.6 = 1.07 >= 1.0)	Verifica non richiesta.
27-1	138401.2	263925.2	SI (263925.2/138401.2 = 1.91 >= 1.0)	Verifica non richiesta.
27-2	137149.4	263529	SI (263529/137149.4 = 1.92 >= 1.0)	Verifica non richiesta.
27-3	137061.4	263284.2	SI (263284.2/137061.4 = 1.92 >= 1.0)	Verifica non richiesta.
27-4	139326.5	264424.6	SI (264424.6/139326.5 = 1.90 >= 1.0)	Verifica non richiesta.
27-5	137059	263231.9	SI (263231.9/137059 = 1.92 >= 1.0)	Verifica non richiesta.
27-6	139186.5	264392.2	SI (264392.2/139186.5 = 1.90 >= 1.0)	Verifica non richiesta.
27-7	138522.8	264230.8	SI (264230.8/138522.8 = 1.91 >= 1.0)	Verifica non richiesta.
27-8	144039	264891	SI (264891/144039 = 1.84 >= 1.0)	Verifica non richiesta.
27-9	145529.9	263892.4	SI (263892.4/145529.9 = 1.81 >= 1.0)	Verifica non richiesta.
27-10	144340	263516.4	SI (263516.4/144340 = 1.83 >= 1.0)	Verifica non richiesta.
27-11	144256.4	263281.4	SI (263281.4/144256.4 = 1.83 >= 1.0)	Verifica non richiesta.
27-12	146410.1	264389.5	SI (264389.5/146410.1 = 1.81 >= 1.0)	Verifica non richiesta.
27-13	144254	263231.2	SI (263231.2/144254 = 1.82 >= 1.0)	Verifica non richiesta.
27-14	146276.9	264357.2	SI (264357.2/146276.9 = 1.81 >= 1.0)	Verifica non richiesta.
27-15	145645.6	264197.4	SI (264197.4/145645.6 = 1.81 >= 1.0)	Verifica non richiesta.
27-16	150901.6	264870.2	SI (264870.2/150901.6 = 1.76 >= 1.0)	Verifica non richiesta.
27-17	144486.9	263903.7	SI (263903.7/144486.9 = 1.83 >= 1.0)	Verifica non richiesta.
27-18	143288.3	263524.8	SI (263524.8/143288.3 = 1.84 >= 1.0)	Verifica non richiesta.
27-19	143204.1	263288.4	SI (263288.4/143204.1 = 1.84 >= 1.0)	Verifica non richiesta.
27-20	145373.4	264401.1	SI (264401.1/145373.4 = 1.82 >= 1.0)	Verifica non richiesta.
27-21	143201.7	263237.9	SI (263237.9/143201.7 = 1.84 >= 1.0)	Verifica non richiesta.
27-22	145239.3	264368.8	SI (264368.8/145239.3 = 1.82 >= 1.0)	Verifica non richiesta.
27-23	144603.4	264208.8	SI (264208.8/144603.4 = 1.83 >= 1.0)	Verifica non richiesta.
27-24	149896	264880	SI (264880/149896 = 1.77 >= 1.0)	Verifica non richiesta.
27-25	151621	263872.7	SI (263872.7/151621 = 1.74 >= 1.0)	Verifica non richiesta.
27-26	150479.2	263513.1	SI (263513.1/150479.2 = 1.75 >= 1.0)	Verifica non richiesta.
27-27	150399	263285.7	SI (263285.7/150399 = 1.75 >= 1.0)	Verifica non richiesta.
27-28	152466	264367.6	SI (264367.6/152466 = 1.73 >= 1.0)	Verifica non richiesta.
27-29	150396.8	263237.1	SI (263237.1/150396.8 = 1.75 >= 1.0)	Verifica non richiesta.
27-30	152338.1	264335.5	SI (264335.5/152338.1 = 1.74 >= 1.0)	Verifica non richiesta.

27-31	151732	264177.3	SI (264177.3/151732 = 1.74 >= 1.0)	Verifica non richiesta.
27-32	156784.2	264857.6	SI (264857.6/156784.2 = 1.69 >= 1.0)	Verifica non richiesta.
27-33	144270.4	263896.9	SI (263896.9/144270.4 = 1.83 >= 1.0)	Verifica non richiesta.
27-34	143070	263517.1	SI (263517.1/143070 = 1.84 >= 1.0)	Verifica non richiesta.
27-35	142985.6	263280.4	SI (263280.4/142985.6 = 1.84 >= 1.0)	Verifica non richiesta.
27-36	145158.2	264394.1	SI (264394.1/145158.2 = 1.82 >= 1.0)	Verifica non richiesta.
27-37	142983.2	263230.2	SI (263230.2/142983.2 = 1.84 >= 1.0)	Verifica non richiesta.
27-38	145023.9	264362.1	SI (264362.1/145023.9 = 1.82 >= 1.0)	Verifica non richiesta.
27-39	144387.1	264202.1	SI (264202.1/144387.1 = 1.83 >= 1.0)	Verifica non richiesta.
27-40	149687.3	264872.6	SI (264872.6/149687.3 = 1.77 >= 1.0)	Verifica non richiesta.
27-41	151404.3	263865.9	SI (263865.9/151404.3 = 1.74 >= 1.0)	Verifica non richiesta.
27-42	150260.9	263505.4	SI (263505.4/150260.9 = 1.75 >= 1.0)	Verifica non richiesta.
27-43	150180.5	263277.7	SI (263277.7/150180.5 = 1.75 >= 1.0)	Verifica non richiesta.
27-44	152250.5	264360.5	SI (264360.5/152250.5 = 1.74 >= 1.0)	Verifica non richiesta.
27-45	150178.3	263229.4	SI (263229.4/150178.3 = 1.75 >= 1.0)	Verifica non richiesta.
27-46	152122.4	264328.7	SI (264328.7/152122.4 = 1.74 >= 1.0)	Verifica non richiesta.
27-47	151515.5	264170.5	SI (264170.5/151515.5 = 1.74 >= 1.0)	Verifica non richiesta.
27-48	156574.6	264850.2	SI (264850.2/156574.6 = 1.69 >= 1.0)	Verifica non richiesta.
27-49	150360.6	263876.9	SI (263876.9/150360.6 = 1.75 >= 1.0)	Verifica non richiesta.
27-50	149209.2	263513.7	SI (263513.7/149209.2 = 1.77 >= 1.0)	Verifica non richiesta.
27-51	149128.3	263284.7	SI (263284.7/149128.3 = 1.77 >= 1.0)	Verifica non richiesta.
27-52	151212.7	264371.9	SI (264371.9/151212.7 = 1.75 >= 1.0)	Verifica non richiesta.
27-53	149126	263236.1	SI (263236.1/149126 = 1.77 >= 1.0)	Verifica non richiesta.
27-54	151083.7	264340.1	SI (264340.1/151083.7 = 1.75 >= 1.0)	Verifica non richiesta.
27-55	150472.5	264181.6	SI (264181.6/150472.5 = 1.76 >= 1.0)	Verifica non richiesta.
27-56	155565.6	264860.2	SI (264860.2/155565.6 = 1.70 >= 1.0)	Verifica non richiesta.
27-57	157499.3	263847.7	SI (263847.7/157499.3 = 1.68 >= 1.0)	Verifica non richiesta.
27-58	156400.4	263502.8	SI (263502.8/156400.4 = 1.68 >= 1.0)	Verifica non richiesta.
27-59	156323.2	263282.2	SI (263282.2/156323.2 = 1.68 >= 1.0)	Verifica non richiesta.
27-60	158312.9	264339.9	SI (264339.9/158312.9 = 1.67 >= 1.0)	Verifica non richiesta.
27-61	156321.1	263235.4	SI (263235.4/156321.1 = 1.68 >= 1.0)	Verifica non richiesta.
27-62	158189.7	264308.3	SI (264308.3/158189.7 = 1.67 >= 1.0)	Verifica non richiesta.
27-63	157606.1	264151.8	SI (264151.8/157606.1 = 1.68 >= 1.0)	Verifica non richiesta.
27-64	162475.7	264836.6	SI (264836.6/162475.7 = 1.63 >= 1.0)	Verifica non richiesta.
28-1	114625.9	263437.1	SI (263437.1/114625.9 = 2.30 >= 1.0)	Verifica non richiesta.
28-2	138602.6	263403.9	SI (263403.9/138602.6 = 1.90 >= 1.0)	Verifica non richiesta.
28-3	135095.8	263430.2	SI (263430.2/135095.8 = 1.95 >= 1.0)	Verifica non richiesta.
28-4	159074.3	263404.8	SI (263404.8/159074.3 = 1.66 >= 1.0)	Verifica non richiesta.
28-5	134367.7	263404.5	SI (263404.5/134367.7 = 1.96 >= 1.0)	Verifica non richiesta.
28-6	158346.2	263379.2	SI (263379.2/158346.2 = 1.66 >= 1.0)	Verifica non richiesta.
28-7	154839.2	263404.3	SI (263404.3/154839.2 = 1.70 >= 1.0)	Verifica non richiesta.
28-8	178818.8	263384.3	SI (263384.3/178818.8 = 1.47 >= 1.0)	Verifica non richiesta.
28-9	115045.6	263881.2	SI (263881.2/115045.6 = 2.29 >= 1.0)	Verifica non richiesta.
28-10	138949.9	263790.8	SI (263790.8/138949.9 = 1.90 >= 1.0)	Verifica non richiesta.
28-11	135452.1	263824.4	SI (263824.4/135452.1 = 1.95 >= 1.0)	Verifica non richiesta.
28-12	159377	263754.3	SI (263754.3/159377 = 1.65 >= 1.0)	Verifica non richiesta.
28-13	134726	263800.3	SI (263800.3/134726 = 1.96 >= 1.0)	Verifica non richiesta.
28-14	158650.3	263729.9	SI (263729.9/158650.3 = 1.66 >= 1.0)	Verifica non richiesta.
28-15	155150.1	263760.9	SI (263760.9/155150.1 = 1.70 >= 1.0)	Verifica non richiesta.
28-16	179088.1	263704.8	SI (263704.8/179088.1 = 1.47 >= 1.0)	Verifica non richiesta.
28-17	114941	263808.5	SI (263808.5/114941 = 2.30 >= 1.0)	Verifica non richiesta.
28-18	138863.3	263726.4	SI (263726.4/138863.3 = 1.90 >= 1.0)	Verifica non richiesta.
28-19	135363.3	263758.6	SI (263758.6/135363.3 = 1.95 >= 1.0)	Verifica non richiesta.
28-20	159301.5	263695.4	SI (263695.4/159301.5 = 1.66 >= 1.0)	Verifica non richiesta.
28-21	134636.6	263734.6	SI (263734.6/134636.6 = 1.96 >= 1.0)	Verifica non richiesta.
28-22	158574.4	263670.9	SI (263670.9/158574.4 = 1.66 >= 1.0)	Verifica non richiesta.
28-23	155072.6	263700.9	SI (263700.9/155072.6 = 1.70 >= 1.0)	Verifica non richiesta.
28-24	179020.9	263650.3	SI (263650.3/179020.9 = 1.47 >= 1.0)	Verifica non richiesta.
28-25	115737.7	264187.3	SI (264187.3/115737.7 = 2.28 >= 1.0)	Verifica non richiesta.
28-26	139523.5	264068.8	SI (264068.8/139523.5 = 1.89 >= 1.0)	Verifica non richiesta.
28-27	136040.4	264106	SI (264106/136040.4 = 1.94 >= 1.0)	Verifica non richiesta.
28-28	159877.3	264011.3	SI (264011.3/159877.3 = 1.65 >= 1.0)	Verifica non richiesta.
28-29	135317.4	264083.1	SI (264083.1/135317.4 = 1.95 >= 1.0)	Verifica non richiesta.
28-30	159152.9	263987.3	SI (263987.3/159152.9 = 1.66 >= 1.0)	Verifica non richiesta.
28-31	155664	264022	SI (264022/155664 = 1.70 >= 1.0)	Verifica non richiesta.
28-32	179533.5	263944	SI (263944/179533.5 = 1.47 >= 1.0)	Verifica non richiesta.
28-33	114922.6	263793.5	SI (263793.5/114922.6 = 2.30 >= 1.0)	Verifica non richiesta.
28-34	138848.1	263712.7	SI (263712.7/138848.1 = 1.90 >= 1.0)	Verifica non richiesta.
28-35	135347.6	263745.1	SI (263745.1/135347.6 = 1.95 >= 1.0)	Verifica non richiesta.
28-36	159288.2	263682.8	SI (263682.8/159288.2 = 1.66 >= 1.0)	Verifica non richiesta.
28-37	134620.9	263721	SI (263721/134620.9 = 1.96 >= 1.0)	Verifica non richiesta.

28-38	158561.1	263658.2	SI (263658.2/158561.1 = 1.66 >= 1.0)	Verifica non richiesta.
28-39	155059	263688.5	SI (263688.5/155059 = 1.70 >= 1.0)	Verifica non richiesta.
28-40	179009.1	263638.6	SI (263638.6/179009.1 = 1.47 >= 1.0)	Verifica non richiesta.
28-41	115704.5	264174.9	SI (264174.9/115704.5 = 2.28 >= 1.0)	Verifica non richiesta.
28-42	139496	264056.9	SI (264056.9/139496 = 1.89 >= 1.0)	Verifica non richiesta.
28-43	136012.2	264094.4	SI (264094.4/136012.2 = 1.94 >= 1.0)	Verifica non richiesta.
28-44	159853.3	264000.1	SI (264000.1/159853.3 = 1.65 >= 1.0)	Verifica non richiesta.
28-45	135289.1	264071.4	SI (264071.4/135289.1 = 1.95 >= 1.0)	Verifica non richiesta.
28-46	159128.7	263976.4	SI (263976.4/159128.7 = 1.66 >= 1.0)	Verifica non richiesta.
28-47	155639.4	264011	SI (264011/155639.4 = 1.70 >= 1.0)	Verifica non richiesta.
28-48	179512.1	263933.7	SI (263933.7/179512.1 = 1.47 >= 1.0)	Verifica non richiesta.
28-49	115538.2	264113.3	SI (264113.3/115538.2 = 2.29 >= 1.0)	Verifica non richiesta.
28-50	139358	263999.9	SI (263999.9/139358 = 1.89 >= 1.0)	Verifica non richiesta.
28-51	135870.7	264036.7	SI (264036.7/135870.7 = 1.94 >= 1.0)	Verifica non richiesta.
28-52	159732.9	263946.8	SI (263946.8/159732.9 = 1.65 >= 1.0)	Verifica non richiesta.
28-53	135146.8	264013.6	SI (264013.6/135146.8 = 1.95 >= 1.0)	Verifica non richiesta.
28-54	159007.8	263923	SI (263923/159007.8 = 1.66 >= 1.0)	Verifica non richiesta.
28-55	155515.7	263956.9	SI (263956.9/155515.7 = 1.70 >= 1.0)	Verifica non richiesta.
28-56	179404.9	263883.6	SI (263883.6/179404.9 = 1.47 >= 1.0)	Verifica non richiesta.
28-57	116691	264429	SI (264429/116691 = 2.27 >= 1.0)	Verifica non richiesta.
28-58	140315.3	264299.1	SI (264299.1/140315.3 = 1.88 >= 1.0)	Verifica non richiesta.
28-59	136852.4	264338.6	SI (264338.6/136852.4 = 1.93 >= 1.0)	Verifica non richiesta.
28-60	160568.8	264230	SI (264230/160568.8 = 1.65 >= 1.0)	Verifica non richiesta.
28-61	136133.7	264316	SI (264316/136133.7 = 1.94 >= 1.0)	Verifica non richiesta.
28-62	159847.5	264206.7	SI (264206.7/159847.5 = 1.65 >= 1.0)	Verifica non richiesta.
28-63	156374.1	264243.4	SI (264243.4/156374.1 = 1.69 >= 1.0)	Verifica non richiesta.
28-64	180149.5	264151.7	SI (264151.7/180149.5 = 1.47 >= 1.0)	Verifica non richiesta.

Descrizione del metodo di calcolo.

Il calcolo della capacità portante viene eseguito secondo la formula trinomia, considerando separatamente i contributi dovuti alla coesione, al sovraccarico laterale ed al peso del terreno.

Per le verifiche in condizioni drenate, si utilizzano i coefficienti di capacità portante N_q (Prandtl, 1921), N_c (Reissner, 1924), N_γ (Vesic, 1973), i coefficienti correttivi dovuti alla forma della fondazione (s , Meyerhof, 1951 e 1963), all'approfondimento (d , Brinch Hansen, 1970), all'inclinazione del carico (i , Vesic, 1973), all'inclinazione del piano di posa (b , Vesic, 1973), all'inclinazione del piano campagna (g , Vesic, 1973), e all'azione sismica (h - Maugeri e Novità, 2004).

Nel caso di terreno eterogeneo (litologie differenti, presenza di falda), i parametri meccanici utilizzati nel calcolo sono ottenuti come media ponderata dei valori rinvenuti all'interno del cuneo di rottura.

La resistenza a scorrimento, viene ottenuta sommando i contributi del carico normale al piano di posa moltiplicato per il coefficiente d'attrito, e dell'area del piano di posa (eventualmente ridotta per carico verticale eccentrico) per l'adesione fondazione-terreno. In condizioni drenate, l'attrito fondazione terreno è assunto pari all'angolo di resistenza al taglio del terreno moltiplicato per il coefficiente 0.75, l'adesione fondazione terreno è trascurata (assunta pari a 0). Si considera il contributo della pressione del terreno a lato della fondazione. La resistenza laterale del terreno è assunta pari alla resistenza passiva disponibile moltiplicata per 0.50.

Descrizione della fondazione.

La fondazione ha piano di posa rettangolare, con lato X di 1650 [cm], lato Y di 660 [cm], e centro alla quota $z = -120$ [cm]. Il piano di posa è orizzontale.

Descrizione del terreno.

La stratigrafia è eterogenea, presenta 3 strati

n.	nome	z_i [cm]	z_f [cm]	γ_d [daN/cm ³]	γ_t [daN/cm ³]	c' [daN/cm ²]	φ' [°]
1	Sabbia	0	-100	0.0017	0.00215	0	27
2	Sabbia	-100	-200	0.0019	0.00215	0.07	27
3	Sabbia	-200	-1000	0.002	0.00215	0.2	31

La stratigrafia non contiene una falda

Verifiche in condizioni drenate.

Sollecitazioni al piano di posa.

Si riportano di seguito le componenti della sollecitazione applicata e la distanza del punto di applicazione dal centro del piano di posa della fondazione.

Rispetto al sistema di rif. globale:								
Caso	Fx [daN]	Fy [daN]	Fz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	-18934.13	-220035.1	-655583.6	58927772	-32161189	0	0	20
2-1	-18924.65	-220035.1	-806791.6	58902487	-110868979	0	0	20
3-1	-18934.13	-220035.1	-772780.6	50088511	-35115720	0	0	20
4-1	-18809.55	-220035	-766037.6	68781152	22588439	0	0	20
5-1	-18924.65	-220035.1	-923989.6	50063226	-113823510	0	0	20
6-1	-18800.07	-220035	-917246.6	68755867	-56119351	0	0	20
7-1	-18809.55	-220035	-883235.6	59941890	19633908	0	0	20
8-1	-18800.07	-220035	-1034443.6	59916606	-59073881	0	0	20
9-1	1276.33	-143397.48	-477527	37359196	-14337009	0	0	20
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9-11	-28029.53	-155240.76	-477544	43946700	-30988633	0	0	20
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10-3	-17244.78	-135714.77	-477529	30867094	-25046302	0	0	20
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10-8	-17244.78	-135714.77	-477529	30866529	-25046608	0	0	20
10-9	-8453.03	-175192.39	-477737	52882687	-20012300	0	0	20
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11-2	-29405.77	-141700.43	-594391.6	39222849	-78100985	0	0	20
11-3	4172.91	-151679.7	-593640.6	40991754	-71790957	0	0	20
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12-1	-7579.63	-130057.94	-593908.6	37173782	-74003914	0	0	20
12-2	-7579.63	-163322.19	-593898.6	43043242	-73995754	0	0	20
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13-1	1283.37	-142430.17	-571031.6	33551911	-21998329	0	0	20
13-2	-26528.88	-142430.17	-571627.6	33500259	-26890145	0	0	20
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14-1	-8450.91	-132490.42	-571210.6	31888289	-23711489	0	0	20
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16-1	-8532.48	-132995.38	-566776.6	44437360	14683309	0	0	20
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17-2	-15499.65	-137440.53	-672212.6	32650602	-77625204	0	0	20
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21-1	14723.82	-138321.72	-644395.6	39424446	16697166	0	0	20
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22-1	-4360.64	-118795.74	-644776.6	36201491	13445931	0	0	20
22-2	-4360.64	-147195.02	-644860.6	40903043	13448858	0	0	20
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22-9	-12375.08	-118795.74	-644942.6	36214460	12128276	0	0	20
22-10	-12375.08	-147195.02	-645025.6	40916012	12131203	0	0	20
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22-15	-20718.76	-146184.98	-645095.6	40697431	10663050	0	0	20
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23-1	31519.49	-133332.09	-744828.6	38531204	-32622128	0	0	20
23-2	3707.24	-133332.09	-745424.6	38479552	-37513943	0	0	20
23-3	31519.49	-141851.87	-744853.6	39941669	-32621249	0	0	20
23-4	3707.24	-141851.87	-745448.6	39890017	-37513065	0	0	20
23-5	4804.69	-133332.09	-745380.6	38574433	-37014310	0	0	20
23-6	-23007.56	-133332.09	-745976.6	38522782	-41906125	0	0	20
23-7	4804.69	-141851.87	-745405.6	39984899	-37013431	0	0	20
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23-9	31519.49	-141548.86	-744820.6	39880743	-32621432	0	0	20
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23-14	-23007.56	-141548.86	-745968.6	39872321	-41905430	0	0	20
23-15	4804.69	-150068.64	-745397.6	41334439	-37012736	0	0	20
23-16	-23007.56	-150068.64	-745993.6	41282787	-41904551	0	0	20
23-17	-2059.2	-133332.09	-745576.6	38523136	-38929708	0	0	20
23-18	-29871.45	-133332.09	-746172.6	38471485	-43821524	0	0	20
23-19	-2059.2	-141851.87	-745601.6	39933602	-38928830	0	0	20
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23-22	-56586.24	-133332.09	-746724.6	38514714	-48213706	0	0	20
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23-24	-56586.24	-141851.87	-746749.6	39925180	-48212828	0	0	20
23-25	-2059.2	-141548.86	-745569.6	39872676	-38929013	0	0	20
23-26	-29871.45	-141548.86	-746165.6	39821024	-43820828	0	0	20
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23-31	-28773.99	-150068.64	-746146.6	41326372	-43320317	0	0	20
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23-33	31519.49	-143311.36	-744825.6	40292041	-32619680	0	0	20
23-34	3707.24	-143311.36	-745421.6	40240390	-37511495	0	0	20
23-35	31519.49	-151831.15	-744850.6	41702507	-32618801	0	0	20
23-36	3707.24	-151831.15	-745446.6	41650855	-37510617	0	0	20
23-37	4804.69	-143311.36	-745377.6	40335271	-37011862	0	0	20
23-38	-23007.56	-143311.36	-745973.6	40283619	-41903677	0	0	20
23-39	4804.69	-151831.15	-745402.6	41745737	-37010984	0	0	20
23-40	-23007.56	-151831.15	-745998.6	41694085	-41902799	0	0	20
23-41	31519.49	-151528.13	-744817.6	41641581	-32618984	0	0	20
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23-57	-2059.2	-151528.13	-745566.6	41633514	-38926565	0	0	20
23-58	-29871.45	-151528.13	-746162.6	41581862	-43818380	0	0	20
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24-4	-7661.19	-130562.9	-745736.6	37937172	-39548489	0	0	20
24-5	682.48	-129552.86	-745449.6	37749581	-38081554	0	0	20
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24-8	-7661.19	-157952.14	-745711.6	42435638	-39546171	0	0	20
24-9	-7331.96	-102163.62	-745640.6	33264084	-39401526	0	0	20
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24-11	-15675.63	-102163.62	-745819.6	33248588	-40869071	0	0	20
24-12	-15675.63	-130562.9	-745902.6	37950140	-40866144	0	0	20
24-13	-7331.96	-129552.86	-745615.6	37762550	-39399208	0	0	20
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24-17	682.48	-135427.87	-745465.6	39120575	-38075712	0	0	20
24-18	682.48	-163827.15	-745548.6	43822127	-38072785	0	0	20
24-19	-7661.19	-135427.87	-745644.6	39105079	-39543256	0	0	20
24-20	-7661.19	-163827.15	-745727.6	43806631	-39540329	0	0	20
24-21	682.48	-162817.11	-745440.6	43619041	-38073394	0	0	20
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24-25	-7331.96	-135427.87	-745631.6	39133544	-39393366	0	0	20
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28-41	-16046.22	-114586.48	-730161	35360223	-41048868	0	0	20
28-42	-16046.22	-138570	-730154	39592103	-41042985	0	0	20
28-43	-16046.22	-135062.36	-730221	38750042	-41046758	0	0	20
28-44	-16046.22	-159045.88	-730214	42981922	-41040874	0	0	20
28-45	-16046.22	-134334.12	-730143	38603617	-41047197	0	0	20
28-46	-16046.22	-158317.64	-730136	42835497	-41041313	0	0	20
28-47	-16046.22	-154810	-730203	41993436	-41045086	0	0	20
28-48	-16046.22	-178793.52	-730196	46225317	-41039203	0	0	20
28-49	-14798.94	-114586.48	-730128	35350795	-40742638	0	0	20
28-50	-14798.94	-138570	-730121	39582676	-40736755	0	0	20
28-51	-14798.94	-135062.36	-730188	38740614	-40740528	0	0	20
28-52	-14798.94	-159045.88	-730181	42972495	-40734644	0	0	20
28-53	-14798.94	-134334.12	-730110	38594190	-40740966	0	0	20
28-54	-14798.94	-158317.64	-730103	42826070	-40735083	0	0	20
28-55	-14798.94	-154810	-730170	41984009	-40738856	0	0	20
28-56	-14798.94	-178793.52	-730163	46215889	-40732973	0	0	20
28-57	-22062.01	-114586.48	-730290	35349051	-42106968	0	0	20
28-58	-22062.01	-138570	-730283	39580931	-42101084	0	0	20
28-59	-22062.01	-135062.36	-730350	38738870	-42104857	0	0	20
28-60	-22062.01	-159045.88	-730343	42970750	-42098974	0	0	20
28-61	-22062.01	-134334.12	-730272	38592445	-42105296	0	0	20
28-62	-22062.01	-158317.64	-730265	42824325	-42099413	0	0	20
28-63	-22062.01	-154810	-730332	41982264	-42103186	0	0	20
28-64	-22062.01	-178793.52	-730325	46214144	-42097302	0	0	20

Rispetto al sistema di rif. locale (centro piano di posa):

Caso	Hx [daN]	Hy [daN]	Vz [daN]	Mx [daN*cm]	My [daN*cm]	dx [cm]	dy [cm]	dz [cm]
1-1	-18934.13	-220035.1	-655583.6	63328474	-32539872	-	-	-
2-1	-18924.65	-220035.1	-806791.6	63303189	-111247472	-	-	-
3-1	-18934.13	-220035.1	-772780.6	54489213	-35494403	-	-	-
4-1	-18809.55	-220035	-766037.6	73181852	22212248	-	-	-
5-1	-18924.65	-220035.1	-923989.6	54463928	-114202003	-	-	-
6-1	-18800.07	-220035	-917246.6	73156567	-56495352	-	-	-
7-1	-18809.55	-220035	-883235.6	64342590	19257717	-	-	-
8-1	-18800.07	-220035	-1034443.6	64317306	-59449882	-	-	-
9-1	1276.33	-143397.48	-477527	40227146	-14311482	-	-	-
9-2	1276.33	-143397.48	-477527	40226968	-14311463	-	-	-
9-3	1276.33	-155240.76	-477515	47084980	-14302081	-	-	-
9-4	1276.33	-155240.76	-477515	47084802	-14302062	-	-	-
9-5	1276.33	-143397.48	-477527	40227241	-14312708	-	-	-
9-6	1276.33	-143397.48	-477527	40227063	-14312689	-	-	-
9-7	1276.33	-155240.76	-477515	47085075	-14303307	-	-	-
9-8	1276.33	-155240.76	-477515	47084897	-14303288	-	-	-
9-9	-28029.53	-143397.48	-477521	40204198	-31566477	-	-	-
9-10	-28029.53	-143397.48	-477521	40204020	-31566458	-	-	-
9-11	-28029.53	-155240.76	-477544	47051515	-31549224	-	-	-
9-12	-28029.53	-155240.76	-477545	47051105	-31549060	-	-	-
9-13	-28029.53	-143397.48	-477521	40204293	-31567703	-	-	-
9-14	-28029.53	-143397.48	-477521	40204115	-31567684	-	-	-
9-15	-28029.53	-155240.76	-477545	47051514	-31550390	-	-	-
9-16	-28029.53	-155240.76	-477545	47051103	-31550226	-	-	-
10-1	-8453.02	-135714.77	-477531	33588274	-20214699	-	-	-
10-2	-8453.02	-135714.77	-477531	33588302	-20215067	-	-	-
10-3	-17244.78	-135714.77	-477529	33581389	-25391198	-	-	-
10-4	-17244.78	-135714.77	-477529	33581418	-25391566	-	-	-
10-5	-8453.02	-135714.77	-477531	33587680	-20214637	-	-	-
10-6	-8453.02	-135714.77	-477531	33587709	-20215005	-	-	-
10-7	-17244.78	-135714.77	-477529	33580796	-25391136	-	-	-
10-8	-17244.78	-135714.77	-477529	33580824	-25391504	-	-	-
10-9	-8453.03	-175192.39	-477737	56386535	-20181361	-	-	-
10-10	-8453.03	-175192.39	-477738	56386296	-20182073	-	-	-
10-11	-17244.79	-175192.39	-477659	56402099	-25339165	-	-	-
10-12	-17244.79	-175192.39	-477660	56401927	-25339720	-	-	-

10-13	-8453.03	-175192.39	-477727	56389105	-20172238	-	-	-
10-14	-8453.03	-175192.39	-477728	56388866	-20172950	-	-	-
10-15	-17244.79	-175192.39	-477654	56403131	-25334647	-	-	-
10-16	-17244.79	-175192.39	-477655	56402959	-25335202	-	-	-
11-1	4172.91	-141700.43	-593642.6	42064926	-71709947	-	-	-
11-2	-29405.77	-141700.43	-594391.6	42056858	-78689100	-	-	-
11-3	4172.91	-151679.7	-593640.6	44025348	-71707499	-	-	-
11-4	-29405.77	-151679.7	-594388.6	44017281	-78686652	-	-	-
12-1	-7579.63	-130057.94	-593908.6	39774941	-74155507	-	-	-
12-2	-7579.63	-163322.19	-593898.6	46309686	-74147347	-	-	-
12-3	-17653.23	-130057.94	-594132.6	39772521	-76249253	-	-	-
12-4	-17653.23	-163322.19	-594123.6	46307266	-76241093	-	-	-
13-1	1283.37	-142430.17	-571031.6	36400514	-21972662	-	-	-
13-2	-26528.88	-142430.17	-571627.6	36348862	-27420723	-	-	-
13-3	1283.37	-150949.96	-571056.6	37981375	-21971784	-	-	-
13-4	-26528.88	-150949.96	-571652.6	37929724	-27419845	-	-	-
14-1	-8450.91	-132490.42	-571210.6	34538097	-23880507	-	-	-
14-2	-8450.91	-160889.7	-571293.6	39807636	-23877580	-	-	-
14-3	-16794.59	-132490.42	-571389.6	34522602	-25514926	-	-	-
14-4	-16794.59	-160889.7	-571472.6	39792140	-25511999	-	-	-
15-1	817.7	-142581.62	-566574.6	48848325	16237738	-	-	-
15-2	-25897.1	-142581.62	-567126.6	48891555	11311260	-	-	-
15-3	817.7	-150798.39	-566566.6	50362201	16238434	-	-	-
15-4	-25897.1	-150798.39	-567118.6	50405431	11311956	-	-	-
16-1	-8532.48	-132995.38	-566776.6	47097268	14512659	-	-	-
16-2	-8532.48	-160384.62	-566750.6	52143519	14514977	-	-	-
16-3	-16546.92	-132995.38	-566941.6	47110237	13034717	-	-	-
16-4	-16546.92	-160384.62	-566916.6	52156488	13037035	-	-	-
17-1	18079.04	-137440.53	-671464.6	35407480	-70956042	-	-	-
17-2	-15499.65	-137440.53	-672212.6	35399413	-77935197	-	-	-
17-3	18079.04	-147419.81	-671461.6	37367903	-70953594	-	-	-
17-4	-15499.65	-147419.81	-672209.6	37359836	-77932749	-	-	-
17-5	-9733.21	-137440.53	-672059.6	35355828	-76404102	-	-	-
17-6	-43311.9	-137440.53	-672808.6	35347761	-83383257	-	-	-
17-7	-9733.21	-147419.81	-672057.6	37316251	-76401654	-	-	-
17-8	-43311.9	-147419.81	-672805.6	37308184	-83380809	-	-	-
17-9	18079.04	-145960.32	-671489.6	36988341	-70955164	-	-	-
17-10	-15499.65	-145960.32	-672237.6	36980273	-77934319	-	-	-
17-11	18079.04	-155939.59	-671486.6	38948764	-70952716	-	-	-
17-12	-15499.65	-155939.59	-672234.6	38940697	-77931871	-	-	-
17-13	-9733.21	-145960.32	-672084.6	36936689	-76403224	-	-	-
17-14	-43311.9	-145960.32	-672833.6	36928621	-83382379	-	-	-
17-15	-9733.21	-155939.59	-672082.6	38897113	-76400776	-	-	-
17-16	-43311.9	-155939.59	-672830.6	38889045	-83379931	-	-	-
18-1	-3407.79	-115858.3	-671908.6	31255079	-75309448	-	-	-
18-2	-3407.79	-149122.55	-671899.6	37789824	-75301288	-	-	-
18-3	-13481.4	-115858.3	-672133.6	31252659	-77403194	-	-	-
18-4	-13481.4	-149122.55	-672124.6	37787404	-77395034	-	-	-
18-5	-3407.79	-144257.58	-671991.6	36524617	-75306521	-	-	-
18-6	-3407.79	-177521.83	-671982.6	43059362	-75298361	-	-	-
18-7	-13481.4	-144257.58	-672216.6	36522197	-77400267	-	-	-
18-8	-13481.4	-177521.83	-672207.6	43056942	-77392107	-	-	-
18-9	-11751.47	-115858.3	-672087.6	31239584	-76943866	-	-	-
18-10	-11751.47	-149122.55	-672078.6	37774328	-76935706	-	-	-
18-11	-21825.07	-115858.3	-672312.6	31237163	-79037612	-	-	-
18-12	-21825.07	-149122.55	-672302.6	37771908	-79029452	-	-	-
18-13	-11751.47	-144257.58	-672170.6	36509122	-76940939	-	-	-
18-14	-11751.47	-177521.83	-672161.6	43043866	-76932779	-	-	-
18-15	-21825.07	-144257.58	-672395.6	36506701	-79034685	-	-	-
18-16	-21825.07	-177521.83	-672386.6	43041446	-79026525	-	-	-
19-1	17613.36	-137591.98	-667006.6	47855291	-32745642	-	-	-
19-2	-15965.32	-137591.98	-667755.6	47847224	-39724796	-	-	-
19-3	17613.36	-147571.25	-667004.6	49815714	-32743194	-	-	-
19-4	-15965.32	-147571.25	-667752.6	49807647	-39722348	-	-	-
19-5	-9101.43	-137591.98	-667559.6	47898521	-37672120	-	-	-
19-6	-42680.12	-137591.98	-668307.6	47890454	-44651274	-	-	-
19-7	-9101.43	-147571.25	-667556.6	49858944	-37669672	-	-	-
19-8	-42680.12	-147571.25	-668304.6	49850877	-44648826	-	-	-
19-9	17613.36	-145808.75	-666999.6	49369166	-32744947	-	-	-
19-10	-15965.32	-145808.75	-667747.6	49361099	-39724101	-	-	-
19-11	17613.36	-155788.03	-666996.6	51329590	-32742499	-	-	-

19-12	-15965.32	-155788.03	-667745.6	51321523	-39721653	-	-	-
19-13	-9101.43	-145808.75	-667551.6	49412396	-37671425	-	-	-
19-14	-42680.12	-145808.75	-668300.6	49404329	-44650579	-	-	-
19-15	-9101.43	-155788.03	-667548.6	51372820	-37668977	-	-	-
19-16	-42680.12	-155788.03	-668297.6	51364753	-44648131	-	-	-
20-1	-3489.36	-116363.26	-667474.6	43814249	-36916281	-	-	-
20-2	-3489.36	-149627.51	-667465.6	50348994	-36908121	-	-	-
20-3	-13562.96	-116363.26	-667698.6	43811829	-39010027	-	-	-
20-4	-13562.96	-149627.51	-667689.6	50346574	-39001867	-	-	-
20-5	-3489.36	-143752.5	-667448.6	48860500	-36913962	-	-	-
20-6	-3489.36	-177016.75	-667439.6	55395245	-36905802	-	-	-
20-7	-13562.96	-143752.5	-667673.6	48858080	-39007709	-	-	-
20-8	-13562.96	-177016.75	-667664.6	55392825	-38999549	-	-	-
20-9	-11503.79	-116363.26	-667639.6	43827218	-38394224	-	-	-
20-10	-11503.79	-149627.51	-667630.6	50361963	-38386064	-	-	-
20-11	-21577.4	-116363.26	-667864.6	43824798	-40487970	-	-	-
20-12	-21577.4	-149627.51	-667855.6	50359543	-40479810	-	-	-
20-13	-11503.79	-143752.5	-667614.6	48873469	-38391906	-	-	-
20-14	-11503.79	-177016.75	-667605.6	55408214	-38383746	-	-	-
20-15	-21577.4	-143752.5	-667839.6	48871049	-40485652	-	-	-
20-16	-21577.4	-177016.75	-667829.6	55405794	-40477492	-	-	-
21-1	14723.82	-138321.72	-644395.6	42190880	16991642	-	-	-
21-2	-13088.43	-138321.72	-644991.6	42139228	11543582	-	-	-
21-3	14723.82	-146841.51	-644420.6	43771741	16992520	-	-	-
21-4	-13088.43	-146841.51	-645016.6	43720089	11544460	-	-	-
21-5	-11990.97	-138321.72	-644947.6	42234109	12065165	-	-	-
21-6	-39803.22	-138321.72	-645543.6	42182458	6617105	-	-	-
21-7	-11990.97	-146841.51	-644972.6	43814971	12066043	-	-	-
21-8	-39803.22	-146841.51	-645568.6	43763319	6617983	-	-	-
21-9	14723.82	-146538.5	-644387.6	43704755	16992337	-	-	-
21-10	-13088.43	-146538.5	-644983.6	43653104	11544277	-	-	-
21-11	14723.82	-155058.28	-644412.6	45285617	16993216	-	-	-
21-12	-13088.43	-155058.28	-645008.6	45233965	11545155	-	-	-
21-13	-11990.97	-146538.5	-644939.6	43747985	12065860	-	-	-
21-14	-39803.22	-146538.5	-645535.6	43696333	6617800	-	-	-
21-15	-11990.97	-155058.28	-644964.6	45328847	12066739	-	-	-
21-16	-39803.22	-155058.28	-645560.6	45277195	6618678	-	-	-
22-1	-4360.64	-118795.74	-644776.6	38577406	13358718	-	-	-
22-2	-4360.64	-147195.02	-644860.6	43846943	13361645	-	-	-
22-3	-12704.32	-118795.74	-644955.6	38561911	11724300	-	-	-
22-4	-12704.32	-147195.02	-645038.6	43831448	11727227	-	-	-
22-5	-4360.64	-146184.98	-644751.6	43623658	13361036	-	-	-
22-6	-4360.64	-174584.26	-644834.6	48893195	13363963	-	-	-
22-7	-12704.32	-146184.98	-644930.6	43608162	11726619	-	-	-
22-8	-12704.32	-174584.26	-645013.6	48877699	11729546	-	-	-
22-9	-12375.08	-118795.74	-644942.6	38590375	11880774	-	-	-
22-10	-12375.08	-147195.02	-645025.6	43859912	11883701	-	-	-
22-11	-20718.76	-118795.74	-645121.6	38574880	10246357	-	-	-
22-12	-20718.76	-147195.02	-645204.6	43844417	10249284	-	-	-
22-13	-12375.08	-146184.98	-644917.6	43636627	11883093	-	-	-
22-14	-12375.08	-174584.26	-645000.6	48906164	11886020	-	-	-
22-15	-20718.76	-146184.98	-645095.6	43621131	10248675	-	-	-
22-16	-20718.76	-174584.26	-645179.6	48890668	10251602	-	-	-
23-1	31519.49	-133332.09	-744828.6	41197846	-31991738	-	-	-
23-2	3707.24	-133332.09	-745424.6	41146194	-37439798	-	-	-
23-3	31519.49	-141851.87	-744853.6	42778706	-31990859	-	-	-
23-4	3707.24	-141851.87	-745448.6	42727054	-37438920	-	-	-
23-5	4804.69	-133332.09	-745380.6	41241075	-36918216	-	-	-
23-6	-23007.56	-133332.09	-745976.6	41189424	-42366276	-	-	-
23-7	4804.69	-141851.87	-745405.6	42821936	-36917337	-	-	-
23-8	-23007.56	-141851.87	-746001.6	42770284	-42365398	-	-	-
23-9	31519.49	-141548.86	-744820.6	42711720	-31991042	-	-	-
23-10	3707.24	-141548.86	-745416.6	42660069	-37439103	-	-	-
23-11	31519.49	-150068.64	-744845.6	44292582	-31990164	-	-	-
23-12	3707.24	-150068.64	-745441.6	44240930	-37438224	-	-	-
23-13	4804.69	-141548.86	-745372.6	42754950	-36917520	-	-	-
23-14	-23007.56	-141548.86	-745968.6	42703298	-42365581	-	-	-
23-15	4804.69	-150068.64	-745397.6	44335812	-36916642	-	-	-
23-16	-23007.56	-150068.64	-745993.6	44284160	-42364702	-	-	-
23-17	-2059.2	-133332.09	-745576.6	41189778	-38970892	-	-	-
23-18	-29871.45	-133332.09	-746172.6	41138127	-44418953	-	-	-

23-19	-2059.2	-141851.87	-745601.6	42770639	-38970014	-	-	-
23-20	-29871.45	-141851.87	-746197.6	42718987	-44418075	-	-	-
23-21	-28773.99	-133332.09	-746128.6	41233008	-43897370	-	-	-
23-22	-56586.24	-133332.09	-746724.6	41181356	-49345431	-	-	-
23-23	-28773.99	-141851.87	-746153.6	42813869	-43896492	-	-	-
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28-7	-3004.74	-154810	-729921	45082030	-38790822	-	-	-

28-8	-3004.74	-178793.52	-729915	49793581	-38784939	-	-	-
28-9	-10267.81	-114586.48	-730042	37642602	-40304195	-	-	-
28-10	-10267.81	-138570	-730035	42354153	-40298312	-	-	-
28-11	-10267.81	-135062.36	-730102	41441938	-40302085	-	-	-
28-12	-10267.81	-159045.88	-730095	46153490	-40296201	-	-	-
28-13	-10267.81	-134334.12	-730023	41280948	-40302524	-	-	-
28-14	-10267.81	-158317.64	-730017	45992500	-40296640	-	-	-
28-15	-10267.81	-154810	-730083	45080285	-40300413	-	-	-
28-16	-10267.81	-178793.52	-730077	49791836	-40294530	-	-	-
28-17	-9020.53	-114586.48	-730008	37633175	-39973020	-	-	-
28-18	-9020.53	-138570	-730002	42344725	-39967137	-	-	-
28-19	-9020.53	-135062.36	-730068	41432511	-39970910	-	-	-
28-20	-9020.53	-159045.88	-730062	46144062	-39965026	-	-	-
28-21	-9020.53	-134334.12	-729990	41271521	-39971348	-	-	-
28-22	-9020.53	-158317.64	-729984	45983072	-39965465	-	-	-
28-23	-9020.53	-154810	-730050	45070858	-39969238	-	-	-
28-24	-9020.53	-178793.52	-730044	49782409	-39963355	-	-	-
28-25	-16283.6	-114586.48	-730170	37631430	-41482611	-	-	-
28-26	-16283.6	-138570	-730164	42342980	-41476727	-	-	-
28-27	-16283.6	-135062.36	-730230	41430766	-41480500	-	-	-
28-28	-16283.6	-159045.88	-730224	46142317	-41474617	-	-	-
28-29	-16283.6	-134334.12	-730152	41269776	-41480939	-	-	-
28-30	-16283.6	-158317.64	-730145	45981328	-41475056	-	-	-
28-31	-16283.6	-154810	-730212	45069113	-41478829	-	-	-
28-32	-16283.6	-178793.52	-730205	49780664	-41472945	-	-	-
28-33	-8783.15	-114586.48	-729999	37653698	-39860201	-	-	-
28-34	-8783.15	-138570	-729992	42365248	-39854318	-	-	-
28-35	-8783.15	-135062.36	-730059	41453034	-39858091	-	-	-
28-36	-8783.15	-159045.88	-730052	46164585	-39852208	-	-	-
28-37	-8783.15	-134334.12	-729981	41292044	-39858530	-	-	-
28-38	-8783.15	-158317.64	-729974	46003595	-39852646	-	-	-
28-39	-8783.15	-154810	-730041	45091381	-39856419	-	-	-
28-40	-8783.15	-178793.52	-730034	49802931	-39850536	-	-	-
28-41	-16046.22	-114586.48	-730161	37651953	-41369792	-	-	-
28-42	-16046.22	-138570	-730154	42363503	-41363909	-	-	-
28-43	-16046.22	-135062.36	-730221	41451289	-41367682	-	-	-
28-44	-16046.22	-159045.88	-730214	46162840	-41361798	-	-	-
28-45	-16046.22	-134334.12	-730143	41290299	-41368121	-	-	-
28-46	-16046.22	-158317.64	-730136	46001850	-41362237	-	-	-
28-47	-16046.22	-154810	-730203	45089636	-41366010	-	-	-
28-48	-16046.22	-178793.52	-730196	49801187	-41360127	-	-	-
28-49	-14798.94	-114586.48	-730128	37642525	-41038617	-	-	-
28-50	-14798.94	-138570	-730121	42354076	-41032734	-	-	-
28-51	-14798.94	-135062.36	-730188	41441861	-41036507	-	-	-
28-52	-14798.94	-159045.88	-730181	46153413	-41030623	-	-	-
28-53	-14798.94	-134334.12	-730110	41280872	-41036945	-	-	-
28-54	-14798.94	-158317.64	-730103	45992423	-41031062	-	-	-
28-55	-14798.94	-154810	-730170	45080209	-41034835	-	-	-
28-56	-14798.94	-178793.52	-730163	49791759	-41028952	-	-	-
28-57	-22062.01	-114586.48	-730290	37640781	-42548208	-	-	-
28-58	-22062.01	-138570	-730283	42352331	-42542324	-	-	-
28-59	-22062.01	-135062.36	-730350	41440117	-42546097	-	-	-
28-60	-22062.01	-159045.88	-730343	46151668	-42540214	-	-	-
28-61	-22062.01	-134334.12	-730272	41279127	-42546536	-	-	-
28-62	-22062.01	-158317.64	-730265	45990678	-42540653	-	-	-
28-63	-22062.01	-154810	-730332	45078464	-42544426	-	-	-
28-64	-22062.01	-178793.52	-730325	49790014	-42538542	-	-	-

Le sollecitazioni applicate provocano un' eccentricità lungo X (max = 137.89 [cm]) e lungo Y (max = 118.08 [cm]), perciò le verifiche vengono eseguite sulla fondazione ridotta rettangolare.

Caso	ecc. X [cm]	ecc. Y [cm]	Asse B	Asse L
1-1	49.63	96.6	asse Y	asse X
2-1	137.89	78.46	asse Y	asse X
3-1	45.93	70.51	asse Y	asse X
4-1	29	95.53	asse Y	asse X
5-1	123.6	58.94	asse Y	asse X
6-1	61.59	79.76	asse Y	asse X
7-1	21.8	72.85	asse Y	asse X
8-1	57.47	62.18	asse Y	asse X
9-1	29.97	84.24	asse Y	asse X
9-2	29.97	84.24	asse Y	asse X

9-3	29.95	98.6	asse Y	asse X
9-4	29.95	98.6	asse Y	asse X
9-5	29.97	84.24	asse Y	asse X
9-6	29.97	84.24	asse Y	asse X
9-7	29.95	98.6	asse Y	asse X
9-8	29.95	98.6	asse Y	asse X
9-9	66.1	84.19	asse Y	asse X
9-10	66.1	84.19	asse Y	asse X
9-11	66.07	98.53	asse Y	asse X
9-12	66.07	98.53	asse Y	asse X
9-13	66.11	84.19	asse Y	asse X
9-14	66.11	84.19	asse Y	asse X
9-15	66.07	98.53	asse Y	asse X
9-16	66.07	98.53	asse Y	asse X
10-1	42.33	70.34	asse Y	asse X
10-2	42.33	70.34	asse Y	asse X
10-3	53.17	70.32	asse Y	asse X
10-4	53.17	70.32	asse Y	asse X
10-5	42.33	70.34	asse Y	asse X
10-6	42.33	70.34	asse Y	asse X
10-7	53.17	70.32	asse Y	asse X
10-8	53.17	70.32	asse Y	asse X
10-9	42.24	118.03	asse Y	asse X
10-10	42.25	118.03	asse Y	asse X
10-11	53.05	118.08	asse Y	asse X
10-12	53.05	118.08	asse Y	asse X
10-13	42.23	118.04	asse Y	asse X
10-14	42.23	118.04	asse Y	asse X
10-15	53.04	118.08	asse Y	asse X
10-16	53.04	118.08	asse Y	asse X
11-1	120.8	70.86	asse Y	asse X
11-2	132.39	70.76	asse Y	asse X
11-3	120.79	74.16	asse Y	asse X
11-4	132.38	74.05	asse Y	asse X
12-1	124.86	66.97	asse Y	asse X
12-2	124.85	77.98	asse Y	asse X
12-3	128.34	66.94	asse Y	asse X
12-4	128.33	77.94	asse Y	asse X
13-1	38.48	63.75	asse Y	asse X
13-2	47.97	63.59	asse Y	asse X
13-3	38.48	66.51	asse Y	asse X
13-4	47.97	66.35	asse Y	asse X
14-1	41.81	60.46	asse Y	asse X
14-2	41.8	69.68	asse Y	asse X
14-3	44.65	60.42	asse Y	asse X
14-4	44.64	69.63	asse Y	asse X
15-1	28.66	86.22	asse Y	asse X
15-2	19.94	86.21	asse Y	asse X
15-3	28.66	88.89	asse Y	asse X
15-4	19.95	88.88	asse Y	asse X
16-1	25.61	83.1	asse Y	asse X
16-2	25.61	92	asse Y	asse X
16-3	22.99	83.1	asse Y	asse X
16-4	23	92	asse Y	asse X
17-1	105.67	52.73	asse Y	asse X
17-2	115.94	52.66	asse Y	asse X
17-3	105.67	55.65	asse Y	asse X
17-4	115.94	55.58	asse Y	asse X
17-5	113.69	52.61	asse Y	asse X
17-6	123.93	52.54	asse Y	asse X
17-7	113.68	55.53	asse Y	asse X
17-8	123.93	55.45	asse Y	asse X
17-9	105.67	55.08	asse Y	asse X
17-10	115.93	55.01	asse Y	asse X
17-11	105.67	58	asse Y	asse X
17-12	115.93	57.93	asse Y	asse X
17-13	113.68	54.96	asse Y	asse X
17-14	123.93	54.89	asse Y	asse X
17-15	113.68	57.88	asse Y	asse X
17-16	123.92	57.8	asse Y	asse X
18-1	112.08	46.52	asse Y	asse X

18-2	112.07	56.24	asse Y	asse X
18-3	115.16	46.5	asse Y	asse X
18-4	115.15	56.22	asse Y	asse X
18-5	112.06	54.35	asse Y	asse X
18-6	112.05	64.08	asse Y	asse X
18-7	115.14	54.33	asse Y	asse X
18-8	115.13	64.05	asse Y	asse X
18-9	114.48	46.48	asse Y	asse X
18-10	114.47	56.21	asse Y	asse X
18-11	117.56	46.46	asse Y	asse X
18-12	117.55	56.18	asse Y	asse X
18-13	114.47	54.32	asse Y	asse X
18-14	114.46	64.04	asse Y	asse X
18-15	117.54	54.29	asse Y	asse X
18-16	117.53	64.01	asse Y	asse X
19-1	49.09	71.75	asse Y	asse X
19-2	59.49	71.65	asse Y	asse X
19-3	49.09	74.69	asse Y	asse X
19-4	59.49	74.59	asse Y	asse X
19-5	56.43	71.75	asse Y	asse X
19-6	66.81	71.66	asse Y	asse X
19-7	56.43	74.69	asse Y	asse X
19-8	66.81	74.59	asse Y	asse X
19-9	49.09	74.02	asse Y	asse X
19-10	59.49	73.92	asse Y	asse X
19-11	49.09	76.96	asse Y	asse X
19-12	59.49	76.86	asse Y	asse X
19-13	56.43	74.02	asse Y	asse X
19-14	66.81	73.93	asse Y	asse X
19-15	56.43	76.96	asse Y	asse X
19-16	66.81	76.86	asse Y	asse X
20-1	55.31	65.64	asse Y	asse X
20-2	55.3	75.43	asse Y	asse X
20-3	58.42	65.62	asse Y	asse X
20-4	58.41	75.4	asse Y	asse X
20-5	55.31	73.2	asse Y	asse X
20-6	55.29	83	asse Y	asse X
20-7	58.42	73.18	asse Y	asse X
20-8	58.41	82.97	asse Y	asse X
20-9	57.51	65.65	asse Y	asse X
20-10	57.5	75.43	asse Y	asse X
20-11	60.62	65.62	asse Y	asse X
20-12	60.61	75.4	asse Y	asse X
20-13	57.51	73.21	asse Y	asse X
20-14	57.49	83	asse Y	asse X
20-15	60.62	73.18	asse Y	asse X
20-16	60.61	82.96	asse Y	asse X
21-1	26.37	65.47	asse Y	asse X
21-2	17.9	65.33	asse Y	asse X
21-3	26.37	67.92	asse Y	asse X
21-4	17.9	67.78	asse Y	asse X
21-5	18.71	65.48	asse Y	asse X
21-6	10.25	65.34	asse Y	asse X
21-7	18.71	67.93	asse Y	asse X
21-8	10.25	67.79	asse Y	asse X
21-9	26.37	67.82	asse Y	asse X
21-10	17.9	67.68	asse Y	asse X
21-11	26.37	70.27	asse Y	asse X
21-12	17.9	70.13	asse Y	asse X
21-13	18.71	67.83	asse Y	asse X
21-14	10.25	67.69	asse Y	asse X
21-15	18.71	70.28	asse Y	asse X
21-16	10.25	70.14	asse Y	asse X
22-1	20.72	59.83	asse Y	asse X
22-2	20.72	67.99	asse Y	asse X
22-3	18.18	59.79	asse Y	asse X
22-4	18.18	67.95	asse Y	asse X
22-5	20.72	67.66	asse Y	asse X
22-6	20.72	75.82	asse Y	asse X
22-7	18.18	67.62	asse Y	asse X
22-8	18.18	75.78	asse Y	asse X

22-9	18.42	59.84	asse Y	asse X
22-10	18.42	68	asse Y	asse X
22-11	15.88	59.79	asse Y	asse X
22-12	15.89	67.95	asse Y	asse X
22-13	18.43	67.66	asse Y	asse X
22-14	18.43	75.82	asse Y	asse X
22-15	15.89	67.62	asse Y	asse X
22-16	15.89	75.78	asse Y	asse X
23-1	42.95	55.31	asse Y	asse X
23-2	50.23	55.2	asse Y	asse X
23-3	42.95	57.43	asse Y	asse X
23-4	50.22	57.32	asse Y	asse X
23-5	49.53	55.33	asse Y	asse X
23-6	56.79	55.22	asse Y	asse X
23-7	49.53	57.45	asse Y	asse X
23-8	56.79	57.33	asse Y	asse X
23-9	42.95	57.34	asse Y	asse X
23-10	50.23	57.23	asse Y	asse X
23-11	42.95	59.47	asse Y	asse X
23-12	50.22	59.35	asse Y	asse X
23-13	49.53	57.36	asse Y	asse X
23-14	56.79	57.25	asse Y	asse X
23-15	49.53	59.48	asse Y	asse X
23-16	56.79	59.36	asse Y	asse X
23-17	52.27	55.25	asse Y	asse X
23-18	59.53	55.13	asse Y	asse X
23-19	52.27	57.36	asse Y	asse X
23-20	59.53	57.25	asse Y	asse X
23-21	58.83	55.26	asse Y	asse X
23-22	66.08	55.15	asse Y	asse X
23-23	58.83	57.38	asse Y	asse X
23-24	66.08	57.26	asse Y	asse X
23-25	52.27	57.28	asse Y	asse X
23-26	59.53	57.16	asse Y	asse X
23-27	52.27	59.39	asse Y	asse X
23-28	59.53	59.28	asse Y	asse X
23-29	58.83	57.29	asse Y	asse X
23-30	66.08	57.18	asse Y	asse X
23-31	58.83	59.41	asse Y	asse X
23-32	66.08	59.29	asse Y	asse X
23-33	42.95	57.94	asse Y	asse X
23-34	50.22	57.83	asse Y	asse X
23-35	42.95	60.06	asse Y	asse X
23-36	50.22	59.95	asse Y	asse X
23-37	49.53	57.96	asse Y	asse X
23-38	56.79	57.84	asse Y	asse X
23-39	49.52	60.08	asse Y	asse X
23-40	56.79	59.96	asse Y	asse X
23-41	42.95	59.98	asse Y	asse X
23-42	50.22	59.86	asse Y	asse X
23-43	42.95	62.1	asse Y	asse X
23-44	50.22	61.98	asse Y	asse X
23-45	49.53	59.99	asse Y	asse X
23-46	56.79	59.87	asse Y	asse X
23-47	49.52	62.11	asse Y	asse X
23-48	56.79	61.99	asse Y	asse X
23-49	52.27	57.88	asse Y	asse X
23-50	59.53	57.76	asse Y	asse X
23-51	52.26	59.99	asse Y	asse X
23-52	59.52	59.88	asse Y	asse X
23-53	58.83	57.89	asse Y	asse X
23-54	66.08	57.77	asse Y	asse X
23-55	58.83	60.01	asse Y	asse X
23-56	66.08	59.89	asse Y	asse X
23-57	52.27	59.91	asse Y	asse X
23-58	59.53	59.79	asse Y	asse X
23-59	52.26	62.02	asse Y	asse X
23-60	59.52	61.91	asse Y	asse X
23-61	58.83	59.92	asse Y	asse X
23-62	66.08	59.8	asse Y	asse X
23-63	58.83	62.04	asse Y	asse X

23-64	66.08	61.92	asse Y	asse X
24-1	51.07	47.34	asse Y	asse X
24-2	51.06	54.41	asse Y	asse X
24-3	53.25	47.31	asse Y	asse X
24-4	53.24	54.37	asse Y	asse X
24-5	51.07	54.12	asse Y	asse X
24-6	51.06	61.18	asse Y	asse X
24-7	53.25	54.08	asse Y	asse X
24-8	53.24	61.14	asse Y	asse X
24-9	53.04	47.35	asse Y	asse X
24-10	53.03	54.41	asse Y	asse X
24-11	55.22	47.32	asse Y	asse X
24-12	55.21	54.38	asse Y	asse X
24-13	53.04	54.12	asse Y	asse X
24-14	53.03	61.18	asse Y	asse X
24-15	55.22	54.09	asse Y	asse X
24-16	55.21	61.15	asse Y	asse X
24-17	51.06	56.11	asse Y	asse X
24-18	51.05	63.17	asse Y	asse X
24-19	53.24	56.08	asse Y	asse X
24-20	53.23	63.14	asse Y	asse X
24-21	51.06	62.88	asse Y	asse X
24-22	51.05	69.94	asse Y	asse X
24-23	53.24	62.85	asse Y	asse X
24-24	53.23	69.91	asse Y	asse X
24-25	53.03	56.12	asse Y	asse X
24-26	53.02	63.18	asse Y	asse X
24-27	55.21	56.08	asse Y	asse X
24-28	55.2	63.14	asse Y	asse X
24-29	53.03	62.89	asse Y	asse X
24-30	53.02	69.95	asse Y	asse X
24-31	55.21	62.85	asse Y	asse X
24-32	55.2	69.91	asse Y	asse X
24-33	53.86	47.33	asse Y	asse X
24-34	53.85	54.39	asse Y	asse X
24-35	56.04	47.3	asse Y	asse X
24-36	56.03	54.35	asse Y	asse X
24-37	53.86	54.1	asse Y	asse X
24-38	53.85	61.16	asse Y	asse X
24-39	56.04	54.06	asse Y	asse X
24-40	56.03	61.12	asse Y	asse X
24-41	55.83	47.33	asse Y	asse X
24-42	55.82	54.39	asse Y	asse X
24-43	58.01	47.3	asse Y	asse X
24-44	58	54.36	asse Y	asse X
24-45	55.83	54.1	asse Y	asse X
24-46	55.82	61.16	asse Y	asse X
24-47	58.01	54.07	asse Y	asse X
24-48	58	61.12	asse Y	asse X
24-49	53.85	56.09	asse Y	asse X
24-50	53.84	63.15	asse Y	asse X
24-51	56.03	56.06	asse Y	asse X
24-52	56.02	63.11	asse Y	asse X
24-53	53.85	62.86	asse Y	asse X
24-54	53.84	69.92	asse Y	asse X
24-55	56.03	62.82	asse Y	asse X
24-56	56.02	69.88	asse Y	asse X
24-57	55.82	56.1	asse Y	asse X
24-58	55.81	63.15	asse Y	asse X
24-59	58	56.06	asse Y	asse X
24-60	57.99	63.12	asse Y	asse X
24-61	55.82	62.86	asse Y	asse X
24-62	55.81	69.92	asse Y	asse X
24-63	58	62.83	asse Y	asse X
24-64	57.99	69.88	asse Y	asse X
25-1	34.89	85.89	asse Y	asse X
25-2	34.89	85.89	asse Y	asse X
25-3	34.87	96.25	asse Y	asse X
25-4	34.87	96.25	asse Y	asse X
25-5	34.89	85.89	asse Y	asse X
25-6	34.89	85.89	asse Y	asse X

25-7	34.87	96.25	asse Y	asse X
25-8	34.87	96.25	asse Y	asse X
25-9	60.94	85.86	asse Y	asse X
25-10	60.94	85.86	asse Y	asse X
25-11	60.93	96.22	asse Y	asse X
25-12	60.93	96.22	asse Y	asse X
25-13	60.94	85.86	asse Y	asse X
25-14	60.94	85.86	asse Y	asse X
25-15	60.93	96.22	asse Y	asse X
25-16	60.93	96.22	asse Y	asse X
26-1	43.8	75.87	asse Y	asse X
26-2	43.8	75.87	asse Y	asse X
26-3	51.62	75.86	asse Y	asse X
26-4	51.62	75.86	asse Y	asse X
26-5	43.8	75.87	asse Y	asse X
26-6	43.8	75.87	asse Y	asse X
26-7	51.62	75.86	asse Y	asse X
26-8	51.62	75.86	asse Y	asse X
26-9	43.8	110.39	asse Y	asse X
26-10	43.8	110.39	asse Y	asse X
26-11	51.61	110.36	asse Y	asse X
26-12	51.61	110.36	asse Y	asse X
26-13	43.8	110.39	asse Y	asse X
26-14	43.8	110.39	asse Y	asse X
26-15	51.61	110.36	asse Y	asse X
26-16	51.61	110.36	asse Y	asse X
27-1	47.18	57.44	asse Y	asse X
27-2	54.04	57.39	asse Y	asse X
27-3	52.53	57.36	asse Y	asse X
27-4	59.38	57.31	asse Y	asse X
27-5	52.02	57.46	asse Y	asse X
27-6	58.87	57.41	asse Y	asse X
27-7	57.37	57.37	asse Y	asse X
27-8	64.21	57.32	asse Y	asse X
27-9	47.18	59.38	asse Y	asse X
27-10	54.03	59.33	asse Y	asse X
27-11	52.53	59.3	asse Y	asse X
27-12	59.38	59.24	asse Y	asse X
27-13	52.02	59.39	asse Y	asse X
27-14	58.87	59.34	asse Y	asse X
27-15	57.37	59.31	asse Y	asse X
27-16	64.21	59.26	asse Y	asse X
27-17	47.18	59.01	asse Y	asse X
27-18	54.03	58.95	asse Y	asse X
27-19	52.53	58.92	asse Y	asse X
27-20	59.38	58.87	asse Y	asse X
27-21	52.02	59.02	asse Y	asse X
27-22	58.87	58.96	asse Y	asse X
27-23	57.37	58.93	asse Y	asse X
27-24	64.21	58.88	asse Y	asse X
27-25	47.17	60.94	asse Y	asse X
27-26	54.03	60.89	asse Y	asse X
27-27	52.53	60.86	asse Y	asse X
27-28	59.38	60.8	asse Y	asse X
27-29	52.01	60.95	asse Y	asse X
27-30	58.87	60.9	asse Y	asse X
27-31	57.36	60.87	asse Y	asse X
27-32	64.21	60.81	asse Y	asse X
27-33	47.18	58.94	asse Y	asse X
27-34	54.04	58.89	asse Y	asse X
27-35	52.53	58.86	asse Y	asse X
27-36	59.38	58.8	asse Y	asse X
27-37	52.02	58.95	asse Y	asse X
27-38	58.87	58.9	asse Y	asse X
27-39	57.37	58.87	asse Y	asse X
27-40	64.21	58.81	asse Y	asse X
27-41	47.18	60.88	asse Y	asse X
27-42	54.03	60.83	asse Y	asse X
27-43	52.53	60.79	asse Y	asse X
27-44	59.38	60.74	asse Y	asse X
27-45	52.02	60.89	asse Y	asse X

27-46	58.87	60.84	asse Y	asse X
27-47	57.36	60.8	asse Y	asse X
27-48	64.21	60.75	asse Y	asse X
27-49	47.18	60.5	asse Y	asse X
27-50	54.03	60.45	asse Y	asse X
27-51	52.53	60.42	asse Y	asse X
27-52	59.38	60.36	asse Y	asse X
27-53	52.02	60.51	asse Y	asse X
27-54	58.87	60.46	asse Y	asse X
27-55	57.36	60.43	asse Y	asse X
27-56	64.21	60.37	asse Y	asse X
27-57	47.17	62.44	asse Y	asse X
27-58	54.03	62.39	asse Y	asse X
27-59	52.53	62.35	asse Y	asse X
27-60	59.38	62.3	asse Y	asse X
27-61	52.01	62.45	asse Y	asse X
27-62	58.87	62.39	asse Y	asse X
27-63	57.36	62.36	asse Y	asse X
27-64	64.21	62.31	asse Y	asse X
28-1	53.15	51.58	asse Y	asse X
28-2	53.14	58.03	asse Y	asse X
28-3	53.14	56.78	asse Y	asse X
28-4	53.14	63.23	asse Y	asse X
28-5	53.15	56.56	asse Y	asse X
28-6	53.14	63.02	asse Y	asse X
28-7	53.14	61.76	asse Y	asse X
28-8	53.14	68.22	asse Y	asse X
28-9	55.21	51.56	asse Y	asse X
28-10	55.2	58.02	asse Y	asse X
28-11	55.2	56.76	asse Y	asse X
28-12	55.19	63.22	asse Y	asse X
28-13	55.21	56.55	asse Y	asse X
28-14	55.2	63	asse Y	asse X
28-15	55.2	61.75	asse Y	asse X
28-16	55.19	68.2	asse Y	asse X
28-17	54.76	51.55	asse Y	asse X
28-18	54.75	58.01	asse Y	asse X
28-19	54.75	56.75	asse Y	asse X
28-20	54.74	63.21	asse Y	asse X
28-21	54.76	56.54	asse Y	asse X
28-22	54.75	62.99	asse Y	asse X
28-23	54.75	61.74	asse Y	asse X
28-24	54.74	68.19	asse Y	asse X
28-25	56.81	51.54	asse Y	asse X
28-26	56.8	57.99	asse Y	asse X
28-27	56.8	56.74	asse Y	asse X
28-28	56.8	63.19	asse Y	asse X
28-29	56.81	56.52	asse Y	asse X
28-30	56.8	62.98	asse Y	asse X
28-31	56.8	61.72	asse Y	asse X
28-32	56.8	68.17	asse Y	asse X
28-33	54.6	51.58	asse Y	asse X
28-34	54.6	58.04	asse Y	asse X
28-35	54.6	56.78	asse Y	asse X
28-36	54.59	63.23	asse Y	asse X
28-37	54.6	56.57	asse Y	asse X
28-38	54.59	63.02	asse Y	asse X
28-39	54.59	61.77	asse Y	asse X
28-40	54.59	68.22	asse Y	asse X
28-41	56.66	51.57	asse Y	asse X
28-42	56.65	58.02	asse Y	asse X
28-43	56.65	56.77	asse Y	asse X
28-44	56.64	63.22	asse Y	asse X
28-45	56.66	56.55	asse Y	asse X
28-46	56.65	63	asse Y	asse X
28-47	56.65	61.75	asse Y	asse X
28-48	56.64	68.2	asse Y	asse X
28-49	56.21	51.56	asse Y	asse X
28-50	56.2	58.01	asse Y	asse X
28-51	56.2	56.76	asse Y	asse X
28-52	56.19	63.21	asse Y	asse X

28-53	56.21	56.54	asse Y	asse X
28-54	56.2	62.99	asse Y	asse X
28-55	56.2	61.74	asse Y	asse X
28-56	56.19	68.19	asse Y	asse X
28-57	58.26	51.54	asse Y	asse X
28-58	58.25	57.99	asse Y	asse X
28-59	58.25	56.74	asse Y	asse X
28-60	58.25	63.19	asse Y	asse X
28-61	58.26	56.53	asse Y	asse X
28-62	58.25	62.98	asse Y	asse X
28-63	58.25	61.72	asse Y	asse X
28-64	58.25	68.18	asse Y	asse X

Capacità portante.

Le seguenti tabelle elencano il valore dell'angolo di resistenza al taglio, del peso di volume alleggerito, della coesione efficace, del sovraccarico alleggerito, e dei fattori e coefficienti introdotti nel calcolo della capacità portante.

Caso	γ_{ϕ}	γ_{γ}	ϕ [°]	γ' [daN/cm ³]	N_{γ}	s_{γ}	d_{γ}	$i_{b\gamma}$	i_{γ}	b_{γ}	g_{γ}	h_{γ}	$q'_{lim,\gamma}$ [daN/cm ²]
1-1	1.00	1.00	29.6	0.00196	21.00	1.09	1.00	0.44	0.95	1.00	1.00	-	4.37
2-1	1.00	1.00	29.7	0.00197	21.30	1.11	1.00	0.51	0.96	1.00	1.00	-	5.66
3-1	1.00	1.00	29.7	0.00197	21.42	1.10	1.00	0.50	0.96	1.00	1.00	-	5.8
4-1	1.00	1.00	29.6	0.00196	21.02	1.09	1.00	0.49	0.96	1.00	1.00	-	4.94
5-1	1.00	1.00	29.7	0.00197	21.58	1.11	1.00	0.56	0.96	1.00	1.00	-	6.89
6-1	1.00	1.00	29.7	0.00197	21.28	1.10	1.00	0.55	0.96	1.00	1.00	-	6.09
7-1	1.00	1.00	29.7	0.00197	21.38	1.09	1.00	0.54	0.96	1.00	1.00	-	6.21
8-1	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.59	0.97	1.00	1.00	-	7.17
9-1	-	-	29.6	0.00197	21.21	1.09	1.00	0.53	1.00	1.00	1.00	0.95	5.56
9-2	-	-	29.6	0.00197	21.21	1.09	1.00	0.53	1.00	1.00	1.00	0.95	5.56
9-3	-	-	29.6	0.00196	20.96	1.09	1.00	0.49	1.00	1.00	1.00	0.95	4.74
9-4	-	-	29.6	0.00196	20.96	1.09	1.00	0.49	1.00	1.00	1.00	0.95	4.74
9-5	-	-	29.6	0.00197	21.21	1.09	1.00	0.53	1.00	1.00	1.00	0.95	5.56
9-6	-	-	29.6	0.00197	21.21	1.09	1.00	0.53	1.00	1.00	1.00	0.95	5.56
9-7	-	-	29.6	0.00196	20.96	1.09	1.00	0.49	1.00	1.00	1.00	0.95	4.74
9-8	-	-	29.6	0.00196	20.96	1.09	1.00	0.49	1.00	1.00	1.00	0.95	4.74
9-9	-	-	29.6	0.00197	21.21	1.10	1.00	0.52	0.91	1.00	1.00	0.95	5.06
9-10	-	-	29.6	0.00197	21.21	1.10	1.00	0.52	0.91	1.00	1.00	0.95	5.06
9-11	-	-	29.6	0.00196	20.97	1.09	1.00	0.48	0.91	1.00	1.00	0.95	4.31
9-12	-	-	29.6	0.00196	20.97	1.09	1.00	0.48	0.91	1.00	1.00	0.95	4.31
9-13	-	-	29.6	0.00197	21.21	1.10	1.00	0.52	0.91	1.00	1.00	0.95	5.06
9-14	-	-	29.6	0.00197	21.21	1.10	1.00	0.52	0.91	1.00	1.00	0.95	5.06
9-15	-	-	29.6	0.00196	20.97	1.09	1.00	0.48	0.91	1.00	1.00	0.95	4.31
9-16	-	-	29.6	0.00196	20.97	1.09	1.00	0.48	0.91	1.00	1.00	0.95	4.31
10-1	-	-	29.7	0.00197	21.42	1.10	1.00	0.56	0.97	1.00	1.00	0.95	6.15
10-2	-	-	29.7	0.00197	21.42	1.10	1.00	0.56	0.97	1.00	1.00	0.95	6.15
10-3	-	-	29.7	0.00197	21.42	1.10	1.00	0.55	0.95	1.00	1.00	0.95	5.97
10-4	-	-	29.7	0.00197	21.42	1.10	1.00	0.55	0.95	1.00	1.00	0.95	5.97
10-5	-	-	29.7	0.00197	21.42	1.10	1.00	0.56	0.97	1.00	1.00	0.95	6.15
10-6	-	-	29.7	0.00197	21.42	1.10	1.00	0.56	0.97	1.00	1.00	0.95	6.15
10-7	-	-	29.7	0.00197	21.42	1.10	1.00	0.55	0.95	1.00	1.00	0.95	5.97
10-8	-	-	29.7	0.00197	21.42	1.10	1.00	0.55	0.95	1.00	1.00	0.95	5.97
10-9	-	-	29.4	0.00196	20.60	1.08	1.00	0.42	0.97	1.00	1.00	0.95	3.57
10-10	-	-	29.4	0.00196	20.60	1.08	1.00	0.42	0.97	1.00	1.00	0.95	3.57
10-11	-	-	29.4	0.00196	20.60	1.08	1.00	0.42	0.94	1.00	1.00	0.95	3.46
10-12	-	-	29.4	0.00196	20.60	1.08	1.00	0.42	0.94	1.00	1.00	0.95	3.46
10-13	-	-	29.4	0.00196	20.60	1.08	1.00	0.42	0.97	1.00	1.00	0.95	3.57
10-14	-	-	29.4	0.00196	20.60	1.08	1.00	0.42	0.97	1.00	1.00	0.95	3.57
10-15	-	-	29.4	0.00196	20.60	1.08	1.00	0.42	0.94	1.00	1.00	0.95	3.46
10-16	-	-	29.4	0.00196	20.60	1.08	1.00	0.42	0.94	1.00	1.00	0.95	3.46
11-1	1.00	1.00	29.7	0.00197	21.41	1.11	1.00	0.59	0.99	1.00	1.00	-	7.01
11-2	1.00	1.00	29.7	0.00197	21.41	1.11	1.00	0.59	0.92	1.00	1.00	-	6.52
11-3	1.00	1.00	29.7	0.00197	21.36	1.11	1.00	0.56	0.99	1.00	1.00	-	6.59
11-4	1.00	1.00	29.7	0.00197	21.36	1.11	1.00	0.56	0.92	1.00	1.00	-	6.13
12-1	1.00	1.00	29.7	0.00197	21.47	1.11	1.00	0.62	0.98	1.00	1.00	-	7.45
12-2	1.00	1.00	29.7	0.00197	21.30	1.11	1.00	0.53	0.98	1.00	1.00	-	6.07
12-3	1.00	1.00	29.7	0.00197	21.47	1.11	1.00	0.62	0.95	1.00	1.00	-	7.24
12-4	1.00	1.00	29.7	0.00197	21.30	1.11	1.00	0.53	0.95	1.00	1.00	-	5.89

13-1	1.00	1.00	29.7	0.00197	21.51	1.10	1.00	0.59	1.00	1.00	1.00	-	7.25
13-2	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.59	0.93	1.00	1.00	-	6.75
13-3	1.00	1.00	29.7	0.00197	21.47	1.10	1.00	0.56	1.00	1.00	1.00	-	6.88
13-4	1.00	1.00	29.7	0.00197	21.48	1.10	1.00	0.56	0.93	1.00	1.00	-	6.41
14-1	1.00	1.00	29.7	0.00197	21.56	1.10	1.00	0.61	0.98	1.00	1.00	-	7.54
14-2	1.00	1.00	29.7	0.00197	21.43	1.10	1.00	0.54	0.98	1.00	1.00	-	6.34
14-3	1.00	1.00	29.7	0.00197	21.56	1.10	1.00	0.61	0.95	1.00	1.00	-	7.36
14-4	1.00	1.00	29.7	0.00197	21.43	1.10	1.00	0.54	0.95	1.00	1.00	-	6.19
15-1	1.00	1.00	29.6	0.00197	21.17	1.09	1.00	0.57	1.00	1.00	1.00	-	6.32
15-2	1.00	1.00	29.6	0.00197	21.17	1.09	1.00	0.57	0.93	1.00	1.00	-	5.88
15-3	1.00	1.00	29.6	0.00197	21.13	1.09	1.00	0.55	1.00	1.00	1.00	-	5.99
15-4	1.00	1.00	29.6	0.00197	21.13	1.09	1.00	0.55	0.93	1.00	1.00	-	5.58
16-1	1.00	1.00	29.6	0.00197	21.22	1.09	1.00	0.60	0.98	1.00	1.00	-	6.57
16-2	1.00	1.00	29.6	0.00196	21.08	1.09	1.00	0.53	0.98	1.00	1.00	-	5.51
16-3	1.00	1.00	29.6	0.00197	21.22	1.09	1.00	0.60	0.95	1.00	1.00	-	6.42
16-4	1.00	1.00	29.6	0.00196	21.08	1.09	1.00	0.53	0.95	1.00	1.00	-	5.38
17-1	1.00	1.00	29.8	0.00197	21.66	1.11	1.00	0.64	0.95	1.00	1.00	-	8
17-2	1.00	1.00	29.8	0.00197	21.66	1.12	1.00	0.64	0.96	1.00	1.00	-	8.06
17-3	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.61	0.95	1.00	1.00	-	7.6
17-4	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.61	0.96	1.00	1.00	-	7.66
17-5	1.00	1.00	29.8	0.00197	21.67	1.12	1.00	0.64	0.98	1.00	1.00	-	8.19
17-6	1.00	1.00	29.8	0.00197	21.67	1.12	1.00	0.63	0.89	1.00	1.00	-	7.5
17-7	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.61	0.98	1.00	1.00	-	7.77
17-8	1.00	1.00	29.8	0.00197	21.63	1.12	1.00	0.61	0.89	1.00	1.00	-	7.12
17-9	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.62	0.95	1.00	1.00	-	7.66
17-10	1.00	1.00	29.8	0.00197	21.63	1.12	1.00	0.62	0.96	1.00	1.00	-	7.72
17-11	1.00	1.00	29.8	0.00197	21.59	1.11	1.00	0.59	0.95	1.00	1.00	-	7.27
17-12	1.00	1.00	29.8	0.00197	21.59	1.11	1.00	0.59	0.96	1.00	1.00	-	7.32
17-13	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.62	0.98	1.00	1.00	-	7.84
17-14	1.00	1.00	29.8	0.00197	21.63	1.12	1.00	0.61	0.89	1.00	1.00	-	7.18
17-15	1.00	1.00	29.8	0.00197	21.59	1.11	1.00	0.59	0.98	1.00	1.00	-	7.44
17-16	1.00	1.00	29.8	0.00197	21.60	1.12	1.00	0.59	0.89	1.00	1.00	-	6.81
18-1	1.00	1.00	29.8	0.00197	21.74	1.12	1.00	0.69	0.99	1.00	1.00	-	9.26
18-2	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.61	0.99	1.00	1.00	-	7.82
18-3	1.00	1.00	29.8	0.00197	21.74	1.12	1.00	0.69	0.97	1.00	1.00	-	9.03
18-4	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.61	0.97	1.00	1.00	-	7.62
18-5	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.62	0.99	1.00	1.00	-	8.04
18-6	1.00	1.00	29.7	0.00197	21.51	1.11	1.00	0.54	0.99	1.00	1.00	-	6.73
18-7	1.00	1.00	29.8	0.00197	21.64	1.12	1.00	0.62	0.97	1.00	1.00	-	7.84
18-8	1.00	1.00	29.7	0.00197	21.51	1.11	1.00	0.54	0.97	1.00	1.00	-	6.55
18-9	1.00	1.00	29.8	0.00197	21.74	1.12	1.00	0.69	0.97	1.00	1.00	-	9.07
18-10	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.61	0.97	1.00	1.00	-	7.66
18-11	1.00	1.00	29.8	0.00197	21.74	1.12	1.00	0.69	0.95	1.00	1.00	-	8.84
18-12	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.61	0.95	1.00	1.00	-	7.46
18-13	1.00	1.00	29.8	0.00197	21.64	1.12	1.00	0.62	0.97	1.00	1.00	-	7.87
18-14	1.00	1.00	29.7	0.00197	21.51	1.11	1.00	0.54	0.97	1.00	1.00	-	6.58
18-15	1.00	1.00	29.8	0.00197	21.64	1.12	1.00	0.62	0.95	1.00	1.00	-	7.67
18-16	1.00	1.00	29.7	0.00197	21.51	1.11	1.00	0.54	0.94	1.00	1.00	-	6.41
19-1	1.00	1.00	29.7	0.00197	21.40	1.10	1.00	0.63	0.96	1.00	1.00	-	7.2
19-2	1.00	1.00	29.7	0.00197	21.40	1.10	1.00	0.63	0.96	1.00	1.00	-	7.23
19-3	1.00	1.00	29.7	0.00197	21.35	1.10	1.00	0.61	0.96	1.00	1.00	-	6.82
19-4	1.00	1.00	29.7	0.00197	21.36	1.10	1.00	0.61	0.96	1.00	1.00	-	6.85
19-5	1.00	1.00	29.7	0.00197	21.40	1.10	1.00	0.63	0.98	1.00	1.00	-	7.36
19-6	1.00	1.00	29.7	0.00197	21.40	1.10	1.00	0.63	0.89	1.00	1.00	-	6.74
19-7	1.00	1.00	29.7	0.00197	21.35	1.10	1.00	0.61	0.98	1.00	1.00	-	6.97
19-8	1.00	1.00	29.7	0.00197	21.36	1.10	1.00	0.61	0.89	1.00	1.00	-	6.39
19-9	1.00	1.00	29.7	0.00197	21.36	1.10	1.00	0.61	0.96	1.00	1.00	-	6.89
19-10	1.00	1.00	29.7	0.00197	21.37	1.10	1.00	0.61	0.96	1.00	1.00	-	6.93
19-11	1.00	1.00	29.7	0.00197	21.32	1.10	1.00	0.59	0.96	1.00	1.00	-	6.53
19-12	1.00	1.00	29.7	0.00197	21.32	1.10	1.00	0.59	0.96	1.00	1.00	-	6.56
19-13	1.00	1.00	29.7	0.00197	21.36	1.10	1.00	0.61	0.98	1.00	1.00	-	7.05
19-14	1.00	1.00	29.7	0.00197	21.37	1.10	1.00	0.61	0.89	1.00	1.00	-	6.46
19-15	1.00	1.00	29.7	0.00197	21.32	1.10	1.00	0.59	0.98	1.00	1.00	-	6.67
19-16	1.00	1.00	29.7	0.00197	21.32	1.10	1.00	0.59	0.89	1.00	1.00	-	6.11
20-1	1.00	1.00	29.7	0.00197	21.49	1.10	1.00	0.68	0.99	1.00	1.00	-	8.33
20-2	1.00	1.00	29.7	0.00197	21.34	1.10	1.00	0.60	0.99	1.00	1.00	-	6.99
20-3	1.00	1.00	29.7	0.00197	21.49	1.10	1.00	0.68	0.97	1.00	1.00	-	8.12
20-4	1.00	1.00	29.7	0.00197	21.34	1.10	1.00	0.60	0.97	1.00	1.00	-	6.81
20-5	1.00	1.00	29.7	0.00197	21.38	1.10	1.00	0.62	0.99	1.00	1.00	-	7.24
20-6	1.00	1.00	29.6	0.00197	21.23	1.09	1.00	0.54	0.99	1.00	1.00	-	6.01
20-7	1.00	1.00	29.7	0.00197	21.38	1.10	1.00	0.62	0.97	1.00	1.00	-	7.05

20-8	1.00	1.00	29.6	0.00197	21.23	1.10	1.00	0.54	0.97	1.00	1.00	-	5.86
20-9	1.00	1.00	29.7	0.00197	21.49	1.10	1.00	0.68	0.97	1.00	1.00	-	8.17
20-10	1.00	1.00	29.7	0.00197	21.34	1.10	1.00	0.60	0.97	1.00	1.00	-	6.85
20-11	1.00	1.00	29.7	0.00197	21.49	1.10	1.00	0.68	0.95	1.00	1.00	-	7.96
20-12	1.00	1.00	29.7	0.00197	21.34	1.10	1.00	0.60	0.95	1.00	1.00	-	6.67
20-13	1.00	1.00	29.7	0.00197	21.38	1.10	1.00	0.62	0.97	1.00	1.00	-	7.09
20-14	1.00	1.00	29.6	0.00197	21.23	1.10	1.00	0.54	0.97	1.00	1.00	-	5.89
20-15	1.00	1.00	29.7	0.00197	21.38	1.10	1.00	0.61	0.95	1.00	1.00	-	6.91
20-16	1.00	1.00	29.6	0.00197	21.23	1.10	1.00	0.54	0.95	1.00	1.00	-	5.74
21-1	1.00	1.00	29.7	0.00197	21.49	1.10	1.00	0.63	0.96	1.00	1.00	-	7.39
21-2	1.00	1.00	29.7	0.00197	21.49	1.10	1.00	0.63	0.97	1.00	1.00	-	7.44
21-3	1.00	1.00	29.7	0.00197	21.45	1.10	1.00	0.60	0.96	1.00	1.00	-	7.06
21-4	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.97	1.00	1.00	-	7.11
21-5	1.00	1.00	29.7	0.00197	21.49	1.10	1.00	0.63	0.97	1.00	1.00	-	7.45
21-6	1.00	1.00	29.7	0.00197	21.49	1.10	1.00	0.63	0.90	1.00	1.00	-	6.94
21-7	1.00	1.00	29.7	0.00197	21.45	1.10	1.00	0.61	0.97	1.00	1.00	-	7.12
21-8	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.90	1.00	1.00	-	6.63
21-9	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.96	1.00	1.00	-	7.08
21-10	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.97	1.00	1.00	-	7.12
21-11	1.00	1.00	29.7	0.00197	21.42	1.10	1.00	0.58	0.96	1.00	1.00	-	6.76
21-12	1.00	1.00	29.7	0.00197	21.42	1.10	1.00	0.59	0.97	1.00	1.00	-	6.8
21-13	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.97	1.00	1.00	-	7.13
21-14	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.90	1.00	1.00	-	6.64
21-15	1.00	1.00	29.7	0.00197	21.42	1.10	1.00	0.59	0.97	1.00	1.00	-	6.81
21-16	1.00	1.00	29.7	0.00197	21.42	1.09	1.00	0.59	0.90	1.00	1.00	-	6.34
22-1	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.67	0.99	1.00	1.00	-	8.41
22-2	1.00	1.00	29.7	0.00197	21.45	1.10	1.00	0.60	0.99	1.00	1.00	-	7.25
22-3	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.67	0.97	1.00	1.00	-	8.24
22-4	1.00	1.00	29.7	0.00197	21.45	1.10	1.00	0.60	0.97	1.00	1.00	-	7.1
22-5	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.99	1.00	1.00	-	7.29
22-6	1.00	1.00	29.7	0.00197	21.34	1.09	1.00	0.54	0.99	1.00	1.00	-	6.23
22-7	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.97	1.00	1.00	-	7.14
22-8	1.00	1.00	29.7	0.00197	21.34	1.09	1.00	0.54	0.97	1.00	1.00	-	6.1
22-9	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.67	0.97	1.00	1.00	-	8.24
22-10	1.00	1.00	29.7	0.00197	21.45	1.10	1.00	0.60	0.97	1.00	1.00	-	7.1
22-11	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.67	0.95	1.00	1.00	-	8.07
22-12	1.00	1.00	29.7	0.00197	21.45	1.10	1.00	0.60	0.95	1.00	1.00	-	6.95
22-13	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.97	1.00	1.00	-	7.14
22-14	1.00	1.00	29.7	0.00197	21.34	1.09	1.00	0.54	0.97	1.00	1.00	-	6.1
22-15	1.00	1.00	29.7	0.00197	21.46	1.10	1.00	0.61	0.95	1.00	1.00	-	6.99
22-16	1.00	1.00	29.7	0.00197	21.34	1.09	1.00	0.54	0.95	1.00	1.00	-	5.97
23-1	1.00	1.00	29.8	0.00197	21.63	1.10	1.00	0.67	0.93	1.00	1.00	-	8.07
23-2	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.67	0.99	1.00	1.00	-	8.62
23-3	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	0.93	1.00	1.00	-	7.76
23-4	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	0.99	1.00	1.00	-	8.29
23-5	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.67	0.99	1.00	1.00	-	8.59
23-6	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.67	0.95	1.00	1.00	-	8.24
23-7	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	0.99	1.00	1.00	-	8.26
23-8	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.95	1.00	1.00	-	7.93
23-9	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	0.93	1.00	1.00	-	7.77
23-10	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	0.99	1.00	1.00	-	8.3
23-11	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.93	1.00	1.00	-	7.47
23-12	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.99	1.00	1.00	-	7.98
23-13	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	0.99	1.00	1.00	-	8.27
23-14	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.95	1.00	1.00	-	7.94
23-15	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.99	1.00	1.00	-	7.96
23-16	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.95	1.00	1.00	-	7.63
23-17	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.67	1.00	1.00	1.00	-	8.65
23-18	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.67	0.93	1.00	1.00	-	8.11
23-19	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	1.00	1.00	1.00	-	8.32
23-20	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.93	1.00	1.00	-	7.8
23-21	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.67	0.93	1.00	1.00	-	8.13
23-22	1.00	1.00	29.8	0.00197	21.63	1.11	1.00	0.67	0.87	1.00	1.00	-	7.61
23-23	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.93	1.00	1.00	-	7.82
23-24	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.87	1.00	1.00	-	7.32
23-25	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	1.00	1.00	1.00	-	8.33
23-26	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.93	1.00	1.00	-	7.81
23-27	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	1.00	1.00	1.00	-	8.01
23-28	1.00	1.00	29.7	0.00197	21.58	1.11	1.00	0.63	0.93	1.00	1.00	-	7.51
23-29	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.93	1.00	1.00	-	7.83
23-30	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.87	1.00	1.00	-	7.33

23-31	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.93	1.00	1.00	-	7.53
23-32	1.00	1.00	29.7	0.00197	21.58	1.11	1.00	0.63	0.87	1.00	1.00	-	7.04
23-33	1.00	1.00	29.8	0.00197	21.59	1.10	1.00	0.65	0.93	1.00	1.00	-	7.7
23-34	1.00	1.00	29.8	0.00197	21.60	1.10	1.00	0.65	0.99	1.00	1.00	-	8.23
23-35	1.00	1.00	29.7	0.00197	21.56	1.10	1.00	0.63	0.93	1.00	1.00	-	7.4
23-36	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.99	1.00	1.00	-	7.91
23-37	1.00	1.00	29.8	0.00197	21.59	1.10	1.00	0.65	0.99	1.00	1.00	-	8.2
23-38	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.95	1.00	1.00	-	7.87
23-39	1.00	1.00	29.7	0.00197	21.56	1.10	1.00	0.63	0.99	1.00	1.00	-	7.88
23-40	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.95	1.00	1.00	-	7.56
23-41	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.93	1.00	1.00	-	7.42
23-42	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.99	1.00	1.00	-	7.92
23-43	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.61	0.93	1.00	1.00	-	7.13
23-44	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.61	0.99	1.00	1.00	-	7.61
23-45	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.99	1.00	1.00	-	7.9
23-46	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.95	1.00	1.00	-	7.57
23-47	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.61	0.99	1.00	1.00	-	7.59
23-48	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.61	0.95	1.00	1.00	-	7.28
23-49	1.00	1.00	29.8	0.00197	21.59	1.10	1.00	0.65	1.00	1.00	1.00	-	8.26
23-50	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.93	1.00	1.00	-	7.74
23-51	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	1.00	1.00	1.00	-	7.94
23-52	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.93	1.00	1.00	-	7.44
23-53	1.00	1.00	29.8	0.00197	21.59	1.11	1.00	0.65	0.93	1.00	1.00	-	7.76
23-54	1.00	1.00	29.8	0.00197	21.60	1.11	1.00	0.65	0.87	1.00	1.00	-	7.26
23-55	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.93	1.00	1.00	-	7.46
23-56	1.00	1.00	29.7	0.00197	21.57	1.11	1.00	0.63	0.87	1.00	1.00	-	6.98
23-57	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	1.00	1.00	1.00	-	7.95
23-58	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.93	1.00	1.00	-	7.46
23-59	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.61	1.00	1.00	1.00	-	7.64
23-60	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.61	0.93	1.00	1.00	-	7.16
23-61	1.00	1.00	29.7	0.00197	21.57	1.10	1.00	0.63	0.93	1.00	1.00	-	7.47
23-62	1.00	1.00	29.7	0.00197	21.57	1.11	1.00	0.63	0.87	1.00	1.00	-	6.99
23-63	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.61	0.93	1.00	1.00	-	7.18
23-64	1.00	1.00	29.7	0.00197	21.54	1.10	1.00	0.61	0.87	1.00	1.00	-	6.71
24-1	1.00	1.00	29.8	0.00197	21.73	1.11	1.00	0.74	1.00	1.00	1.00	-	9.96
24-2	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.68	1.00	1.00	1.00	-	8.79
24-3	1.00	1.00	29.8	0.00197	21.73	1.11	1.00	0.74	0.98	1.00	1.00	-	9.8
24-4	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.68	0.98	1.00	1.00	-	8.65
24-5	1.00	1.00	29.8	0.00197	21.65	1.11	1.00	0.68	1.00	1.00	1.00	-	8.83
24-6	1.00	1.00	29.7	0.00197	21.55	1.10	1.00	0.62	1.00	1.00	1.00	-	7.75
24-7	1.00	1.00	29.8	0.00197	21.65	1.11	1.00	0.68	0.98	1.00	1.00	-	8.69
24-8	1.00	1.00	29.7	0.00197	21.55	1.10	1.00	0.62	0.98	1.00	1.00	-	7.63
24-9	1.00	1.00	29.8	0.00197	21.73	1.11	1.00	0.74	0.98	1.00	1.00	-	9.81
24-10	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.68	0.98	1.00	1.00	-	8.66
24-11	1.00	1.00	29.8	0.00197	21.73	1.11	1.00	0.74	0.96	1.00	1.00	-	9.62
24-12	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.68	0.96	1.00	1.00	-	8.49
24-13	1.00	1.00	29.8	0.00197	21.65	1.11	1.00	0.68	0.98	1.00	1.00	-	8.7
24-14	1.00	1.00	29.7	0.00197	21.55	1.10	1.00	0.62	0.98	1.00	1.00	-	7.64
24-15	1.00	1.00	29.8	0.00197	21.65	1.11	1.00	0.68	0.96	1.00	1.00	-	8.53
24-16	1.00	1.00	29.7	0.00197	21.55	1.10	1.00	0.62	0.96	1.00	1.00	-	7.49
24-17	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.67	1.00	1.00	1.00	-	8.58
24-18	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.60	1.00	1.00	1.00	-	7.52
24-19	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.67	0.98	1.00	1.00	-	8.44
24-20	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.60	0.98	1.00	1.00	-	7.4
24-21	1.00	1.00	29.7	0.00197	21.53	1.10	1.00	0.61	1.00	1.00	1.00	-	7.56
24-22	1.00	1.00	29.7	0.00197	21.42	1.10	1.00	0.55	1.00	1.00	1.00	-	6.58
24-23	1.00	1.00	29.7	0.00197	21.53	1.10	1.00	0.61	0.98	1.00	1.00	-	7.44
24-24	1.00	1.00	29.7	0.00197	21.43	1.10	1.00	0.55	0.98	1.00	1.00	-	6.48
24-25	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.67	0.98	1.00	1.00	-	8.45
24-26	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.60	0.98	1.00	1.00	-	7.4
24-27	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.67	0.96	1.00	1.00	-	8.29
24-28	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.60	0.96	1.00	1.00	-	7.26
24-29	1.00	1.00	29.7	0.00197	21.53	1.10	1.00	0.61	0.98	1.00	1.00	-	7.44
24-30	1.00	1.00	29.7	0.00197	21.42	1.10	1.00	0.55	0.98	1.00	1.00	-	6.48
24-31	1.00	1.00	29.7	0.00197	21.53	1.10	1.00	0.61	0.96	1.00	1.00	-	7.3
24-32	1.00	1.00	29.7	0.00197	21.43	1.10	1.00	0.55	0.96	1.00	1.00	-	6.36
24-33	1.00	1.00	29.8	0.00197	21.73	1.11	1.00	0.74	0.98	1.00	1.00	-	9.76
24-34	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.68	0.98	1.00	1.00	-	8.62
24-35	1.00	1.00	29.8	0.00197	21.73	1.11	1.00	0.74	0.96	1.00	1.00	-	9.58
24-36	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.68	0.96	1.00	1.00	-	8.46
24-37	1.00	1.00	29.8	0.00197	21.65	1.11	1.00	0.68	0.98	1.00	1.00	-	8.66

24-38	1.00	1.00	29.7	0.00197	21.55	1.10	1.00	0.62	0.98	1.00	1.00	-	7.6
24-39	1.00	1.00	29.8	0.00197	21.65	1.11	1.00	0.68	0.96	1.00	1.00	-	8.49
24-40	1.00	1.00	29.7	0.00197	21.55	1.10	1.00	0.62	0.96	1.00	1.00	-	7.46
24-41	1.00	1.00	29.8	0.00197	21.73	1.11	1.00	0.74	0.96	1.00	1.00	-	9.59
24-42	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.68	0.96	1.00	1.00	-	8.46
24-43	1.00	1.00	29.8	0.00197	21.73	1.11	1.00	0.74	0.94	1.00	1.00	-	9.4
24-44	1.00	1.00	29.8	0.00197	21.64	1.11	1.00	0.68	0.94	1.00	1.00	-	8.3
24-45	1.00	1.00	29.8	0.00197	21.65	1.11	1.00	0.68	0.96	1.00	1.00	-	8.5
24-46	1.00	1.00	29.7	0.00197	21.55	1.10	1.00	0.62	0.96	1.00	1.00	-	7.46
24-47	1.00	1.00	29.8	0.00197	21.65	1.11	1.00	0.68	0.94	1.00	1.00	-	8.34
24-48	1.00	1.00	29.7	0.00197	21.55	1.10	1.00	0.62	0.94	1.00	1.00	-	7.32
24-49	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.67	0.98	1.00	1.00	-	8.41
24-50	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.60	0.98	1.00	1.00	-	7.37
24-51	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.67	0.96	1.00	1.00	-	8.25
24-52	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.60	0.96	1.00	1.00	-	7.23
24-53	1.00	1.00	29.7	0.00197	21.53	1.10	1.00	0.61	0.98	1.00	1.00	-	7.41
24-54	1.00	1.00	29.7	0.00197	21.43	1.10	1.00	0.55	0.98	1.00	1.00	-	6.45
24-55	1.00	1.00	29.7	0.00197	21.53	1.10	1.00	0.61	0.96	1.00	1.00	-	7.27
24-56	1.00	1.00	29.7	0.00197	21.43	1.10	1.00	0.55	0.96	1.00	1.00	-	6.33
24-57	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.67	0.96	1.00	1.00	-	8.25
24-58	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.60	0.96	1.00	1.00	-	7.23
24-59	1.00	1.00	29.8	0.00197	21.62	1.11	1.00	0.67	0.94	1.00	1.00	-	8.1
24-60	1.00	1.00	29.7	0.00197	21.52	1.10	1.00	0.60	0.94	1.00	1.00	-	7.09
24-61	1.00	1.00	29.7	0.00197	21.53	1.10	1.00	0.61	0.96	1.00	1.00	-	7.27
24-62	1.00	1.00	29.7	0.00197	21.43	1.10	1.00	0.55	0.96	1.00	1.00	-	6.33
24-63	1.00	1.00	29.7	0.00197	21.53	1.10	1.00	0.61	0.94	1.00	1.00	-	7.13
24-64	1.00	1.00	29.7	0.00197	21.43	1.10	1.00	0.55	0.94	1.00	1.00	-	6.21
25-1	-	-	29.6	0.00197	21.18	1.09	1.00	0.52	0.99	1.00	1.00	0.97	5.6
25-2	-	-	29.6	0.00197	21.18	1.09	1.00	0.52	0.99	1.00	1.00	0.97	5.6
25-3	-	-	29.6	0.00196	21.01	1.09	1.00	0.49	0.99	1.00	1.00	0.97	4.99
25-4	-	-	29.6	0.00196	21.01	1.09	1.00	0.49	0.99	1.00	1.00	0.97	4.99
25-5	-	-	29.6	0.00197	21.18	1.09	1.00	0.52	0.99	1.00	1.00	0.97	5.6
25-6	-	-	29.6	0.00197	21.18	1.09	1.00	0.52	0.99	1.00	1.00	0.97	5.6
25-7	-	-	29.6	0.00196	21.01	1.09	1.00	0.49	0.99	1.00	1.00	0.97	4.99
25-8	-	-	29.6	0.00196	21.01	1.09	1.00	0.49	0.99	1.00	1.00	0.97	4.99
25-9	-	-	29.6	0.00197	21.18	1.09	1.00	0.52	0.92	1.00	1.00	0.97	5.2
25-10	-	-	29.6	0.00197	21.18	1.09	1.00	0.52	0.92	1.00	1.00	0.97	5.2
25-11	-	-	29.6	0.00196	21.01	1.09	1.00	0.49	0.92	1.00	1.00	0.97	4.63
25-12	-	-	29.6	0.00196	21.01	1.09	1.00	0.49	0.92	1.00	1.00	0.97	4.63
25-13	-	-	29.6	0.00197	21.18	1.09	1.00	0.52	0.92	1.00	1.00	0.97	5.2
25-14	-	-	29.6	0.00197	21.18	1.09	1.00	0.52	0.92	1.00	1.00	0.97	5.2
25-15	-	-	29.6	0.00196	21.01	1.09	1.00	0.49	0.92	1.00	1.00	0.97	4.63
25-16	-	-	29.6	0.00196	21.01	1.09	1.00	0.49	0.92	1.00	1.00	0.97	4.63
26-1	-	-	29.7	0.00197	21.34	1.10	1.00	0.54	0.97	1.00	1.00	0.97	5.99
26-2	-	-	29.7	0.00197	21.34	1.10	1.00	0.54	0.97	1.00	1.00	0.97	5.99
26-3	-	-	29.7	0.00197	21.34	1.10	1.00	0.54	0.95	1.00	1.00	0.97	5.86
26-4	-	-	29.7	0.00197	21.34	1.10	1.00	0.54	0.95	1.00	1.00	0.97	5.86
26-5	-	-	29.7	0.00197	21.34	1.10	1.00	0.54	0.97	1.00	1.00	0.97	5.99
26-6	-	-	29.7	0.00197	21.34	1.10	1.00	0.54	0.97	1.00	1.00	0.97	5.99
26-7	-	-	29.7	0.00197	21.34	1.10	1.00	0.54	0.95	1.00	1.00	0.97	5.86
26-8	-	-	29.7	0.00197	21.34	1.10	1.00	0.54	0.95	1.00	1.00	0.97	5.86
26-9	-	-	29.5	0.00196	20.75	1.08	1.00	0.45	0.97	1.00	1.00	0.97	4.06
26-10	-	-	29.5	0.00196	20.75	1.08	1.00	0.45	0.97	1.00	1.00	0.97	4.06
26-11	-	-	29.5	0.00196	20.75	1.08	1.00	0.44	0.95	1.00	1.00	0.97	3.97
26-12	-	-	29.5	0.00196	20.75	1.08	1.00	0.44	0.95	1.00	1.00	0.97	3.97
26-13	-	-	29.5	0.00196	20.75	1.08	1.00	0.45	0.97	1.00	1.00	0.97	4.06
26-14	-	-	29.5	0.00196	20.75	1.08	1.00	0.45	0.97	1.00	1.00	0.97	4.06
26-15	-	-	29.5	0.00196	20.75	1.08	1.00	0.44	0.95	1.00	1.00	0.97	3.97
26-16	-	-	29.5	0.00196	20.75	1.08	1.00	0.44	0.95	1.00	1.00	0.97	3.97
27-1	-	-	29.8	0.00197	21.60	1.10	1.00	0.66	0.96	1.00	1.00	-	8.05
27-2	-	-	29.8	0.00197	21.60	1.11	1.00	0.66	0.99	1.00	1.00	-	8.33
27-3	-	-	29.8	0.00197	21.60	1.10	1.00	0.66	1.00	1.00	1.00	-	8.41
27-4	-	-	29.8	0.00197	21.60	1.11	1.00	0.66	0.94	1.00	1.00	-	7.95
27-5	-	-	29.8	0.00197	21.60	1.10	1.00	0.66	1.00	1.00	1.00	-	8.42
27-6	-	-	29.8	0.00197	21.60	1.11	1.00	0.66	0.94	1.00	1.00	-	7.96
27-7	-	-	29.8	0.00197	21.60	1.11	1.00	0.66	0.95	1.00	1.00	-	8.04
27-8	-	-	29.8	0.00197	21.60	1.11	1.00	0.66	0.90	1.00	1.00	-	7.59
27-9	-	-	29.7	0.00197	21.57	1.10	1.00	0.64	0.96	1.00	1.00	-	7.78
27-10	-	-	29.7	0.00197	21.57	1.10	1.00	0.64	0.99	1.00	1.00	-	8.05
27-11	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	1.00	1.00	1.00	-	8.13
27-12	-	-	29.7	0.00197	21.58	1.11	1.00	0.64	0.94	1.00	1.00	-	7.68

27-13	-	-	29.7	0.00197	21.57	1.10	1.00	0.64	1.00	1.00	1.00	-	8.14
27-14	-	-	29.7	0.00197	21.57	1.10	1.00	0.64	0.94	1.00	1.00	-	7.69
27-15	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	0.95	1.00	1.00	-	7.77
27-16	-	-	29.7	0.00197	21.58	1.11	1.00	0.64	0.90	1.00	1.00	-	7.33
27-17	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	0.96	1.00	1.00	-	7.82
27-18	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	0.99	1.00	1.00	-	8.1
27-19	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	1.00	1.00	1.00	-	8.18
27-20	-	-	29.7	0.00197	21.58	1.11	1.00	0.64	0.94	1.00	1.00	-	7.72
27-21	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	1.00	1.00	1.00	-	8.19
27-22	-	-	29.7	0.00197	21.58	1.11	1.00	0.64	0.94	1.00	1.00	-	7.73
27-23	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	0.95	1.00	1.00	-	7.81
27-24	-	-	29.7	0.00197	21.58	1.11	1.00	0.64	0.90	1.00	1.00	-	7.37
27-25	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.96	1.00	1.00	-	7.56
27-26	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.99	1.00	1.00	-	7.82
27-27	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	1.00	1.00	1.00	-	7.9
27-28	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.94	1.00	1.00	-	7.46
27-29	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	1.00	1.00	1.00	-	7.91
27-30	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.94	1.00	1.00	-	7.47
27-31	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.95	1.00	1.00	-	7.55
27-32	-	-	29.7	0.00197	21.55	1.11	1.00	0.63	0.90	1.00	1.00	-	7.12
27-33	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	0.96	1.00	1.00	-	7.83
27-34	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	0.99	1.00	1.00	-	8.1
27-35	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	1.00	1.00	1.00	-	8.18
27-36	-	-	29.7	0.00197	21.58	1.11	1.00	0.64	0.94	1.00	1.00	-	7.73
27-37	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	1.00	1.00	1.00	-	8.19
27-38	-	-	29.7	0.00197	21.58	1.11	1.00	0.64	0.94	1.00	1.00	-	7.74
27-39	-	-	29.7	0.00197	21.58	1.10	1.00	0.64	0.95	1.00	1.00	-	7.82
27-40	-	-	29.7	0.00197	21.58	1.11	1.00	0.64	0.90	1.00	1.00	-	7.38
27-41	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.96	1.00	1.00	-	7.56
27-42	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.99	1.00	1.00	-	7.83
27-43	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	1.00	1.00	1.00	-	7.91
27-44	-	-	29.7	0.00197	21.56	1.10	1.00	0.63	0.94	1.00	1.00	-	7.47
27-45	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	1.00	1.00	1.00	-	7.92
27-46	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.94	1.00	1.00	-	7.48
27-47	-	-	29.7	0.00197	21.55	1.10	1.00	0.63	0.95	1.00	1.00	-	7.55
27-48	-	-	29.7	0.00197	21.56	1.11	1.00	0.63	0.90	1.00	1.00	-	7.13
27-49	-	-	29.7	0.00197	21.56	1.10	1.00	0.63	0.96	1.00	1.00	-	7.61
27-50	-	-	29.7	0.00197	21.56	1.10	1.00	0.63	0.99	1.00	1.00	-	7.87
27-51	-	-	29.7	0.00197	21.56	1.10	1.00	0.63	1.00	1.00	1.00	-	7.95
27-52	-	-	29.7	0.00197	21.56	1.10	1.00	0.63	0.94	1.00	1.00	-	7.51
27-53	-	-	29.7	0.00197	21.56	1.10	1.00	0.63	1.00	1.00	1.00	-	7.96
27-54	-	-	29.7	0.00197	21.56	1.10	1.00	0.63	0.94	1.00	1.00	-	7.52
27-55	-	-	29.7	0.00197	21.56	1.10	1.00	0.63	0.95	1.00	1.00	-	7.6
27-56	-	-	29.7	0.00197	21.56	1.11	1.00	0.63	0.90	1.00	1.00	-	7.17
27-57	-	-	29.7	0.00197	21.53	1.10	1.00	0.62	0.96	1.00	1.00	-	7.35
27-58	-	-	29.7	0.00197	21.53	1.10	1.00	0.61	0.99	1.00	1.00	-	7.6
27-59	-	-	29.7	0.00197	21.53	1.10	1.00	0.61	1.00	1.00	1.00	-	7.68
27-60	-	-	29.7	0.00197	21.53	1.10	1.00	0.61	0.94	1.00	1.00	-	7.25
27-61	-	-	29.7	0.00197	21.53	1.10	1.00	0.61	1.00	1.00	1.00	-	7.69
27-62	-	-	29.7	0.00197	21.53	1.10	1.00	0.61	0.94	1.00	1.00	-	7.26
27-63	-	-	29.7	0.00197	21.53	1.10	1.00	0.61	0.95	1.00	1.00	-	7.34
27-64	-	-	29.7	0.00197	21.53	1.10	1.00	0.61	0.90	1.00	1.00	-	6.92
28-1	-	-	29.8	0.00197	21.68	1.11	1.00	0.71	0.99	1.00	1.00	-	9.28
28-2	-	-	29.8	0.00197	21.59	1.10	1.00	0.65	0.99	1.00	1.00	-	8.3
28-3	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.99	1.00	1.00	-	8.45
28-4	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.99	1.00	1.00	-	7.53
28-5	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.99	1.00	1.00	-	8.48
28-6	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.99	1.00	1.00	-	7.56
28-7	-	-	29.7	0.00197	21.54	1.10	1.00	0.62	0.99	1.00	1.00	-	7.7
28-8	-	-	29.7	0.00197	21.45	1.10	1.00	0.57	0.99	1.00	1.00	-	6.84
28-9	-	-	29.8	0.00197	21.68	1.11	1.00	0.71	0.98	1.00	1.00	-	9.12
28-10	-	-	29.8	0.00197	21.59	1.10	1.00	0.65	0.98	1.00	1.00	-	8.16
28-11	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.98	1.00	1.00	-	8.31
28-12	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.98	1.00	1.00	-	7.4
28-13	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.98	1.00	1.00	-	8.34
28-14	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.98	1.00	1.00	-	7.43
28-15	-	-	29.7	0.00197	21.54	1.10	1.00	0.62	0.98	1.00	1.00	-	7.57
28-16	-	-	29.7	0.00197	21.45	1.10	1.00	0.57	0.98	1.00	1.00	-	6.72
28-17	-	-	29.8	0.00197	21.68	1.11	1.00	0.71	0.98	1.00	1.00	-	9.15
28-18	-	-	29.8	0.00197	21.59	1.10	1.00	0.65	0.98	1.00	1.00	-	8.18
28-19	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.98	1.00	1.00	-	8.34

28-20	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.98	1.00	1.00	-	7.43
28-21	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.98	1.00	1.00	-	8.36
28-22	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.98	1.00	1.00	-	7.45
28-23	-	-	29.7	0.00197	21.54	1.10	1.00	0.62	0.98	1.00	1.00	-	7.6
28-24	-	-	29.7	0.00197	21.45	1.10	1.00	0.57	0.98	1.00	1.00	-	6.74
28-25	-	-	29.8	0.00197	21.68	1.11	1.00	0.71	0.96	1.00	1.00	-	9
28-26	-	-	29.8	0.00197	21.59	1.11	1.00	0.65	0.96	1.00	1.00	-	8.05
28-27	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.96	1.00	1.00	-	8.19
28-28	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.96	1.00	1.00	-	7.3
28-29	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.96	1.00	1.00	-	8.22
28-30	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.96	1.00	1.00	-	7.33
28-31	-	-	29.7	0.00197	21.54	1.10	1.00	0.62	0.96	1.00	1.00	-	7.47
28-32	-	-	29.7	0.00197	21.45	1.10	1.00	0.57	0.96	1.00	1.00	-	6.63
28-33	-	-	29.8	0.00197	21.68	1.11	1.00	0.71	0.98	1.00	1.00	-	9.15
28-34	-	-	29.8	0.00197	21.59	1.10	1.00	0.65	0.98	1.00	1.00	-	8.19
28-35	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.98	1.00	1.00	-	8.34
28-36	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.98	1.00	1.00	-	7.43
28-37	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.98	1.00	1.00	-	8.37
28-38	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.98	1.00	1.00	-	7.46
28-39	-	-	29.7	0.00197	21.54	1.10	1.00	0.62	0.98	1.00	1.00	-	7.6
28-40	-	-	29.7	0.00197	21.45	1.10	1.00	0.57	0.98	1.00	1.00	-	6.74
28-41	-	-	29.8	0.00197	21.68	1.11	1.00	0.71	0.96	1.00	1.00	-	9
28-42	-	-	29.8	0.00197	21.59	1.11	1.00	0.65	0.96	1.00	1.00	-	8.05
28-43	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.96	1.00	1.00	-	8.2
28-44	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.96	1.00	1.00	-	7.3
28-45	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.96	1.00	1.00	-	8.23
28-46	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.96	1.00	1.00	-	7.33
28-47	-	-	29.7	0.00197	21.54	1.10	1.00	0.62	0.96	1.00	1.00	-	7.47
28-48	-	-	29.7	0.00197	21.45	1.10	1.00	0.57	0.96	1.00	1.00	-	6.63
28-49	-	-	29.8	0.00197	21.68	1.11	1.00	0.71	0.97	1.00	1.00	-	9.03
28-50	-	-	29.8	0.00197	21.59	1.11	1.00	0.65	0.97	1.00	1.00	-	8.07
28-51	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.97	1.00	1.00	-	8.22
28-52	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.97	1.00	1.00	-	7.33
28-53	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.97	1.00	1.00	-	8.25
28-54	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.97	1.00	1.00	-	7.35
28-55	-	-	29.7	0.00197	21.54	1.10	1.00	0.62	0.97	1.00	1.00	-	7.49
28-56	-	-	29.7	0.00197	21.45	1.10	1.00	0.57	0.97	1.00	1.00	-	6.65
28-57	-	-	29.8	0.00197	21.68	1.11	1.00	0.71	0.95	1.00	1.00	-	8.87
28-58	-	-	29.8	0.00197	21.59	1.11	1.00	0.65	0.95	1.00	1.00	-	7.94
28-59	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.95	1.00	1.00	-	8.08
28-60	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.95	1.00	1.00	-	7.2
28-61	-	-	29.8	0.00197	21.61	1.11	1.00	0.66	0.95	1.00	1.00	-	8.11
28-62	-	-	29.7	0.00197	21.52	1.10	1.00	0.61	0.95	1.00	1.00	-	7.23
28-63	-	-	29.7	0.00197	21.54	1.10	1.00	0.62	0.95	1.00	1.00	-	7.36
28-64	-	-	29.7	0.00197	21.45	1.10	1.00	0.57	0.95	1.00	1.00	-	6.53
Caso	γ_c	c' [daN/cm ²]	N_c	s_c	d_c	i_{bc}	i_c	b_c	g_c	h_c	$q'_{lim,c}$ [daN/cm ²]		
1-1	1.00	0.16	29.11	1.18	1.08	0.57	0.97	1.00	1.00	-	3.15		
2-1	1.00	0.16	29.33	1.22	1.07	0.63	0.97	1.00	1.00	-	3.71		
3-1	1.00	0.16	29.42	1.20	1.07	0.63	0.97	1.00	1.00	-	3.67		
4-1	1.00	0.16	29.13	1.17	1.08	0.61	0.97	1.00	1.00	-	3.41		
5-1	1.00	0.16	29.54	1.23	1.07	0.67	0.98	1.00	1.00	-	4.1		
6-1	1.00	0.16	29.32	1.19	1.07	0.66	0.98	1.00	1.00	-	3.86		
7-1	1.00	0.16	29.39	1.19	1.07	0.66	0.98	1.00	1.00	-	3.84		
8-1	1.00	0.16	29.51	1.21	1.07	0.70	0.98	1.00	1.00	-	4.19		
9-1	-	0.16	29.26	1.18	1.08	0.64	1.00	1.00	1.00	0.98	3.67		
9-2	-	0.16	29.26	1.18	1.08	0.64	1.00	1.00	1.00	0.98	3.67		
9-3	-	0.15	29.09	1.17	1.08	0.61	1.00	1.00	1.00	0.98	3.38		
9-4	-	0.15	29.09	1.17	1.08	0.61	1.00	1.00	1.00	0.98	3.38		
9-5	-	0.16	29.26	1.18	1.08	0.64	1.00	1.00	1.00	0.98	3.67		
9-6	-	0.16	29.26	1.18	1.08	0.64	1.00	1.00	1.00	0.98	3.67		
9-7	-	0.15	29.09	1.17	1.08	0.61	1.00	1.00	1.00	0.98	3.38		
9-8	-	0.15	29.09	1.17	1.08	0.61	1.00	1.00	1.00	0.98	3.38		
9-9	-	0.16	29.26	1.19	1.08	0.64	0.95	1.00	1.00	0.98	3.49		
9-10	-	0.16	29.26	1.19	1.08	0.64	0.95	1.00	1.00	0.98	3.49		
9-11	-	0.15	29.09	1.18	1.08	0.60	0.95	1.00	1.00	0.98	3.21		
9-12	-	0.15	29.09	1.18	1.08	0.60	0.95	1.00	1.00	0.98	3.21		
9-13	-	0.16	29.26	1.19	1.08	0.64	0.95	1.00	1.00	0.98	3.49		
9-14	-	0.16	29.26	1.19	1.08	0.64	0.95	1.00	1.00	0.98	3.49		
9-15	-	0.15	29.09	1.18	1.08	0.60	0.95	1.00	1.00	0.98	3.21		
9-16	-	0.15	29.09	1.18	1.08	0.60	0.95	1.00	1.00	0.98	3.21		

10-1	-	0.16	29.42	1.20	1.07	0.67	0.98	1.00	1.00	0.98	3.86
10-2	-	0.16	29.42	1.20	1.07	0.67	0.98	1.00	1.00	0.98	3.86
10-3	-	0.16	29.42	1.20	1.07	0.67	0.97	1.00	1.00	0.98	3.8
10-4	-	0.16	29.42	1.20	1.07	0.67	0.97	1.00	1.00	0.98	3.8
10-5	-	0.16	29.42	1.20	1.07	0.67	0.98	1.00	1.00	0.98	3.86
10-6	-	0.16	29.42	1.20	1.07	0.67	0.98	1.00	1.00	0.98	3.86
10-7	-	0.16	29.42	1.20	1.07	0.67	0.97	1.00	1.00	0.98	3.8
10-8	-	0.16	29.42	1.20	1.07	0.67	0.97	1.00	1.00	0.98	3.8
10-9	-	0.15	28.81	1.16	1.09	0.55	0.98	1.00	1.00	0.98	2.88
10-10	-	0.15	28.81	1.16	1.09	0.55	0.98	1.00	1.00	0.98	2.88
10-11	-	0.15	28.81	1.16	1.09	0.55	0.97	1.00	1.00	0.98	2.83
10-12	-	0.15	28.81	1.16	1.09	0.55	0.97	1.00	1.00	0.98	2.83
10-13	-	0.15	28.81	1.16	1.09	0.55	0.98	1.00	1.00	0.98	2.88
10-14	-	0.15	28.81	1.16	1.09	0.55	0.98	1.00	1.00	0.98	2.88
10-15	-	0.15	28.81	1.16	1.09	0.55	0.97	1.00	1.00	0.98	2.83
10-16	-	0.15	28.81	1.16	1.09	0.55	0.97	1.00	1.00	0.98	2.83
11-1	1.00	0.16	29.42	1.22	1.07	0.70	0.99	1.00	1.00	-	4.22
11-2	1.00	0.16	29.42	1.22	1.07	0.70	0.95	1.00	1.00	-	4.05
11-3	1.00	0.16	29.38	1.22	1.07	0.67	0.99	1.00	1.00	-	4.07
11-4	1.00	0.16	29.38	1.22	1.07	0.67	0.95	1.00	1.00	-	3.9
12-1	1.00	0.16	29.46	1.22	1.07	0.72	0.99	1.00	1.00	-	4.38
12-2	1.00	0.16	29.34	1.21	1.07	0.65	0.99	1.00	1.00	-	3.87
12-3	1.00	0.16	29.46	1.22	1.07	0.72	0.97	1.00	1.00	-	4.31
12-4	1.00	0.16	29.34	1.21	1.07	0.65	0.97	1.00	1.00	-	3.81
13-1	1.00	0.16	29.49	1.20	1.07	0.69	1.00	1.00	1.00	-	4.21
13-2	1.00	0.16	29.49	1.20	1.07	0.69	0.96	1.00	1.00	-	4.04
13-3	1.00	0.16	29.46	1.20	1.07	0.68	1.00	1.00	1.00	-	4.08
13-4	1.00	0.16	29.46	1.20	1.07	0.68	0.96	1.00	1.00	-	3.91
14-1	1.00	0.16	29.52	1.20	1.07	0.72	0.99	1.00	1.00	-	4.31
14-2	1.00	0.16	29.43	1.20	1.07	0.66	0.99	1.00	1.00	-	3.88
14-3	1.00	0.16	29.53	1.21	1.07	0.72	0.97	1.00	1.00	-	4.25
14-4	1.00	0.16	29.43	1.20	1.07	0.66	0.97	1.00	1.00	-	3.83
15-1	1.00	0.16	29.24	1.18	1.08	0.68	1.00	1.00	1.00	-	3.97
15-2	1.00	0.16	29.24	1.18	1.08	0.68	0.96	1.00	1.00	-	3.8
15-3	1.00	0.16	29.21	1.18	1.08	0.66	1.00	1.00	1.00	-	3.85
15-4	1.00	0.16	29.21	1.18	1.08	0.67	0.96	1.00	1.00	-	3.68
16-1	1.00	0.16	29.28	1.18	1.07	0.70	0.99	1.00	1.00	-	4.06
16-2	1.00	0.16	29.17	1.18	1.08	0.64	0.99	1.00	1.00	-	3.65
16-3	1.00	0.16	29.28	1.18	1.07	0.70	0.97	1.00	1.00	-	4.01
16-4	1.00	0.16	29.17	1.18	1.08	0.64	0.97	1.00	1.00	-	3.6
17-1	1.00	0.16	29.60	1.23	1.07	0.74	0.97	1.00	1.00	-	4.49
17-2	1.00	0.16	29.60	1.23	1.07	0.74	0.98	1.00	1.00	-	4.52
17-3	1.00	0.16	29.57	1.23	1.07	0.72	0.97	1.00	1.00	-	4.36
17-4	1.00	0.16	29.57	1.23	1.07	0.72	0.98	1.00	1.00	-	4.38
17-5	1.00	0.16	29.60	1.23	1.07	0.74	0.99	1.00	1.00	-	4.56
17-6	1.00	0.16	29.60	1.24	1.07	0.74	0.93	1.00	1.00	-	4.34
17-7	1.00	0.16	29.57	1.23	1.07	0.72	0.99	1.00	1.00	-	4.42
17-8	1.00	0.16	29.57	1.23	1.07	0.72	0.93	1.00	1.00	-	4.2
17-9	1.00	0.16	29.58	1.23	1.07	0.72	0.97	1.00	1.00	-	4.38
17-10	1.00	0.16	29.58	1.23	1.07	0.72	0.98	1.00	1.00	-	4.4
17-11	1.00	0.16	29.55	1.23	1.07	0.70	0.97	1.00	1.00	-	4.24
17-12	1.00	0.16	29.55	1.22	1.07	0.70	0.98	1.00	1.00	-	4.27
17-13	1.00	0.16	29.58	1.23	1.07	0.72	0.99	1.00	1.00	-	4.44
17-14	1.00	0.16	29.58	1.23	1.07	0.72	0.93	1.00	1.00	-	4.22
17-15	1.00	0.16	29.55	1.23	1.07	0.70	0.99	1.00	1.00	-	4.3
17-16	1.00	0.16	29.55	1.23	1.07	0.70	0.93	1.00	1.00	-	4.09
18-1	1.00	0.16	29.66	1.24	1.06	0.78	0.99	1.00	1.00	-	4.91
18-2	1.00	0.16	29.57	1.23	1.07	0.71	0.99	1.00	1.00	-	4.44
18-3	1.00	0.16	29.66	1.24	1.06	0.78	0.98	1.00	1.00	-	4.84
18-4	1.00	0.16	29.57	1.23	1.07	0.71	0.98	1.00	1.00	-	4.37
18-5	1.00	0.16	29.59	1.23	1.07	0.72	0.99	1.00	1.00	-	4.51
18-6	1.00	0.16	29.49	1.22	1.07	0.66	0.99	1.00	1.00	-	4.05
18-7	1.00	0.16	29.59	1.23	1.07	0.72	0.98	1.00	1.00	-	4.44
18-8	1.00	0.16	29.49	1.22	1.07	0.66	0.98	1.00	1.00	-	3.99
18-9	1.00	0.16	29.66	1.24	1.06	0.78	0.98	1.00	1.00	-	4.85
18-10	1.00	0.16	29.57	1.23	1.07	0.71	0.98	1.00	1.00	-	4.38
18-11	1.00	0.16	29.66	1.24	1.06	0.78	0.97	1.00	1.00	-	4.78
18-12	1.00	0.16	29.57	1.23	1.07	0.71	0.97	1.00	1.00	-	4.32
18-13	1.00	0.16	29.59	1.23	1.07	0.72	0.98	1.00	1.00	-	4.45
18-14	1.00	0.16	29.49	1.22	1.07	0.66	0.98	1.00	1.00	-	4
18-15	1.00	0.16	29.59	1.23	1.07	0.72	0.97	1.00	1.00	-	4.39

18-16	1.00	0.16	29.49	1.22	1.07	0.66	0.97	1.00	1.00	-	3.94
19-1	1.00	0.16	29.41	1.20	1.07	0.73	0.97	1.00	1.00	-	4.27
19-2	1.00	0.16	29.41	1.20	1.07	0.73	0.98	1.00	1.00	-	4.29
19-3	1.00	0.16	29.37	1.19	1.07	0.71	0.97	1.00	1.00	-	4.13
19-4	1.00	0.16	29.37	1.20	1.07	0.71	0.98	1.00	1.00	-	4.15
19-5	1.00	0.16	29.41	1.20	1.07	0.73	0.99	1.00	1.00	-	4.33
19-6	1.00	0.16	29.41	1.20	1.07	0.73	0.94	1.00	1.00	-	4.12
19-7	1.00	0.16	29.37	1.20	1.07	0.71	0.99	1.00	1.00	-	4.19
19-8	1.00	0.16	29.37	1.20	1.07	0.71	0.94	1.00	1.00	-	3.99
19-9	1.00	0.16	29.38	1.20	1.07	0.71	0.97	1.00	1.00	-	4.16
19-10	1.00	0.16	29.38	1.20	1.07	0.71	0.98	1.00	1.00	-	4.18
19-11	1.00	0.16	29.35	1.19	1.07	0.69	0.97	1.00	1.00	-	4.02
19-12	1.00	0.16	29.35	1.20	1.07	0.69	0.98	1.00	1.00	-	4.04
19-13	1.00	0.16	29.38	1.20	1.07	0.71	0.99	1.00	1.00	-	4.22
19-14	1.00	0.16	29.38	1.20	1.07	0.71	0.94	1.00	1.00	-	4.01
19-15	1.00	0.16	29.35	1.19	1.07	0.69	0.99	1.00	1.00	-	4.08
19-16	1.00	0.16	29.35	1.20	1.07	0.69	0.94	1.00	1.00	-	3.88
20-1	1.00	0.16	29.47	1.20	1.07	0.77	0.99	1.00	1.00	-	4.66
20-2	1.00	0.16	29.37	1.20	1.07	0.71	0.99	1.00	1.00	-	4.2
20-3	1.00	0.16	29.47	1.20	1.07	0.77	0.98	1.00	1.00	-	4.59
20-4	1.00	0.16	29.37	1.20	1.07	0.71	0.98	1.00	1.00	-	4.14
20-5	1.00	0.16	29.39	1.20	1.07	0.72	0.99	1.00	1.00	-	4.28
20-6	1.00	0.16	29.28	1.19	1.07	0.65	0.99	1.00	1.00	-	3.83
20-7	1.00	0.16	29.39	1.20	1.07	0.72	0.98	1.00	1.00	-	4.22
20-8	1.00	0.16	29.28	1.19	1.07	0.65	0.98	1.00	1.00	-	3.77
20-9	1.00	0.16	29.47	1.20	1.07	0.77	0.98	1.00	1.00	-	4.61
20-10	1.00	0.16	29.37	1.20	1.07	0.71	0.98	1.00	1.00	-	4.15
20-11	1.00	0.16	29.47	1.21	1.07	0.77	0.97	1.00	1.00	-	4.54
20-12	1.00	0.16	29.37	1.20	1.07	0.71	0.97	1.00	1.00	-	4.09
20-13	1.00	0.16	29.39	1.20	1.07	0.72	0.98	1.00	1.00	-	4.23
20-14	1.00	0.16	29.28	1.19	1.07	0.65	0.98	1.00	1.00	-	3.78
20-15	1.00	0.16	29.39	1.20	1.07	0.72	0.97	1.00	1.00	-	4.17
20-16	1.00	0.16	29.28	1.19	1.07	0.65	0.97	1.00	1.00	-	3.73
21-1	1.00	0.16	29.47	1.20	1.07	0.73	0.98	1.00	1.00	-	4.28
21-2	1.00	0.16	29.47	1.19	1.07	0.73	0.98	1.00	1.00	-	4.29
21-3	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.17
21-4	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.18
21-5	1.00	0.16	29.47	1.19	1.07	0.73	0.98	1.00	1.00	-	4.3
21-6	1.00	0.16	29.47	1.19	1.07	0.73	0.94	1.00	1.00	-	4.12
21-7	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.18
21-8	1.00	0.16	29.45	1.19	1.07	0.71	0.94	1.00	1.00	-	4.01
21-9	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.17
21-10	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.18
21-11	1.00	0.16	29.42	1.19	1.07	0.69	0.98	1.00	1.00	-	4.06
21-12	1.00	0.16	29.42	1.19	1.07	0.69	0.98	1.00	1.00	-	4.07
21-13	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.19
21-14	1.00	0.16	29.45	1.19	1.07	0.71	0.94	1.00	1.00	-	4.01
21-15	1.00	0.16	29.42	1.19	1.07	0.69	0.98	1.00	1.00	-	4.07
21-16	1.00	0.16	29.42	1.19	1.07	0.69	0.94	1.00	1.00	-	3.9
22-1	1.00	0.16	29.53	1.20	1.07	0.77	0.99	1.00	1.00	-	4.62
22-2	1.00	0.16	29.45	1.19	1.07	0.71	0.99	1.00	1.00	-	4.23
22-3	1.00	0.16	29.53	1.20	1.07	0.77	0.98	1.00	1.00	-	4.56
22-4	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.18
22-5	1.00	0.16	29.45	1.19	1.07	0.71	0.99	1.00	1.00	-	4.24
22-6	1.00	0.16	29.36	1.19	1.07	0.66	0.99	1.00	1.00	-	3.86
22-7	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.19
22-8	1.00	0.16	29.36	1.19	1.07	0.66	0.98	1.00	1.00	-	3.81
22-9	1.00	0.16	29.53	1.20	1.07	0.77	0.98	1.00	1.00	-	4.57
22-10	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.18
22-11	1.00	0.16	29.53	1.20	1.07	0.77	0.97	1.00	1.00	-	4.51
22-12	1.00	0.16	29.45	1.19	1.07	0.71	0.97	1.00	1.00	-	4.12
22-13	1.00	0.16	29.45	1.19	1.07	0.71	0.98	1.00	1.00	-	4.19
22-14	1.00	0.16	29.36	1.19	1.07	0.66	0.98	1.00	1.00	-	3.81
22-15	1.00	0.16	29.45	1.19	1.07	0.71	0.97	1.00	1.00	-	4.14
22-16	1.00	0.16	29.36	1.19	1.07	0.66	0.97	1.00	1.00	-	3.76
23-1	1.00	0.16	29.58	1.21	1.07	0.76	0.96	1.00	1.00	-	4.5
23-2	1.00	0.16	29.58	1.21	1.07	0.76	0.99	1.00	1.00	-	4.68
23-3	1.00	0.16	29.55	1.21	1.07	0.75	0.96	1.00	1.00	-	4.4
23-4	1.00	0.16	29.56	1.21	1.07	0.75	0.99	1.00	1.00	-	4.58
23-5	1.00	0.16	29.58	1.21	1.07	0.76	0.99	1.00	1.00	-	4.67
23-6	1.00	0.16	29.58	1.21	1.07	0.76	0.97	1.00	1.00	-	4.57

23-7	1.00	0.16	29.55	1.21	1.07	0.75	0.99	1.00	1.00	-	4.57
23-8	1.00	0.16	29.56	1.21	1.07	0.75	0.97	1.00	1.00	-	4.46
23-9	1.00	0.16	29.56	1.21	1.07	0.75	0.96	1.00	1.00	-	4.4
23-10	1.00	0.16	29.56	1.21	1.07	0.75	0.99	1.00	1.00	-	4.58
23-11	1.00	0.16	29.53	1.21	1.07	0.73	0.96	1.00	1.00	-	4.3
23-12	1.00	0.16	29.54	1.21	1.07	0.73	0.99	1.00	1.00	-	4.47
23-13	1.00	0.16	29.56	1.21	1.07	0.75	0.99	1.00	1.00	-	4.57
23-14	1.00	0.16	29.56	1.21	1.07	0.75	0.97	1.00	1.00	-	4.47
23-15	1.00	0.16	29.53	1.21	1.07	0.73	0.99	1.00	1.00	-	4.47
23-16	1.00	0.16	29.54	1.21	1.07	0.73	0.97	1.00	1.00	-	4.36
23-17	1.00	0.16	29.58	1.21	1.07	0.76	1.00	1.00	1.00	-	4.7
23-18	1.00	0.16	29.58	1.21	1.07	0.76	0.96	1.00	1.00	-	4.53
23-19	1.00	0.16	29.56	1.21	1.07	0.75	1.00	1.00	1.00	-	4.59
23-20	1.00	0.16	29.56	1.21	1.07	0.75	0.96	1.00	1.00	-	4.42
23-21	1.00	0.16	29.58	1.21	1.07	0.76	0.96	1.00	1.00	-	4.53
23-22	1.00	0.16	29.58	1.22	1.07	0.76	0.92	1.00	1.00	-	4.36
23-23	1.00	0.16	29.56	1.21	1.07	0.75	0.96	1.00	1.00	-	4.43
23-24	1.00	0.16	29.56	1.21	1.07	0.75	0.92	1.00	1.00	-	4.26
23-25	1.00	0.16	29.56	1.21	1.07	0.75	1.00	1.00	1.00	-	4.59
23-26	1.00	0.16	29.56	1.21	1.07	0.75	0.96	1.00	1.00	-	4.43
23-27	1.00	0.16	29.54	1.21	1.07	0.73	1.00	1.00	1.00	-	4.49
23-28	1.00	0.16	29.54	1.21	1.07	0.73	0.96	1.00	1.00	-	4.32
23-29	1.00	0.16	29.56	1.21	1.07	0.75	0.96	1.00	1.00	-	4.43
23-30	1.00	0.16	29.56	1.21	1.07	0.75	0.92	1.00	1.00	-	4.26
23-31	1.00	0.16	29.54	1.21	1.07	0.73	0.96	1.00	1.00	-	4.33
23-32	1.00	0.16	29.54	1.21	1.07	0.73	0.92	1.00	1.00	-	4.16
23-33	1.00	0.16	29.55	1.21	1.07	0.75	0.96	1.00	1.00	-	4.38
23-34	1.00	0.16	29.55	1.21	1.07	0.75	0.99	1.00	1.00	-	4.56
23-35	1.00	0.16	29.53	1.20	1.07	0.73	0.96	1.00	1.00	-	4.28
23-36	1.00	0.16	29.53	1.21	1.07	0.73	0.99	1.00	1.00	-	4.45
23-37	1.00	0.16	29.55	1.21	1.07	0.75	0.99	1.00	1.00	-	4.55
23-38	1.00	0.16	29.55	1.21	1.07	0.75	0.97	1.00	1.00	-	4.44
23-39	1.00	0.16	29.53	1.21	1.07	0.73	0.99	1.00	1.00	-	4.44
23-40	1.00	0.16	29.53	1.21	1.07	0.73	0.97	1.00	1.00	-	4.34
23-41	1.00	0.16	29.53	1.21	1.07	0.73	0.96	1.00	1.00	-	4.28
23-42	1.00	0.16	29.53	1.21	1.07	0.73	0.99	1.00	1.00	-	4.45
23-43	1.00	0.16	29.51	1.20	1.07	0.72	0.96	1.00	1.00	-	4.18
23-44	1.00	0.16	29.51	1.21	1.07	0.72	0.99	1.00	1.00	-	4.35
23-45	1.00	0.16	29.53	1.21	1.07	0.73	0.99	1.00	1.00	-	4.45
23-46	1.00	0.16	29.53	1.21	1.07	0.73	0.97	1.00	1.00	-	4.34
23-47	1.00	0.16	29.51	1.21	1.07	0.72	0.99	1.00	1.00	-	4.34
23-48	1.00	0.16	29.51	1.21	1.07	0.72	0.97	1.00	1.00	-	4.24
23-49	1.00	0.16	29.55	1.21	1.07	0.75	1.00	1.00	1.00	-	4.57
23-50	1.00	0.16	29.55	1.21	1.07	0.75	0.96	1.00	1.00	-	4.4
23-51	1.00	0.16	29.53	1.21	1.07	0.73	1.00	1.00	1.00	-	4.46
23-52	1.00	0.16	29.53	1.21	1.07	0.73	0.96	1.00	1.00	-	4.3
23-53	1.00	0.16	29.55	1.21	1.07	0.75	0.96	1.00	1.00	-	4.41
23-54	1.00	0.16	29.55	1.21	1.07	0.75	0.92	1.00	1.00	-	4.24
23-55	1.00	0.16	29.53	1.21	1.07	0.73	0.96	1.00	1.00	-	4.3
23-56	1.00	0.16	29.53	1.21	1.07	0.73	0.92	1.00	1.00	-	4.14
23-57	1.00	0.16	29.53	1.21	1.07	0.73	1.00	1.00	1.00	-	4.47
23-58	1.00	0.16	29.53	1.21	1.07	0.73	0.96	1.00	1.00	-	4.3
23-59	1.00	0.16	29.51	1.21	1.07	0.72	1.00	1.00	1.00	-	4.36
23-60	1.00	0.16	29.51	1.21	1.07	0.72	0.96	1.00	1.00	-	4.2
23-61	1.00	0.16	29.53	1.21	1.07	0.73	0.96	1.00	1.00	-	4.31
23-62	1.00	0.16	29.53	1.21	1.07	0.73	0.92	1.00	1.00	-	4.15
23-63	1.00	0.16	29.51	1.21	1.07	0.72	0.96	1.00	1.00	-	4.21
23-64	1.00	0.16	29.51	1.21	1.07	0.72	0.92	1.00	1.00	-	4.05
24-1	1.00	0.16	29.65	1.22	1.07	0.82	1.00	1.00	1.00	-	5.1
24-2	1.00	0.16	29.58	1.21	1.07	0.77	1.00	1.00	1.00	-	4.74
24-3	1.00	0.16	29.65	1.22	1.07	0.82	0.99	1.00	1.00	-	5.06
24-4	1.00	0.16	29.59	1.21	1.07	0.77	0.99	1.00	1.00	-	4.7
24-5	1.00	0.16	29.59	1.21	1.07	0.77	1.00	1.00	1.00	-	4.75
24-6	1.00	0.16	29.52	1.21	1.07	0.72	1.00	1.00	1.00	-	4.4
24-7	1.00	0.16	29.59	1.21	1.07	0.77	0.99	1.00	1.00	-	4.71
24-8	1.00	0.16	29.52	1.21	1.07	0.72	0.99	1.00	1.00	-	4.36
24-9	1.00	0.16	29.65	1.22	1.07	0.82	0.99	1.00	1.00	-	5.06
24-10	1.00	0.16	29.58	1.21	1.07	0.77	0.99	1.00	1.00	-	4.7
24-11	1.00	0.16	29.65	1.22	1.07	0.82	0.98	1.00	1.00	-	5.01
24-12	1.00	0.16	29.59	1.21	1.07	0.77	0.98	1.00	1.00	-	4.65
24-13	1.00	0.16	29.59	1.21	1.07	0.77	0.99	1.00	1.00	-	4.71

24-14	1.00	0.16	29.52	1.21	1.07	0.72	0.99	1.00	1.00	-	4.36
24-15	1.00	0.16	29.59	1.21	1.07	0.77	0.98	1.00	1.00	-	4.66
24-16	1.00	0.16	29.52	1.21	1.07	0.72	0.98	1.00	1.00	-	4.31
24-17	1.00	0.16	29.57	1.21	1.07	0.76	1.00	1.00	1.00	-	4.67
24-18	1.00	0.16	29.50	1.20	1.07	0.71	1.00	1.00	1.00	-	4.32
24-19	1.00	0.16	29.57	1.21	1.07	0.76	0.99	1.00	1.00	-	4.63
24-20	1.00	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.28
24-21	1.00	0.16	29.50	1.20	1.07	0.71	1.00	1.00	1.00	-	4.33
24-22	1.00	0.16	29.43	1.20	1.07	0.66	1.00	1.00	1.00	-	3.98
24-23	1.00	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.29
24-24	1.00	0.16	29.43	1.20	1.07	0.66	0.99	1.00	1.00	-	3.95
24-25	1.00	0.16	29.57	1.21	1.07	0.76	0.99	1.00	1.00	-	4.63
24-26	1.00	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.28
24-27	1.00	0.16	29.57	1.21	1.07	0.76	0.98	1.00	1.00	-	4.58
24-28	1.00	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.23
24-29	1.00	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.29
24-30	1.00	0.16	29.43	1.20	1.07	0.66	0.99	1.00	1.00	-	3.95
24-31	1.00	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.25
24-32	1.00	0.16	29.43	1.20	1.07	0.66	0.98	1.00	1.00	-	3.91
24-33	1.00	0.16	29.65	1.22	1.07	0.82	0.99	1.00	1.00	-	5.05
24-34	1.00	0.16	29.58	1.21	1.07	0.77	0.99	1.00	1.00	-	4.69
24-35	1.00	0.16	29.65	1.22	1.07	0.82	0.98	1.00	1.00	-	4.99
24-36	1.00	0.16	29.59	1.21	1.07	0.77	0.98	1.00	1.00	-	4.64
24-37	1.00	0.16	29.59	1.21	1.07	0.77	0.99	1.00	1.00	-	4.7
24-38	1.00	0.16	29.52	1.21	1.07	0.72	0.99	1.00	1.00	-	4.35
24-39	1.00	0.16	29.59	1.21	1.07	0.77	0.98	1.00	1.00	-	4.65
24-40	1.00	0.16	29.52	1.21	1.07	0.72	0.98	1.00	1.00	-	4.3
24-41	1.00	0.16	29.65	1.22	1.07	0.82	0.98	1.00	1.00	-	4.99
24-42	1.00	0.16	29.58	1.21	1.07	0.77	0.98	1.00	1.00	-	4.64
24-43	1.00	0.16	29.65	1.22	1.07	0.82	0.97	1.00	1.00	-	4.94
24-44	1.00	0.16	29.59	1.21	1.07	0.77	0.97	1.00	1.00	-	4.59
24-45	1.00	0.16	29.59	1.21	1.07	0.77	0.98	1.00	1.00	-	4.65
24-46	1.00	0.16	29.52	1.21	1.07	0.72	0.98	1.00	1.00	-	4.3
24-47	1.00	0.16	29.59	1.21	1.07	0.77	0.97	1.00	1.00	-	4.6
24-48	1.00	0.16	29.52	1.21	1.07	0.72	0.96	1.00	1.00	-	4.25
24-49	1.00	0.16	29.57	1.21	1.07	0.76	0.99	1.00	1.00	-	4.62
24-50	1.00	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.27
24-51	1.00	0.16	29.57	1.21	1.07	0.76	0.98	1.00	1.00	-	4.57
24-52	1.00	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.22
24-53	1.00	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.28
24-54	1.00	0.16	29.43	1.20	1.07	0.66	0.99	1.00	1.00	-	3.94
24-55	1.00	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.23
24-56	1.00	0.16	29.43	1.20	1.07	0.66	0.98	1.00	1.00	-	3.89
24-57	1.00	0.16	29.57	1.21	1.07	0.76	0.98	1.00	1.00	-	4.57
24-58	1.00	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.22
24-59	1.00	0.16	29.57	1.21	1.07	0.76	0.97	1.00	1.00	-	4.52
24-60	1.00	0.16	29.50	1.21	1.07	0.71	0.96	1.00	1.00	-	4.18
24-61	1.00	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.24
24-62	1.00	0.16	29.43	1.20	1.07	0.66	0.98	1.00	1.00	-	3.9
24-63	1.00	0.16	29.50	1.21	1.07	0.71	0.96	1.00	1.00	-	4.19
24-64	1.00	0.16	29.43	1.20	1.07	0.66	0.96	1.00	1.00	-	3.85
25-1	-	0.16	29.24	1.18	1.08	0.64	1.00	1.00	1.00	0.99	3.68
25-2	-	0.16	29.24	1.18	1.08	0.64	1.00	1.00	1.00	0.99	3.68
25-3	-	0.16	29.12	1.17	1.08	0.61	1.00	1.00	1.00	0.99	3.46
25-4	-	0.16	29.12	1.17	1.08	0.61	1.00	1.00	1.00	0.99	3.46
25-5	-	0.16	29.24	1.18	1.08	0.64	1.00	1.00	1.00	0.99	3.68
25-6	-	0.16	29.24	1.18	1.08	0.64	1.00	1.00	1.00	0.99	3.68
25-7	-	0.16	29.12	1.17	1.08	0.61	1.00	1.00	1.00	0.99	3.46
25-8	-	0.16	29.12	1.17	1.08	0.61	1.00	1.00	1.00	0.99	3.46
25-9	-	0.16	29.25	1.19	1.08	0.64	0.95	1.00	1.00	0.99	3.54
25-10	-	0.16	29.25	1.19	1.08	0.64	0.95	1.00	1.00	0.99	3.54
25-11	-	0.16	29.12	1.18	1.08	0.61	0.95	1.00	1.00	0.99	3.32
25-12	-	0.16	29.12	1.18	1.08	0.61	0.95	1.00	1.00	0.99	3.32
25-13	-	0.16	29.25	1.19	1.08	0.64	0.95	1.00	1.00	0.99	3.54
25-14	-	0.16	29.25	1.19	1.08	0.64	0.95	1.00	1.00	0.99	3.54
25-15	-	0.16	29.12	1.18	1.08	0.61	0.95	1.00	1.00	0.99	3.32
25-16	-	0.16	29.12	1.18	1.08	0.61	0.95	1.00	1.00	0.99	3.32
26-1	-	0.16	29.36	1.19	1.07	0.66	0.98	1.00	1.00	0.99	3.8
26-2	-	0.16	29.36	1.19	1.07	0.66	0.98	1.00	1.00	0.99	3.8
26-3	-	0.16	29.36	1.19	1.07	0.66	0.97	1.00	1.00	0.99	3.76
26-4	-	0.16	29.36	1.19	1.07	0.66	0.97	1.00	1.00	0.99	3.76

26-5	-	0.16	29.36	1.19	1.07	0.66	0.98	1.00	1.00	0.99	3.8
26-6	-	0.16	29.36	1.19	1.07	0.66	0.98	1.00	1.00	0.99	3.8
26-7	-	0.16	29.36	1.19	1.07	0.66	0.97	1.00	1.00	0.99	3.76
26-8	-	0.16	29.36	1.19	1.07	0.66	0.97	1.00	1.00	0.99	3.76
26-9	-	0.15	28.92	1.17	1.08	0.57	0.98	1.00	1.00	0.99	3.09
26-10	-	0.15	28.92	1.17	1.08	0.57	0.98	1.00	1.00	0.99	3.09
26-11	-	0.15	28.93	1.17	1.08	0.57	0.97	1.00	1.00	0.99	3.05
26-12	-	0.15	28.93	1.17	1.08	0.57	0.97	1.00	1.00	0.99	3.05
26-13	-	0.15	28.92	1.17	1.08	0.57	0.98	1.00	1.00	0.99	3.09
26-14	-	0.15	28.92	1.17	1.08	0.57	0.98	1.00	1.00	0.99	3.09
26-15	-	0.15	28.93	1.17	1.08	0.57	0.97	1.00	1.00	0.99	3.05
26-16	-	0.15	28.93	1.17	1.08	0.57	0.97	1.00	1.00	0.99	3.05
27-1	-	0.16	29.55	1.21	1.07	0.75	0.97	1.00	1.00	-	4.5
27-2	-	0.16	29.56	1.21	1.07	0.75	0.99	1.00	1.00	-	4.6
27-3	-	0.16	29.56	1.21	1.07	0.75	1.00	1.00	1.00	-	4.62
27-4	-	0.16	29.56	1.21	1.07	0.75	0.97	1.00	1.00	-	4.47
27-5	-	0.16	29.55	1.21	1.07	0.75	1.00	1.00	1.00	-	4.63
27-6	-	0.16	29.56	1.21	1.07	0.75	0.97	1.00	1.00	-	4.48
27-7	-	0.16	29.56	1.21	1.07	0.75	0.97	1.00	1.00	-	4.5
27-8	-	0.16	29.56	1.21	1.07	0.75	0.94	1.00	1.00	-	4.36
27-9	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.41
27-10	-	0.16	29.54	1.21	1.07	0.74	0.99	1.00	1.00	-	4.5
27-11	-	0.16	29.54	1.21	1.07	0.74	1.00	1.00	1.00	-	4.53
27-12	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.38
27-13	-	0.16	29.54	1.21	1.07	0.74	1.00	1.00	1.00	-	4.53
27-14	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.39
27-15	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.41
27-16	-	0.16	29.54	1.21	1.07	0.74	0.94	1.00	1.00	-	4.27
27-17	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.42
27-18	-	0.16	29.54	1.21	1.07	0.74	0.99	1.00	1.00	-	4.52
27-19	-	0.16	29.54	1.21	1.07	0.74	1.00	1.00	1.00	-	4.54
27-20	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.4
27-21	-	0.16	29.54	1.21	1.07	0.74	1.00	1.00	1.00	-	4.55
27-22	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.4
27-23	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.43
27-24	-	0.16	29.54	1.21	1.07	0.74	0.94	1.00	1.00	-	4.28
27-25	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.33
27-26	-	0.16	29.52	1.21	1.07	0.73	0.99	1.00	1.00	-	4.43
27-27	-	0.16	29.52	1.21	1.07	0.73	1.00	1.00	1.00	-	4.45
27-28	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.31
27-29	-	0.16	29.52	1.21	1.07	0.73	1.00	1.00	1.00	-	4.45
27-30	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.31
27-31	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.34
27-32	-	0.16	29.52	1.21	1.07	0.73	0.94	1.00	1.00	-	4.19
27-33	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.43
27-34	-	0.16	29.54	1.21	1.07	0.74	0.99	1.00	1.00	-	4.52
27-35	-	0.16	29.54	1.21	1.07	0.74	1.00	1.00	1.00	-	4.55
27-36	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.4
27-37	-	0.16	29.54	1.21	1.07	0.74	1.00	1.00	1.00	-	4.55
27-38	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.4
27-39	-	0.16	29.54	1.21	1.07	0.74	0.97	1.00	1.00	-	4.43
27-40	-	0.16	29.54	1.21	1.07	0.74	0.94	1.00	1.00	-	4.28
27-41	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.34
27-42	-	0.16	29.52	1.21	1.07	0.73	0.99	1.00	1.00	-	4.43
27-43	-	0.16	29.52	1.21	1.07	0.73	1.00	1.00	1.00	-	4.45
27-44	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.31
27-45	-	0.16	29.52	1.21	1.07	0.73	1.00	1.00	1.00	-	4.46
27-46	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.31
27-47	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.34
27-48	-	0.16	29.52	1.21	1.07	0.73	0.94	1.00	1.00	-	4.2
27-49	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.35
27-50	-	0.16	29.52	1.21	1.07	0.73	0.99	1.00	1.00	-	4.44
27-51	-	0.16	29.53	1.21	1.07	0.73	1.00	1.00	1.00	-	4.47
27-52	-	0.16	29.53	1.21	1.07	0.73	0.97	1.00	1.00	-	4.32
27-53	-	0.16	29.52	1.21	1.07	0.73	1.00	1.00	1.00	-	4.47
27-54	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.33
27-55	-	0.16	29.52	1.21	1.07	0.73	0.97	1.00	1.00	-	4.35
27-56	-	0.16	29.53	1.21	1.07	0.73	0.94	1.00	1.00	-	4.21
27-57	-	0.16	29.50	1.20	1.07	0.72	0.97	1.00	1.00	-	4.26
27-58	-	0.16	29.51	1.21	1.07	0.72	0.99	1.00	1.00	-	4.35
27-59	-	0.16	29.51	1.21	1.07	0.72	1.00	1.00	1.00	-	4.38

27-60	-	0.16	29.51	1.21	1.07	0.72	0.97	1.00	1.00	-	4.24
27-61	-	0.16	29.50	1.21	1.07	0.72	1.00	1.00	1.00	-	4.38
27-62	-	0.16	29.50	1.21	1.07	0.72	0.97	1.00	1.00	-	4.24
27-63	-	0.16	29.51	1.21	1.07	0.72	0.97	1.00	1.00	-	4.26
27-64	-	0.16	29.51	1.21	1.07	0.72	0.94	1.00	1.00	-	4.12
28-1	-	0.16	29.61	1.21	1.07	0.79	1.00	1.00	1.00	-	4.9
28-2	-	0.16	29.55	1.21	1.07	0.75	1.00	1.00	1.00	-	4.59
28-3	-	0.16	29.56	1.21	1.07	0.76	1.00	1.00	1.00	-	4.64
28-4	-	0.16	29.50	1.21	1.07	0.71	1.00	1.00	1.00	-	4.33
28-5	-	0.16	29.56	1.21	1.07	0.76	1.00	1.00	1.00	-	4.64
28-6	-	0.16	29.50	1.21	1.07	0.71	1.00	1.00	1.00	-	4.34
28-7	-	0.16	29.51	1.21	1.07	0.72	1.00	1.00	1.00	-	4.38
28-8	-	0.16	29.44	1.20	1.07	0.68	1.00	1.00	1.00	-	4.08
28-9	-	0.16	29.61	1.22	1.07	0.79	0.99	1.00	1.00	-	4.85
28-10	-	0.16	29.55	1.21	1.07	0.75	0.99	1.00	1.00	-	4.54
28-11	-	0.16	29.56	1.21	1.07	0.76	0.99	1.00	1.00	-	4.59
28-12	-	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.29
28-13	-	0.16	29.56	1.21	1.07	0.76	0.99	1.00	1.00	-	4.6
28-14	-	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.29
28-15	-	0.16	29.51	1.21	1.07	0.72	0.99	1.00	1.00	-	4.34
28-16	-	0.16	29.44	1.20	1.07	0.68	0.99	1.00	1.00	-	4.04
28-17	-	0.16	29.61	1.21	1.07	0.79	0.99	1.00	1.00	-	4.86
28-18	-	0.16	29.55	1.21	1.07	0.75	0.99	1.00	1.00	-	4.55
28-19	-	0.16	29.56	1.21	1.07	0.76	0.99	1.00	1.00	-	4.6
28-20	-	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.29
28-21	-	0.16	29.56	1.21	1.07	0.76	0.99	1.00	1.00	-	4.61
28-22	-	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.3
28-23	-	0.16	29.51	1.21	1.07	0.72	0.99	1.00	1.00	-	4.35
28-24	-	0.16	29.44	1.20	1.07	0.68	0.99	1.00	1.00	-	4.05
28-25	-	0.16	29.61	1.22	1.07	0.79	0.98	1.00	1.00	-	4.81
28-26	-	0.16	29.55	1.21	1.07	0.75	0.98	1.00	1.00	-	4.51
28-27	-	0.16	29.56	1.21	1.07	0.76	0.98	1.00	1.00	-	4.55
28-28	-	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.25
28-29	-	0.16	29.56	1.21	1.07	0.76	0.98	1.00	1.00	-	4.56
28-30	-	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.26
28-31	-	0.16	29.51	1.21	1.07	0.72	0.98	1.00	1.00	-	4.31
28-32	-	0.16	29.44	1.20	1.07	0.68	0.98	1.00	1.00	-	4.01
28-33	-	0.16	29.61	1.21	1.07	0.79	0.99	1.00	1.00	-	4.86
28-34	-	0.16	29.55	1.21	1.07	0.75	0.99	1.00	1.00	-	4.55
28-35	-	0.16	29.56	1.21	1.07	0.76	0.99	1.00	1.00	-	4.6
28-36	-	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.29
28-37	-	0.16	29.56	1.21	1.07	0.76	0.99	1.00	1.00	-	4.61
28-38	-	0.16	29.50	1.21	1.07	0.71	0.99	1.00	1.00	-	4.3
28-39	-	0.16	29.51	1.21	1.07	0.72	0.99	1.00	1.00	-	4.35
28-40	-	0.16	29.44	1.20	1.07	0.68	0.99	1.00	1.00	-	4.05
28-41	-	0.16	29.61	1.22	1.07	0.79	0.98	1.00	1.00	-	4.82
28-42	-	0.16	29.55	1.21	1.07	0.75	0.98	1.00	1.00	-	4.51
28-43	-	0.16	29.56	1.21	1.07	0.76	0.98	1.00	1.00	-	4.55
28-44	-	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.25
28-45	-	0.16	29.56	1.21	1.07	0.76	0.98	1.00	1.00	-	4.56
28-46	-	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.26
28-47	-	0.16	29.51	1.21	1.07	0.72	0.98	1.00	1.00	-	4.31
28-48	-	0.16	29.44	1.20	1.07	0.68	0.98	1.00	1.00	-	4.01
28-49	-	0.16	29.61	1.22	1.07	0.79	0.98	1.00	1.00	-	4.82
28-50	-	0.16	29.55	1.21	1.07	0.75	0.98	1.00	1.00	-	4.51
28-51	-	0.16	29.56	1.21	1.07	0.76	0.98	1.00	1.00	-	4.56
28-52	-	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.26
28-53	-	0.16	29.56	1.21	1.07	0.76	0.98	1.00	1.00	-	4.57
28-54	-	0.16	29.50	1.21	1.07	0.71	0.98	1.00	1.00	-	4.27
28-55	-	0.16	29.51	1.21	1.07	0.72	0.98	1.00	1.00	-	4.32
28-56	-	0.16	29.44	1.20	1.07	0.68	0.98	1.00	1.00	-	4.02
28-57	-	0.16	29.61	1.22	1.07	0.79	0.97	1.00	1.00	-	4.78
28-58	-	0.16	29.55	1.21	1.07	0.75	0.97	1.00	1.00	-	4.47
28-59	-	0.16	29.56	1.21	1.07	0.76	0.97	1.00	1.00	-	4.52
28-60	-	0.16	29.50	1.21	1.07	0.71	0.97	1.00	1.00	-	4.22
28-61	-	0.16	29.56	1.21	1.07	0.76	0.97	1.00	1.00	-	4.53
28-62	-	0.16	29.50	1.21	1.07	0.71	0.97	1.00	1.00	-	4.23
28-63	-	0.16	29.51	1.21	1.07	0.72	0.97	1.00	1.00	-	4.27
28-64	-	0.16	29.44	1.20	1.07	0.68	0.97	1.00	1.00	-	3.98
Caso	q' [daN/cm ²]	N _q	s _q	d _q	l _{bq}	l _{iq}	b _q	g _q	h _q	q' _{lim,q} [daN/cm ²]	

1-1	0.21	17.51	1.09	1.07	0.59	0.97	1.00	1.00	-	2.45
2-1	0.21	17.70	1.11	1.07	0.65	0.98	1.00	1.00	-	2.77
3-1	0.21	17.78	1.10	1.07	0.65	0.98	1.00	1.00	-	2.74
4-1	0.21	17.52	1.09	1.07	0.63	0.98	1.00	1.00	-	2.63
5-1	0.21	17.88	1.11	1.06	0.69	0.98	1.00	1.00	-	2.98
6-1	0.21	17.69	1.10	1.07	0.68	0.98	1.00	1.00	-	2.89
7-1	0.21	17.76	1.09	1.07	0.68	0.98	1.00	1.00	-	2.87
8-1	0.21	17.85	1.10	1.07	0.72	0.98	1.00	1.00	-	3.07
9-1	0.21	17.64	1.09	1.07	0.66	1.00	1.00	1.00	0.97	2.76
9-2	0.21	17.64	1.09	1.07	0.66	1.00	1.00	1.00	0.97	2.76
9-3	0.21	17.49	1.09	1.08	0.63	1.00	1.00	1.00	0.97	2.59
9-4	0.21	17.49	1.09	1.08	0.63	1.00	1.00	1.00	0.97	2.59
9-5	0.21	17.64	1.09	1.07	0.66	1.00	1.00	1.00	0.97	2.76
9-6	0.21	17.64	1.09	1.07	0.66	1.00	1.00	1.00	0.97	2.76
9-7	0.21	17.49	1.09	1.08	0.63	1.00	1.00	1.00	0.97	2.59
9-8	0.21	17.49	1.09	1.08	0.63	1.00	1.00	1.00	0.97	2.59
9-9	0.21	17.64	1.10	1.07	0.66	0.95	1.00	1.00	0.97	2.62
9-10	0.21	17.64	1.10	1.07	0.66	0.95	1.00	1.00	0.97	2.62
9-11	0.21	17.49	1.09	1.08	0.63	0.95	1.00	1.00	0.97	2.46
9-12	0.21	17.49	1.09	1.08	0.63	0.95	1.00	1.00	0.97	2.46
9-13	0.21	17.64	1.10	1.07	0.66	0.95	1.00	1.00	0.97	2.62
9-14	0.21	17.64	1.10	1.07	0.66	0.95	1.00	1.00	0.97	2.62
9-15	0.21	17.49	1.09	1.08	0.63	0.95	1.00	1.00	0.97	2.46
9-16	0.21	17.49	1.09	1.08	0.63	0.95	1.00	1.00	0.97	2.46
10-1	0.21	17.78	1.10	1.07	0.69	0.99	1.00	1.00	0.97	2.84
10-2	0.21	17.78	1.10	1.07	0.69	0.99	1.00	1.00	0.97	2.84
10-3	0.21	17.78	1.10	1.07	0.69	0.97	1.00	1.00	0.97	2.8
10-4	0.21	17.78	1.10	1.07	0.69	0.97	1.00	1.00	0.97	2.8
10-5	0.21	17.78	1.10	1.07	0.69	0.99	1.00	1.00	0.97	2.84
10-6	0.21	17.78	1.10	1.07	0.69	0.99	1.00	1.00	0.97	2.84
10-7	0.21	17.78	1.10	1.07	0.69	0.97	1.00	1.00	0.97	2.8
10-8	0.21	17.78	1.10	1.07	0.69	0.97	1.00	1.00	0.97	2.8
10-9	0.21	17.26	1.08	1.08	0.57	0.98	1.00	1.00	0.97	2.3
10-10	0.21	17.26	1.08	1.08	0.57	0.98	1.00	1.00	0.97	2.3
10-11	0.21	17.25	1.08	1.08	0.57	0.97	1.00	1.00	0.97	2.26
10-12	0.21	17.25	1.08	1.08	0.57	0.97	1.00	1.00	0.97	2.26
10-13	0.21	17.26	1.08	1.08	0.57	0.98	1.00	1.00	0.97	2.3
10-14	0.21	17.26	1.08	1.08	0.57	0.98	1.00	1.00	0.97	2.3
10-15	0.21	17.25	1.08	1.08	0.57	0.97	1.00	1.00	0.97	2.26
10-16	0.21	17.25	1.08	1.08	0.57	0.97	1.00	1.00	0.97	2.26
11-1	0.21	17.77	1.11	1.07	0.71	0.99	1.00	1.00	-	3.1
11-2	0.21	17.78	1.11	1.07	0.71	0.95	1.00	1.00	-	2.98
11-3	0.21	17.74	1.11	1.07	0.69	0.99	1.00	1.00	-	3
11-4	0.21	17.74	1.11	1.07	0.69	0.95	1.00	1.00	-	2.89
12-1	0.21	17.81	1.11	1.07	0.74	0.99	1.00	1.00	-	3.19
12-2	0.21	17.71	1.11	1.07	0.67	0.99	1.00	1.00	-	2.88
12-3	0.21	17.81	1.11	1.07	0.74	0.97	1.00	1.00	-	3.14
12-4	0.21	17.71	1.11	1.07	0.67	0.97	1.00	1.00	-	2.83
13-1	0.21	17.84	1.10	1.07	0.71	1.00	1.00	1.00	-	3.09
13-2	0.21	17.84	1.10	1.07	0.71	0.96	1.00	1.00	-	2.97
13-3	0.21	17.81	1.10	1.07	0.69	1.00	1.00	1.00	-	3.01
13-4	0.21	17.82	1.10	1.07	0.69	0.96	1.00	1.00	-	2.89
14-1	0.21	17.87	1.10	1.06	0.73	0.99	1.00	1.00	-	3.15
14-2	0.21	17.79	1.10	1.07	0.67	0.99	1.00	1.00	-	2.89
14-3	0.21	17.87	1.10	1.06	0.73	0.97	1.00	1.00	-	3.11
14-4	0.21	17.79	1.10	1.07	0.67	0.97	1.00	1.00	-	2.85
15-1	0.21	17.62	1.09	1.07	0.70	1.00	1.00	1.00	-	3
15-2	0.21	17.62	1.09	1.07	0.70	0.96	1.00	1.00	-	2.88
15-3	0.21	17.60	1.09	1.07	0.68	1.00	1.00	1.00	-	2.92
15-4	0.21	17.60	1.09	1.07	0.68	0.96	1.00	1.00	-	2.8
16-1	0.21	17.66	1.09	1.07	0.72	0.99	1.00	1.00	-	3.05
16-2	0.21	17.56	1.09	1.07	0.66	0.99	1.00	1.00	-	2.79
16-3	0.21	17.66	1.09	1.07	0.72	0.97	1.00	1.00	-	3.01
16-4	0.21	17.56	1.09	1.07	0.66	0.97	1.00	1.00	-	2.76
17-1	0.21	17.93	1.11	1.06	0.75	0.97	1.00	1.00	-	3.23
17-2	0.21	17.93	1.12	1.06	0.75	0.98	1.00	1.00	-	3.25
17-3	0.21	17.91	1.11	1.06	0.73	0.97	1.00	1.00	-	3.15
17-4	0.21	17.91	1.11	1.06	0.73	0.98	1.00	1.00	-	3.16
17-5	0.21	17.94	1.12	1.06	0.75	0.99	1.00	1.00	-	3.28
17-6	0.21	17.94	1.12	1.06	0.75	0.94	1.00	1.00	-	3.12
17-7	0.21	17.91	1.11	1.06	0.73	0.99	1.00	1.00	-	3.19

17-8	0.21	17.91	1.12	1.06	0.73	0.94	1.00	1.00	-	3.04
17-9	0.21	17.91	1.11	1.06	0.74	0.97	1.00	1.00	-	3.16
17-10	0.21	17.91	1.12	1.06	0.74	0.98	1.00	1.00	-	3.18
17-11	0.21	17.89	1.11	1.06	0.72	0.97	1.00	1.00	-	3.08
17-12	0.21	17.89	1.11	1.06	0.72	0.98	1.00	1.00	-	3.09
17-13	0.21	17.92	1.11	1.06	0.74	0.99	1.00	1.00	-	3.2
17-14	0.21	17.92	1.12	1.06	0.74	0.94	1.00	1.00	-	3.05
17-15	0.21	17.89	1.11	1.06	0.72	0.99	1.00	1.00	-	3.12
17-16	0.21	17.89	1.12	1.06	0.72	0.94	1.00	1.00	-	2.97
18-1	0.21	17.98	1.12	1.06	0.79	1.00	1.00	1.00	-	3.49
18-2	0.21	17.90	1.11	1.06	0.73	1.00	1.00	1.00	-	3.2
18-3	0.21	17.99	1.12	1.06	0.79	0.98	1.00	1.00	-	3.44
18-4	0.21	17.90	1.11	1.06	0.73	0.98	1.00	1.00	-	3.16
18-5	0.21	17.92	1.11	1.06	0.74	1.00	1.00	1.00	-	3.25
18-6	0.21	17.84	1.11	1.07	0.68	1.00	1.00	1.00	-	2.97
18-7	0.21	17.92	1.12	1.06	0.74	0.98	1.00	1.00	-	3.2
18-8	0.21	17.84	1.11	1.07	0.68	0.98	1.00	1.00	-	2.92
18-9	0.21	17.99	1.12	1.06	0.79	0.98	1.00	1.00	-	3.45
18-10	0.21	17.90	1.11	1.06	0.73	0.98	1.00	1.00	-	3.17
18-11	0.21	17.99	1.12	1.06	0.79	0.97	1.00	1.00	-	3.4
18-12	0.21	17.90	1.11	1.06	0.73	0.97	1.00	1.00	-	3.12
18-13	0.21	17.92	1.12	1.06	0.74	0.98	1.00	1.00	-	3.21
18-14	0.21	17.84	1.11	1.07	0.68	0.98	1.00	1.00	-	2.93
18-15	0.21	17.92	1.12	1.06	0.74	0.97	1.00	1.00	-	3.16
18-16	0.21	17.84	1.11	1.07	0.68	0.97	1.00	1.00	-	2.89
19-1	0.21	17.77	1.10	1.07	0.75	0.98	1.00	1.00	-	3.15
19-2	0.21	17.77	1.10	1.07	0.75	0.98	1.00	1.00	-	3.16
19-3	0.21	17.74	1.10	1.07	0.73	0.98	1.00	1.00	-	3.07
19-4	0.21	17.74	1.10	1.07	0.73	0.98	1.00	1.00	-	3.08
19-5	0.21	17.77	1.10	1.07	0.75	0.99	1.00	1.00	-	3.19
19-6	0.21	17.77	1.10	1.07	0.75	0.94	1.00	1.00	-	3.04
19-7	0.21	17.74	1.10	1.07	0.73	0.99	1.00	1.00	-	3.11
19-8	0.21	17.74	1.10	1.07	0.73	0.94	1.00	1.00	-	2.96
19-9	0.21	17.74	1.10	1.07	0.73	0.98	1.00	1.00	-	3.08
19-10	0.21	17.75	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
19-11	0.21	17.72	1.10	1.07	0.71	0.98	1.00	1.00	-	3
19-12	0.21	17.72	1.10	1.07	0.71	0.98	1.00	1.00	-	3.01
19-13	0.21	17.74	1.10	1.07	0.73	0.99	1.00	1.00	-	3.12
19-14	0.21	17.75	1.10	1.07	0.73	0.94	1.00	1.00	-	2.98
19-15	0.21	17.72	1.10	1.07	0.71	0.99	1.00	1.00	-	3.04
19-16	0.21	17.72	1.10	1.07	0.71	0.94	1.00	1.00	-	2.89
20-1	0.21	17.82	1.10	1.07	0.78	1.00	1.00	1.00	-	3.4
20-2	0.21	17.73	1.10	1.07	0.72	1.00	1.00	1.00	-	3.11
20-3	0.21	17.82	1.10	1.07	0.78	0.98	1.00	1.00	-	3.35
20-4	0.21	17.73	1.10	1.07	0.72	0.98	1.00	1.00	-	3.07
20-5	0.21	17.75	1.10	1.07	0.73	1.00	1.00	1.00	-	3.16
20-6	0.21	17.66	1.09	1.07	0.67	1.00	1.00	1.00	-	2.88
20-7	0.21	17.75	1.10	1.07	0.73	0.98	1.00	1.00	-	3.12
20-8	0.21	17.66	1.10	1.07	0.67	0.98	1.00	1.00	-	2.84
20-9	0.21	17.82	1.10	1.07	0.78	0.98	1.00	1.00	-	3.36
20-10	0.21	17.73	1.10	1.07	0.72	0.98	1.00	1.00	-	3.08
20-11	0.21	17.82	1.10	1.07	0.78	0.97	1.00	1.00	-	3.31
20-12	0.21	17.73	1.10	1.07	0.72	0.97	1.00	1.00	-	3.03
20-13	0.21	17.75	1.10	1.07	0.73	0.98	1.00	1.00	-	3.13
20-14	0.21	17.66	1.10	1.07	0.67	0.98	1.00	1.00	-	2.85
20-15	0.21	17.75	1.10	1.07	0.73	0.97	1.00	1.00	-	3.09
20-16	0.21	17.66	1.10	1.07	0.67	0.97	1.00	1.00	-	2.81
21-1	0.21	17.82	1.10	1.07	0.74	0.98	1.00	1.00	-	3.15
21-2	0.21	17.82	1.10	1.07	0.74	0.98	1.00	1.00	-	3.16
21-3	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.08
21-4	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
21-5	0.21	17.82	1.10	1.07	0.74	0.98	1.00	1.00	-	3.16
21-6	0.21	17.82	1.10	1.07	0.74	0.94	1.00	1.00	-	3.04
21-7	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
21-8	0.21	17.80	1.10	1.07	0.73	0.94	1.00	1.00	-	2.97
21-9	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.08
21-10	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
21-11	0.21	17.78	1.10	1.07	0.71	0.98	1.00	1.00	-	3.01
21-12	0.21	17.78	1.10	1.07	0.71	0.98	1.00	1.00	-	3.02
21-13	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
21-14	0.21	17.80	1.10	1.07	0.73	0.94	1.00	1.00	-	2.97

21-15	0.21	17.78	1.10	1.07	0.71	0.98	1.00	1.00	-	3.02
21-16	0.21	17.78	1.09	1.07	0.71	0.94	1.00	1.00	-	2.9
22-1	0.21	17.87	1.10	1.06	0.78	0.99	1.00	1.00	-	3.37
22-2	0.21	17.80	1.10	1.07	0.73	0.99	1.00	1.00	-	3.12
22-3	0.21	17.87	1.10	1.06	0.78	0.98	1.00	1.00	-	3.33
22-4	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
22-5	0.21	17.80	1.10	1.07	0.73	0.99	1.00	1.00	-	3.13
22-6	0.21	17.73	1.09	1.07	0.68	0.99	1.00	1.00	-	2.89
22-7	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
22-8	0.21	17.73	1.09	1.07	0.68	0.98	1.00	1.00	-	2.86
22-9	0.21	17.87	1.10	1.06	0.78	0.98	1.00	1.00	-	3.33
22-10	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
22-11	0.21	17.87	1.10	1.06	0.78	0.97	1.00	1.00	-	3.29
22-12	0.21	17.80	1.10	1.07	0.73	0.97	1.00	1.00	-	3.05
22-13	0.21	17.80	1.10	1.07	0.73	0.98	1.00	1.00	-	3.1
22-14	0.21	17.73	1.09	1.07	0.68	0.98	1.00	1.00	-	2.86
22-15	0.21	17.80	1.10	1.07	0.73	0.97	1.00	1.00	-	3.06
22-16	0.21	17.73	1.09	1.07	0.68	0.97	1.00	1.00	-	2.82
23-1	0.21	17.91	1.10	1.06	0.78	0.96	1.00	1.00	-	3.26
23-2	0.21	17.91	1.11	1.06	0.78	1.00	1.00	1.00	-	3.39
23-3	0.21	17.89	1.10	1.06	0.76	0.96	1.00	1.00	-	3.2
23-4	0.21	17.90	1.10	1.06	0.76	1.00	1.00	1.00	-	3.32
23-5	0.21	17.91	1.11	1.06	0.78	0.99	1.00	1.00	-	3.38
23-6	0.21	17.91	1.11	1.06	0.78	0.97	1.00	1.00	-	3.3
23-7	0.21	17.89	1.10	1.06	0.76	0.99	1.00	1.00	-	3.31
23-8	0.21	17.90	1.11	1.06	0.76	0.97	1.00	1.00	-	3.24
23-9	0.21	17.90	1.10	1.06	0.76	0.96	1.00	1.00	-	3.2
23-10	0.21	17.90	1.10	1.06	0.76	1.00	1.00	1.00	-	3.32
23-11	0.21	17.88	1.10	1.06	0.75	0.96	1.00	1.00	-	3.14
23-12	0.21	17.88	1.10	1.06	0.75	1.00	1.00	1.00	-	3.26
23-13	0.21	17.89	1.10	1.06	0.76	0.99	1.00	1.00	-	3.32
23-14	0.21	17.90	1.11	1.06	0.76	0.97	1.00	1.00	-	3.24
23-15	0.21	17.88	1.10	1.06	0.75	0.99	1.00	1.00	-	3.25
23-16	0.21	17.88	1.10	1.06	0.75	0.97	1.00	1.00	-	3.18
23-17	0.21	17.91	1.11	1.06	0.78	1.00	1.00	1.00	-	3.39
23-18	0.21	17.91	1.11	1.06	0.78	0.96	1.00	1.00	-	3.27
23-19	0.21	17.89	1.10	1.06	0.76	1.00	1.00	1.00	-	3.33
23-20	0.21	17.90	1.11	1.06	0.76	0.96	1.00	1.00	-	3.21
23-21	0.21	17.91	1.11	1.06	0.78	0.96	1.00	1.00	-	3.28
23-22	0.21	17.91	1.11	1.06	0.78	0.93	1.00	1.00	-	3.16
23-23	0.21	17.89	1.11	1.06	0.76	0.96	1.00	1.00	-	3.22
23-24	0.21	17.90	1.11	1.06	0.76	0.93	1.00	1.00	-	3.1
23-25	0.21	17.90	1.10	1.06	0.76	1.00	1.00	1.00	-	3.33
23-26	0.21	17.90	1.11	1.06	0.76	0.96	1.00	1.00	-	3.21
23-27	0.21	17.88	1.10	1.06	0.75	1.00	1.00	1.00	-	3.26
23-28	0.21	17.88	1.11	1.06	0.75	0.96	1.00	1.00	-	3.15
23-29	0.21	17.90	1.11	1.06	0.76	0.96	1.00	1.00	-	3.22
23-30	0.21	17.90	1.11	1.06	0.76	0.93	1.00	1.00	-	3.1
23-31	0.21	17.88	1.10	1.06	0.75	0.96	1.00	1.00	-	3.15
23-32	0.21	17.88	1.11	1.06	0.75	0.93	1.00	1.00	-	3.04
23-33	0.21	17.89	1.10	1.06	0.76	0.96	1.00	1.00	-	3.19
23-34	0.21	17.89	1.10	1.06	0.76	1.00	1.00	1.00	-	3.31
23-35	0.21	17.87	1.10	1.06	0.75	0.96	1.00	1.00	-	3.12
23-36	0.21	17.87	1.10	1.06	0.75	1.00	1.00	1.00	-	3.24
23-37	0.21	17.89	1.10	1.06	0.76	0.99	1.00	1.00	-	3.3
23-38	0.21	17.89	1.11	1.06	0.76	0.97	1.00	1.00	-	3.23
23-39	0.21	17.87	1.10	1.06	0.75	0.99	1.00	1.00	-	3.24
23-40	0.21	17.87	1.10	1.06	0.75	0.97	1.00	1.00	-	3.16
23-41	0.21	17.87	1.10	1.06	0.75	0.96	1.00	1.00	-	3.13
23-42	0.21	17.87	1.10	1.06	0.75	1.00	1.00	1.00	-	3.24
23-43	0.21	17.85	1.10	1.06	0.73	0.96	1.00	1.00	-	3.06
23-44	0.21	17.85	1.10	1.06	0.73	1.00	1.00	1.00	-	3.18
23-45	0.21	17.87	1.10	1.06	0.75	0.99	1.00	1.00	-	3.24
23-46	0.21	17.87	1.10	1.06	0.75	0.97	1.00	1.00	-	3.17
23-47	0.21	17.85	1.10	1.06	0.73	0.99	1.00	1.00	-	3.17
23-48	0.21	17.85	1.10	1.06	0.73	0.97	1.00	1.00	-	3.1
23-49	0.21	17.89	1.10	1.06	0.76	1.00	1.00	1.00	-	3.32
23-50	0.21	17.89	1.11	1.06	0.76	0.96	1.00	1.00	-	3.2
23-51	0.21	17.87	1.10	1.06	0.75	1.00	1.00	1.00	-	3.25
23-52	0.21	17.87	1.10	1.06	0.75	0.96	1.00	1.00	-	3.14
23-53	0.21	17.89	1.11	1.06	0.76	0.96	1.00	1.00	-	3.2

23-54	0.21	17.89	1.11	1.06	0.76	0.93	1.00	1.00	-	3.09
23-55	0.21	17.87	1.10	1.06	0.75	0.96	1.00	1.00	-	3.14
23-56	0.21	17.87	1.11	1.06	0.75	0.93	1.00	1.00	-	3.03
23-57	0.21	17.87	1.10	1.06	0.75	1.00	1.00	1.00	-	3.25
23-58	0.21	17.87	1.10	1.06	0.75	0.96	1.00	1.00	-	3.14
23-59	0.21	17.85	1.10	1.06	0.73	1.00	1.00	1.00	-	3.19
23-60	0.21	17.86	1.10	1.06	0.73	0.96	1.00	1.00	-	3.07
23-61	0.21	17.87	1.10	1.06	0.75	0.96	1.00	1.00	-	3.14
23-62	0.21	17.87	1.11	1.06	0.75	0.93	1.00	1.00	-	3.03
23-63	0.21	17.85	1.10	1.06	0.73	0.96	1.00	1.00	-	3.08
23-64	0.21	17.86	1.10	1.06	0.73	0.93	1.00	1.00	-	2.97
24-1	0.21	17.98	1.11	1.06	0.83	1.00	1.00	1.00	-	3.64
24-2	0.21	17.92	1.11	1.06	0.78	1.00	1.00	1.00	-	3.42
24-3	0.21	17.98	1.11	1.06	0.83	0.99	1.00	1.00	-	3.61
24-4	0.21	17.92	1.11	1.06	0.78	0.99	1.00	1.00	-	3.39
24-5	0.21	17.92	1.11	1.06	0.78	1.00	1.00	1.00	-	3.43
24-6	0.21	17.86	1.10	1.06	0.74	1.00	1.00	1.00	-	3.21
24-7	0.21	17.92	1.11	1.06	0.78	0.99	1.00	1.00	-	3.4
24-8	0.21	17.86	1.10	1.06	0.74	0.99	1.00	1.00	-	3.18
24-9	0.21	17.98	1.11	1.06	0.83	0.99	1.00	1.00	-	3.61
24-10	0.21	17.92	1.11	1.06	0.78	0.99	1.00	1.00	-	3.39
24-11	0.21	17.98	1.11	1.06	0.83	0.98	1.00	1.00	-	3.58
24-12	0.21	17.92	1.11	1.06	0.78	0.98	1.00	1.00	-	3.36
24-13	0.21	17.92	1.11	1.06	0.78	0.99	1.00	1.00	-	3.4
24-14	0.21	17.86	1.10	1.06	0.74	0.99	1.00	1.00	-	3.18
24-15	0.21	17.92	1.11	1.06	0.78	0.98	1.00	1.00	-	3.36
24-16	0.21	17.86	1.10	1.06	0.74	0.98	1.00	1.00	-	3.15
24-17	0.21	17.91	1.11	1.06	0.77	1.00	1.00	1.00	-	3.38
24-18	0.21	17.84	1.10	1.07	0.73	1.00	1.00	1.00	-	3.16
24-19	0.21	17.91	1.11	1.06	0.77	0.99	1.00	1.00	-	3.35
24-20	0.21	17.84	1.10	1.07	0.73	0.99	1.00	1.00	-	3.13
24-21	0.21	17.85	1.10	1.07	0.73	1.00	1.00	1.00	-	3.17
24-22	0.21	17.78	1.10	1.07	0.68	1.00	1.00	1.00	-	2.95
24-23	0.21	17.85	1.10	1.07	0.73	0.99	1.00	1.00	-	3.14
24-24	0.21	17.78	1.10	1.07	0.68	0.99	1.00	1.00	-	2.93
24-25	0.21	17.91	1.11	1.06	0.77	0.99	1.00	1.00	-	3.35
24-26	0.21	17.84	1.10	1.07	0.73	0.99	1.00	1.00	-	3.14
24-27	0.21	17.91	1.11	1.06	0.77	0.98	1.00	1.00	-	3.32
24-28	0.21	17.84	1.10	1.07	0.73	0.98	1.00	1.00	-	3.1
24-29	0.21	17.85	1.10	1.07	0.73	0.99	1.00	1.00	-	3.14
24-30	0.21	17.78	1.10	1.07	0.68	0.99	1.00	1.00	-	2.93
24-31	0.21	17.85	1.10	1.07	0.73	0.98	1.00	1.00	-	3.11
24-32	0.21	17.78	1.10	1.07	0.68	0.98	1.00	1.00	-	2.9
24-33	0.21	17.98	1.11	1.06	0.83	0.99	1.00	1.00	-	3.6
24-34	0.21	17.92	1.11	1.06	0.78	0.99	1.00	1.00	-	3.38
24-35	0.21	17.98	1.11	1.06	0.83	0.98	1.00	1.00	-	3.57
24-36	0.21	17.92	1.11	1.06	0.78	0.98	1.00	1.00	-	3.35
24-37	0.21	17.92	1.11	1.06	0.78	0.99	1.00	1.00	-	3.39
24-38	0.21	17.86	1.10	1.06	0.74	0.99	1.00	1.00	-	3.17
24-39	0.21	17.92	1.11	1.06	0.78	0.98	1.00	1.00	-	3.36
24-40	0.21	17.86	1.10	1.06	0.74	0.98	1.00	1.00	-	3.14
24-41	0.21	17.98	1.11	1.06	0.83	0.98	1.00	1.00	-	3.57
24-42	0.21	17.92	1.11	1.06	0.78	0.98	1.00	1.00	-	3.35
24-43	0.21	17.98	1.11	1.06	0.83	0.97	1.00	1.00	-	3.53
24-44	0.21	17.92	1.11	1.06	0.78	0.97	1.00	1.00	-	3.31
24-45	0.21	17.92	1.11	1.06	0.78	0.98	1.00	1.00	-	3.36
24-46	0.21	17.86	1.10	1.06	0.74	0.98	1.00	1.00	-	3.14
24-47	0.21	17.92	1.11	1.06	0.78	0.97	1.00	1.00	-	3.32
24-48	0.21	17.86	1.10	1.06	0.74	0.97	1.00	1.00	-	3.11
24-49	0.21	17.91	1.11	1.06	0.77	0.99	1.00	1.00	-	3.34
24-50	0.21	17.84	1.10	1.07	0.73	0.99	1.00	1.00	-	3.13
24-51	0.21	17.91	1.11	1.06	0.77	0.98	1.00	1.00	-	3.31
24-52	0.21	17.84	1.10	1.07	0.73	0.98	1.00	1.00	-	3.09
24-53	0.21	17.85	1.10	1.07	0.73	0.99	1.00	1.00	-	3.14
24-54	0.21	17.78	1.10	1.07	0.68	0.99	1.00	1.00	-	2.92
24-55	0.21	17.85	1.10	1.07	0.73	0.98	1.00	1.00	-	3.1
24-56	0.21	17.78	1.10	1.07	0.68	0.98	1.00	1.00	-	2.89
24-57	0.21	17.91	1.11	1.06	0.77	0.98	1.00	1.00	-	3.31
24-58	0.21	17.84	1.10	1.07	0.73	0.98	1.00	1.00	-	3.1
24-59	0.21	17.91	1.11	1.06	0.77	0.97	1.00	1.00	-	3.28
24-60	0.21	17.84	1.10	1.07	0.73	0.97	1.00	1.00	-	3.06

24-61	0.21	17.85	1.10	1.07	0.73	0.98	1.00	1.00	-	3.1
24-62	0.21	17.78	1.10	1.07	0.68	0.98	1.00	1.00	-	2.89
24-63	0.21	17.85	1.10	1.07	0.73	0.97	1.00	1.00	-	3.07
24-64	0.21	17.78	1.10	1.07	0.68	0.97	1.00	1.00	-	2.86
25-1	0.21	17.63	1.09	1.07	0.66	1.00	1.00	1.00	0.98	2.78
25-2	0.21	17.63	1.09	1.07	0.66	1.00	1.00	1.00	0.98	2.78
25-3	0.21	17.52	1.09	1.07	0.64	1.00	1.00	1.00	0.98	2.66
25-4	0.21	17.52	1.09	1.07	0.64	1.00	1.00	1.00	0.98	2.66
25-5	0.21	17.63	1.09	1.07	0.66	1.00	1.00	1.00	0.98	2.78
25-6	0.21	17.63	1.09	1.07	0.66	1.00	1.00	1.00	0.98	2.78
25-7	0.21	17.52	1.09	1.07	0.64	1.00	1.00	1.00	0.98	2.66
25-8	0.21	17.52	1.09	1.07	0.64	1.00	1.00	1.00	0.98	2.66
25-9	0.21	17.63	1.09	1.07	0.66	0.96	1.00	1.00	0.98	2.67
25-10	0.21	17.63	1.09	1.07	0.66	0.96	1.00	1.00	0.98	2.67
25-11	0.21	17.52	1.09	1.07	0.63	0.96	1.00	1.00	0.98	2.55
25-12	0.21	17.52	1.09	1.07	0.63	0.96	1.00	1.00	0.98	2.55
25-13	0.21	17.63	1.09	1.07	0.66	0.96	1.00	1.00	0.98	2.67
25-14	0.21	17.63	1.09	1.07	0.66	0.96	1.00	1.00	0.98	2.67
25-15	0.21	17.52	1.09	1.07	0.63	0.96	1.00	1.00	0.98	2.55
25-16	0.21	17.52	1.09	1.07	0.63	0.96	1.00	1.00	0.98	2.55
26-1	0.21	17.73	1.10	1.07	0.68	0.98	1.00	1.00	0.98	2.83
26-2	0.21	17.73	1.10	1.07	0.68	0.98	1.00	1.00	0.98	2.83
26-3	0.21	17.73	1.10	1.07	0.68	0.97	1.00	1.00	0.98	2.8
26-4	0.21	17.73	1.10	1.07	0.68	0.97	1.00	1.00	0.98	2.8
26-5	0.21	17.73	1.10	1.07	0.68	0.98	1.00	1.00	0.98	2.83
26-6	0.21	17.73	1.10	1.07	0.68	0.98	1.00	1.00	0.98	2.83
26-7	0.21	17.73	1.10	1.07	0.68	0.97	1.00	1.00	0.98	2.8
26-8	0.21	17.73	1.10	1.07	0.68	0.97	1.00	1.00	0.98	2.8
26-9	0.21	17.35	1.08	1.08	0.60	0.98	1.00	1.00	0.98	2.43
26-10	0.21	17.35	1.08	1.08	0.60	0.98	1.00	1.00	0.98	2.43
26-11	0.21	17.35	1.08	1.08	0.60	0.97	1.00	1.00	0.98	2.4
26-12	0.21	17.35	1.08	1.08	0.60	0.97	1.00	1.00	0.98	2.4
26-13	0.21	17.35	1.08	1.08	0.60	0.98	1.00	1.00	0.98	2.43
26-14	0.21	17.35	1.08	1.08	0.60	0.98	1.00	1.00	0.98	2.43
26-15	0.21	17.35	1.08	1.08	0.60	0.97	1.00	1.00	0.98	2.4
26-16	0.21	17.35	1.08	1.08	0.60	0.97	1.00	1.00	0.98	2.4
27-1	0.21	17.89	1.10	1.06	0.77	0.98	1.00	1.00	-	3.27
27-2	0.21	17.89	1.11	1.06	0.77	0.99	1.00	1.00	-	3.33
27-3	0.21	17.89	1.10	1.06	0.77	1.00	1.00	1.00	-	3.35
27-4	0.21	17.90	1.11	1.06	0.77	0.97	1.00	1.00	-	3.25
27-5	0.21	17.89	1.10	1.06	0.77	1.00	1.00	1.00	-	3.35
27-6	0.21	17.89	1.11	1.06	0.77	0.97	1.00	1.00	-	3.25
27-7	0.21	17.89	1.11	1.06	0.77	0.97	1.00	1.00	-	3.27
27-8	0.21	17.90	1.11	1.06	0.77	0.94	1.00	1.00	-	3.16
27-9	0.21	17.88	1.10	1.06	0.75	0.98	1.00	1.00	-	3.21
27-10	0.21	17.88	1.10	1.06	0.75	0.99	1.00	1.00	-	3.28
27-11	0.21	17.88	1.10	1.06	0.75	1.00	1.00	1.00	-	3.29
27-12	0.21	17.88	1.11	1.06	0.75	0.97	1.00	1.00	-	3.19
27-13	0.21	17.88	1.10	1.06	0.75	1.00	1.00	1.00	-	3.3
27-14	0.21	17.88	1.10	1.06	0.75	0.97	1.00	1.00	-	3.19
27-15	0.21	17.88	1.10	1.06	0.75	0.97	1.00	1.00	-	3.21
27-16	0.21	17.88	1.11	1.06	0.75	0.94	1.00	1.00	-	3.11
27-17	0.21	17.88	1.10	1.06	0.76	0.98	1.00	1.00	-	3.22
27-18	0.21	17.88	1.10	1.06	0.76	0.99	1.00	1.00	-	3.28
27-19	0.21	17.88	1.10	1.06	0.76	1.00	1.00	1.00	-	3.3
27-20	0.21	17.88	1.11	1.06	0.76	0.97	1.00	1.00	-	3.2
27-21	0.21	17.88	1.10	1.06	0.76	1.00	1.00	1.00	-	3.3
27-22	0.21	17.88	1.11	1.06	0.76	0.97	1.00	1.00	-	3.2
27-23	0.21	17.88	1.10	1.06	0.76	0.97	1.00	1.00	-	3.22
27-24	0.21	17.88	1.11	1.06	0.76	0.94	1.00	1.00	-	3.12
27-25	0.21	17.86	1.10	1.06	0.74	0.98	1.00	1.00	-	3.17
27-26	0.21	17.86	1.10	1.06	0.74	0.99	1.00	1.00	-	3.23
27-27	0.21	17.86	1.10	1.06	0.74	1.00	1.00	1.00	-	3.24
27-28	0.21	17.87	1.10	1.06	0.74	0.97	1.00	1.00	-	3.14
27-29	0.21	17.86	1.10	1.06	0.74	1.00	1.00	1.00	-	3.25
27-30	0.21	17.86	1.10	1.06	0.74	0.97	1.00	1.00	-	3.15
27-31	0.21	17.86	1.10	1.06	0.74	0.97	1.00	1.00	-	3.16
27-32	0.21	17.86	1.11	1.06	0.74	0.94	1.00	1.00	-	3.06
27-33	0.21	17.88	1.10	1.06	0.76	0.98	1.00	1.00	-	3.22
27-34	0.21	17.88	1.10	1.06	0.76	0.99	1.00	1.00	-	3.29
27-35	0.21	17.88	1.10	1.06	0.76	1.00	1.00	1.00	-	3.3

27-36	0.21	17.88	1.11	1.06	0.76	0.97	1.00	1.00	-	3.2
27-37	0.21	17.88	1.10	1.06	0.76	1.00	1.00	1.00	-	3.31
27-38	0.21	17.88	1.11	1.06	0.76	0.97	1.00	1.00	-	3.2
27-39	0.21	17.88	1.10	1.06	0.76	0.97	1.00	1.00	-	3.22
27-40	0.21	17.88	1.11	1.06	0.76	0.94	1.00	1.00	-	3.12
27-41	0.21	17.86	1.10	1.06	0.74	0.98	1.00	1.00	-	3.17
27-42	0.21	17.86	1.10	1.06	0.74	0.99	1.00	1.00	-	3.23
27-43	0.21	17.87	1.10	1.06	0.74	1.00	1.00	1.00	-	3.25
27-44	0.21	17.87	1.10	1.06	0.74	0.97	1.00	1.00	-	3.15
27-45	0.21	17.86	1.10	1.06	0.74	1.00	1.00	1.00	-	3.25
27-46	0.21	17.86	1.10	1.06	0.74	0.97	1.00	1.00	-	3.15
27-47	0.21	17.87	1.10	1.06	0.74	0.97	1.00	1.00	-	3.17
27-48	0.21	17.87	1.11	1.06	0.74	0.94	1.00	1.00	-	3.07
27-49	0.21	17.87	1.10	1.06	0.75	0.98	1.00	1.00	-	3.18
27-50	0.21	17.87	1.10	1.06	0.75	0.99	1.00	1.00	-	3.24
27-51	0.21	17.87	1.10	1.06	0.75	1.00	1.00	1.00	-	3.26
27-52	0.21	17.87	1.10	1.06	0.75	0.97	1.00	1.00	-	3.15
27-53	0.21	17.87	1.10	1.06	0.75	1.00	1.00	1.00	-	3.26
27-54	0.21	17.87	1.10	1.06	0.75	0.97	1.00	1.00	-	3.16
27-55	0.21	17.87	1.10	1.06	0.75	0.97	1.00	1.00	-	3.17
27-56	0.21	17.87	1.11	1.06	0.75	0.94	1.00	1.00	-	3.07
27-57	0.21	17.85	1.10	1.07	0.73	0.97	1.00	1.00	-	3.12
27-58	0.21	17.85	1.10	1.07	0.73	0.99	1.00	1.00	-	3.18
27-59	0.21	17.85	1.10	1.07	0.73	1.00	1.00	1.00	-	3.2
27-60	0.21	17.85	1.10	1.07	0.73	0.97	1.00	1.00	-	3.1
27-61	0.21	17.85	1.10	1.07	0.73	1.00	1.00	1.00	-	3.2
27-62	0.21	17.85	1.10	1.07	0.73	0.97	1.00	1.00	-	3.1
27-63	0.21	17.85	1.10	1.07	0.73	0.97	1.00	1.00	-	3.12
27-64	0.21	17.85	1.10	1.07	0.73	0.94	1.00	1.00	-	3.02
28-1	0.21	17.94	1.11	1.06	0.80	1.00	1.00	1.00	-	3.52
28-2	0.21	17.89	1.10	1.06	0.76	1.00	1.00	1.00	-	3.33
28-3	0.21	17.90	1.11	1.06	0.77	1.00	1.00	1.00	-	3.36
28-4	0.21	17.84	1.10	1.07	0.73	1.00	1.00	1.00	-	3.17
28-5	0.21	17.90	1.11	1.06	0.77	1.00	1.00	1.00	-	3.36
28-6	0.21	17.85	1.10	1.07	0.73	1.00	1.00	1.00	-	3.17
28-7	0.21	17.86	1.10	1.06	0.74	1.00	1.00	1.00	-	3.2
28-8	0.21	17.80	1.10	1.07	0.70	1.00	1.00	1.00	-	3.01
28-9	0.21	17.94	1.11	1.06	0.80	0.99	1.00	1.00	-	3.49
28-10	0.21	17.89	1.10	1.06	0.76	0.99	1.00	1.00	-	3.3
28-11	0.21	17.90	1.11	1.06	0.77	0.99	1.00	1.00	-	3.33
28-12	0.21	17.84	1.10	1.07	0.73	0.99	1.00	1.00	-	3.14
28-13	0.21	17.90	1.11	1.06	0.77	0.99	1.00	1.00	-	3.33
28-14	0.21	17.85	1.10	1.07	0.73	0.99	1.00	1.00	-	3.14
28-15	0.21	17.86	1.10	1.06	0.74	0.99	1.00	1.00	-	3.17
28-16	0.21	17.80	1.10	1.07	0.70	0.99	1.00	1.00	-	2.99
28-17	0.21	17.94	1.11	1.06	0.80	0.99	1.00	1.00	-	3.49
28-18	0.21	17.89	1.10	1.06	0.76	0.99	1.00	1.00	-	3.3
28-19	0.21	17.90	1.11	1.06	0.77	0.99	1.00	1.00	-	3.33
28-20	0.21	17.84	1.10	1.07	0.73	0.99	1.00	1.00	-	3.14
28-21	0.21	17.90	1.11	1.06	0.77	0.99	1.00	1.00	-	3.34
28-22	0.21	17.85	1.10	1.07	0.73	0.99	1.00	1.00	-	3.15
28-23	0.21	17.86	1.10	1.06	0.74	0.99	1.00	1.00	-	3.18
28-24	0.21	17.80	1.10	1.07	0.70	0.99	1.00	1.00	-	2.99
28-25	0.21	17.94	1.11	1.06	0.80	0.98	1.00	1.00	-	3.46
28-26	0.21	17.89	1.11	1.06	0.76	0.98	1.00	1.00	-	3.27
28-27	0.21	17.90	1.11	1.06	0.77	0.98	1.00	1.00	-	3.3
28-28	0.21	17.84	1.10	1.07	0.73	0.98	1.00	1.00	-	3.11
28-29	0.21	17.90	1.11	1.06	0.77	0.98	1.00	1.00	-	3.31
28-30	0.21	17.85	1.10	1.07	0.73	0.98	1.00	1.00	-	3.12
28-31	0.21	17.86	1.10	1.06	0.74	0.98	1.00	1.00	-	3.15
28-32	0.21	17.80	1.10	1.07	0.70	0.98	1.00	1.00	-	2.96
28-33	0.21	17.94	1.11	1.06	0.80	0.99	1.00	1.00	-	3.49
28-34	0.21	17.89	1.10	1.06	0.76	0.99	1.00	1.00	-	3.3
28-35	0.21	17.90	1.11	1.06	0.77	0.99	1.00	1.00	-	3.33
28-36	0.21	17.84	1.10	1.07	0.73	0.99	1.00	1.00	-	3.14
28-37	0.21	17.90	1.11	1.06	0.77	0.99	1.00	1.00	-	3.34
28-38	0.21	17.85	1.10	1.07	0.73	0.99	1.00	1.00	-	3.15
28-39	0.21	17.86	1.10	1.06	0.74	0.99	1.00	1.00	-	3.18
28-40	0.21	17.80	1.10	1.07	0.70	0.99	1.00	1.00	-	2.99
28-41	0.21	17.94	1.11	1.06	0.80	0.98	1.00	1.00	-	3.46
28-42	0.21	17.89	1.11	1.06	0.76	0.98	1.00	1.00	-	3.27

28-43	0.21	17.90	1.11	1.06	0.77	0.98	1.00	1.00	-	3.3
28-44	0.21	17.84	1.10	1.07	0.73	0.98	1.00	1.00	-	3.11
28-45	0.21	17.90	1.11	1.06	0.77	0.98	1.00	1.00	-	3.31
28-46	0.21	17.85	1.10	1.07	0.73	0.98	1.00	1.00	-	3.12
28-47	0.21	17.86	1.10	1.06	0.74	0.98	1.00	1.00	-	3.15
28-48	0.21	17.80	1.10	1.07	0.70	0.98	1.00	1.00	-	2.96
28-49	0.21	17.94	1.11	1.06	0.80	0.98	1.00	1.00	-	3.47
28-50	0.21	17.89	1.11	1.06	0.76	0.98	1.00	1.00	-	3.28
28-51	0.21	17.90	1.11	1.06	0.77	0.98	1.00	1.00	-	3.31
28-52	0.21	17.84	1.10	1.07	0.73	0.98	1.00	1.00	-	3.12
28-53	0.21	17.90	1.11	1.06	0.77	0.98	1.00	1.00	-	3.31
28-54	0.21	17.85	1.10	1.07	0.73	0.98	1.00	1.00	-	3.13
28-55	0.21	17.86	1.10	1.06	0.74	0.98	1.00	1.00	-	3.15
28-56	0.21	17.80	1.10	1.07	0.70	0.98	1.00	1.00	-	2.97
28-57	0.21	17.94	1.11	1.06	0.80	0.97	1.00	1.00	-	3.43
28-58	0.21	17.89	1.11	1.06	0.76	0.97	1.00	1.00	-	3.25
28-59	0.21	17.90	1.11	1.06	0.77	0.97	1.00	1.00	-	3.28
28-60	0.21	17.84	1.10	1.07	0.73	0.97	1.00	1.00	-	3.09
28-61	0.21	17.90	1.11	1.06	0.77	0.97	1.00	1.00	-	3.28
28-62	0.21	17.85	1.10	1.07	0.73	0.97	1.00	1.00	-	3.1
28-63	0.21	17.86	1.10	1.06	0.74	0.97	1.00	1.00	-	3.12
28-64	0.21	17.80	1.10	1.07	0.70	0.97	1.00	1.00	-	2.94

Segue il confronto fra la pressione limite ed applicata.

Caso	γ_{Rv}	q_{lim} [daN/cm ²]	A [cm ²]	R_d [daN]	E_d [daN]	Verifica
1-1	2.30	4.45	723885.06	3220947.2	655583.6	SI (3220947.2/655583.6 = 4.91 >= 1.0)
2-1	2.30	5.4	691335.97	3730877.5	806791.6	SI (3730877.5/806791.6 = 4.62 >= 1.0)
3-1	2.30	5.42	808640.88	4386697.2	772780.6	SI (4386697.2/772780.6 = 5.68 >= 1.0)
4-1	2.30	4.89	746546.48	3653615.2	766037.6	SI (3653615.2/766037.6 = 4.77 >= 1.0)
5-1	2.30	6.19	760477.5	4708738.7	923989.6	SI (4708738.7/923989.6 = 5.10 >= 1.0)
6-1	2.30	5.7	764150.6	4355297.7	917246.6	SI (4355297.7/917246.6 = 4.75 >= 1.0)
7-1	2.30	5.74	826171.9	4739844.2	883235.6	SI (4739844.2/883235.6 = 5.37 >= 1.0)
8-1	2.30	6.39	822252.17	5257931.9	1034443.6	SI (5257931.9/1034443.6 = 5.08 >= 1.0)
9-1	1.80	6.75	781544.49	5277714.7	477527	SI (5277714.7/477527 = 11.05 >= 1.0)
9-2	1.80	6.75	781545.71	5277731.1	477527	SI (5277731.1/477527 = 11.05 >= 1.0)
9-3	1.80	6.04	735883.97	4445806.2	477515	SI (4445806.2/477515 = 9.31 >= 1.0)
9-4	1.80	6.04	735885.19	4445820.9	477515	SI (4445820.9/477515 = 9.31 >= 1.0)
9-5	1.80	6.75	781541.33	5277688.4	477527	SI (5277688.4/477527 = 11.05 >= 1.0)
9-6	1.80	6.75	781542.56	5277704.8	477527	SI (5277704.8/477527 = 11.05 >= 1.0)
9-7	1.80	6.04	735880.96	4445783.3	477515	SI (4445783.3/477515 = 9.31 >= 1.0)
9-8	1.80	6.04	735882.18	4445798.1	477515	SI (4445798.1/477515 = 9.31 >= 1.0)
9-9	1.80	6.3	746165.18	4701070.7	477521	SI (4701070.7/477521 = 9.84 >= 1.0)
9-10	1.80	6.3	746166.36	4701085.4	477521	SI (4701085.4/477521 = 9.84 >= 1.0)
9-11	1.80	5.63	702687.89	3958040.8	477544	SI (3958040.8/477544 = 8.29 >= 1.0)
9-12	1.80	5.63	702691.57	3958084.9	477545	SI (3958084.9/477545 = 8.29 >= 1.0)
9-13	1.80	6.3	746162.06	4701046.2	477521	SI (4701046.2/477521 = 9.84 >= 1.0)
9-14	1.80	6.3	746163.23	4701060.9	477521	SI (4701060.9/477521 = 9.84 >= 1.0)
9-15	1.80	5.63	702686.39	3958039.6	477545	SI (3958039.6/477545 = 8.29 >= 1.0)
9-16	1.80	5.63	702689.32	3958071.4	477545	SI (3958071.4/477545 = 8.29 >= 1.0)
10-1	1.80	7.24	812918.84	5881673.6	477531	SI (5881673.6/477531 = 12.32 >= 1.0)
10-2	1.80	7.24	812917.85	5881664.9	477531	SI (5881664.9/477531 = 12.32 >= 1.0)
10-3	1.80	7.07	801703.1	5671903.5	477529	SI (5671903.5/477529 = 11.88 >= 1.0)
10-4	1.80	7.07	801702.11	5671894.9	477529	SI (5671894.9/477529 = 11.88 >= 1.0)
10-5	1.80	7.24	812922.87	5881731.7	477531	SI (5881731.7/477531 = 12.32 >= 1.0)
10-6	1.80	7.24	812921.88	5881722.9	477531	SI (5881722.9/477531 = 12.32 >= 1.0)
10-7	1.80	7.07	801707.07	5671959.5	477529	SI (5671959.5/477529 = 11.88 >= 1.0)
10-8	1.80	7.07	801706.09	5671951	477529	SI (5671951/477529 = 11.88 >= 1.0)
10-9	1.80	4.95	663688.45	3288402	477737	SI (3288402/477737 = 6.88 >= 1.0)
10-10	1.80	4.95	663689.6	3288423.5	477738	SI (3288423.5/477738 = 6.88 >= 1.0)
10-11	1.80	4.84	654366.92	3166386.2	477659	SI (3166386.2/477659 = 6.63 >= 1.0)
10-12	1.80	4.84	654367.9	3166404.2	477660	SI (3166404.2/477660 = 6.63 >= 1.0)
10-13	1.80	4.95	663679.31	3288193.9	477727	SI (3288193.9/477727 = 6.88 >= 1.0)
10-14	1.80	4.95	663680.46	3288215.4	477728	SI (3288215.4/477728 = 6.88 >= 1.0)
10-15	1.80	4.84	654363.98	3166301.3	477654	SI (3166301.3/477654 = 6.63 >= 1.0)
10-16	1.80	4.84	654364.96	3166319.3	477655	SI (3166319.3/477655 = 6.63 >= 1.0)
11-1	2.30	6.35	72951.98	4633411.4	593642.6	SI (4633411.4/593642.6 = 7.81 >= 1.0)
11-2	2.30	6.01	718223.74	4313979.8	594391.6	SI (4313979.8/594391.6 = 7.26 >= 1.0)
11-3	2.30	6.06	720652.94	4365598.9	593640.6	SI (4365598.9/593640.6 = 7.35 >= 1.0)
11-4	2.30	5.73	709088.72	4064952.5	594388.6	SI (4064952.5/594388.6 = 6.84 >= 1.0)
12-1	2.30	6.65	736627	4897693.1	593908.6	SI (4897693.1/593908.6 = 8.25 >= 1.0)

12-2	2.30	5.69	705820.65	4015866.3	593898.6	SI (4015866.3/593898.6 = 6.76 >= 1.0)
12-3	2.30	6.5	733050.55	4767429.7	594132.6	SI (4767429.7/594132.6 = 8.02 >= 1.0)
12-4	2.30	5.57	702409.33	3909533	594123.6	SI (3909533/594123.6 = 6.58 >= 1.0)
13-1	2.30	6.44	837660.13	5395156.8	571031.6	SI (5395156.8/571031.6 = 9.45 >= 1.0)
13-2	2.30	6.1	828039.81	5050185.3	571627.6	SI (5050185.3/571627.6 = 8.83 >= 1.0)
13-3	2.30	6.19	828962.98	5132649.3	571056.6	SI (5132649.3/571056.6 = 8.99 >= 1.0)
13-4	2.30	5.86	819457.02	4804702.3	571652.6	SI (4804702.3/571652.6 = 8.40 >= 1.0)
14-1	2.30	6.64	844392.71	5604041.4	571210.6	SI (5604041.4/571210.6 = 9.81 >= 1.0)
14-2	2.30	5.82	815535.6	4745655.6	571293.6	SI (4745655.6/571293.6 = 8.31 >= 1.0)
14-3	2.30	6.52	841466.66	5484832.1	571389.6	SI (5484832.1/571389.6 = 9.60 >= 1.0)
14-4	2.30	5.72	812723.92	4644973.9	571472.6	SI (4644973.9/571472.6 = 8.13 >= 1.0)
15-1	2.30	5.89	776537.32	4576840.8	566574.6	SI (4576840.8/566574.6 = 8.08 >= 1.0)
15-2	2.30	5.58	785060.01	4380790.7	567126.6	SI (4380790.7/567126.6 = 7.72 >= 1.0)
15-3	2.30	5.66	768020.53	4349883.9	566566.6	SI (4349883.9/566566.6 = 7.68 >= 1.0)
15-4	2.30	5.36	776458.53	4164449.8	567118.6	SI (4164449.8/567118.6 = 7.34 >= 1.0)
16-1	2.30	6.07	789492.44	4789487.6	566776.6	SI (4789487.6/566776.6 = 8.45 >= 1.0)
16-2	2.30	5.31	761004.55	4043455.3	566750.6	SI (4043455.3/566750.6 = 7.13 >= 1.0)
16-3	2.30	5.96	792078.58	4721603.3	566941.6	SI (4721603.3/566941.6 = 8.33 >= 1.0)
16-4	2.30	5.22	763506.53	3987032.1	566916.6	SI (3987032.1/566916.6 = 7.03 >= 1.0)
17-1	2.30	6.96	797785.66	5549668.4	671464.6	SI (5549668.4/671464.6 = 8.27 >= 1.0)
17-2	2.30	7	786601.73	5507522.2	672212.6	SI (5507522.2/672212.6 = 8.19 >= 1.0)
17-3	2.30	6.68	789387.77	5276948.3	671461.6	SI (5276948.3/671461.6 = 7.86 >= 1.0)
17-4	2.30	6.73	778332.9	5236673.8	672209.6	SI (5236673.8/672209.6 = 7.79 >= 1.0)
17-5	2.30	7.08	789250.21	5590570.7	672059.6	SI (5590570.7/672059.6 = 8.32 >= 1.0)
17-6	2.30	6.62	778078.77	5150715.9	672808.6	SI (5150715.9/672808.6 = 7.66 >= 1.0)
17-7	2.30	6.81	780953.65	5315608.7	672057.6	SI (5315608.7/672057.6 = 7.91 >= 1.0)
17-8	2.30	6.36	769910.41	4897849.2	672805.6	SI (4897849.2/672805.6 = 7.28 >= 1.0)
17-9	2.30	6.73	791023.14	5321685.5	671489.6	SI (5321685.5/671489.6 = 7.93 >= 1.0)
17-10	2.30	6.77	779943.63	5281094.8	672237.6	SI (5281094.8/672237.6 = 7.86 >= 1.0)
17-11	2.30	6.46	782625.45	5056995.9	671486.6	SI (5056995.9/671486.6 = 7.53 >= 1.0)
17-12	2.30	6.5	771674.98	5018233.6	672234.6	SI (5018233.6/672234.6 = 7.47 >= 1.0)
17-13	2.30	6.85	782569.33	5360694.1	672084.6	SI (5360694.1/672084.6 = 7.98 >= 1.0)
17-14	2.30	6.4	771501.96	4939340.6	672833.6	SI (4939340.6/672833.6 = 7.34 >= 1.0)
17-15	2.30	6.58	774272.96	5093838.5	672082.6	SI (5093838.5/672082.6 = 7.58 >= 1.0)
17-16	2.30	6.15	763333.78	4693931.7	672830.6	SI (4693931.7/672830.6 = 6.98 >= 1.0)
18-1	2.30	7.8	808399.94	6302626.1	671908.6	SI (6302626.1/671908.6 = 9.38 >= 1.0)
18-2	2.30	6.84	780675.13	5339479	671899.6	SI (5339479/671899.6 = 7.95 >= 1.0)
18-3	2.30	7.64	804964.64	6152178.3	672133.6	SI (6152178.3/672133.6 = 9.15 >= 1.0)
18-4	2.30	6.71	777368.76	5212464.3	672124.6	SI (5212464.3/672124.6 = 7.76 >= 1.0)
18-5	2.30	6.99	786074.54	5492010.7	671991.6	SI (5492010.7/671991.6 = 8.17 >= 1.0)
18-6	2.30	6.09	758351.81	4620286.9	671982.6	SI (4620286.9/671982.6 = 6.88 >= 1.0)
18-7	2.30	6.85	782743.55	5361307.4	672216.6	SI (5361307.4/672216.6 = 7.98 >= 1.0)
18-8	2.30	5.97	755149.73	4510804.7	672207.6	SI (4510804.7/672207.6 = 6.71 >= 1.0)
18-9	2.30	7.67	805776.96	6179885	672087.6	SI (6179885/672087.6 = 9.20 >= 1.0)
18-10	2.30	6.73	778152.93	5235908.4	672078.6	SI (5235908.4/672078.6 = 7.79 >= 1.0)
18-11	2.30	7.52	802342.84	6031055.4	672312.6	SI (6031055.4/672312.6 = 8.97 >= 1.0)
18-12	2.30	6.6	774847.18	5110247.9	672302.6	SI (5110247.9/672302.6 = 7.60 >= 1.0)
18-13	2.30	6.87	783533.1	5385422.9	672170.6	SI (5385422.9/672170.6 = 8.01 >= 1.0)
18-14	2.30	5.99	755911.13	4531054.1	672161.6	SI (4531054.1/672161.6 = 6.74 >= 1.0)
18-15	2.30	6.74	780203.18	5256121.4	672395.6	SI (5256121.4/672395.6 = 7.82 >= 1.0)
18-16	2.30	5.88	752709.98	4422740.4	672386.6	SI (4422740.4/672386.6 = 6.58 >= 1.0)
19-1	2.30	6.47	801522.81	5187427.6	667006.6	SI (5187427.6/667006.6 = 7.78 >= 1.0)
19-2	2.30	6.5	791066.39	5142125.3	667755.6	SI (5142125.3/667755.6 = 7.70 >= 1.0)
19-3	2.30	6.21	792403.73	4923322.3	667004.6	SI (4923322.3/667004.6 = 7.38 >= 1.0)
19-4	2.30	6.24	782079.17	4880193.4	667752.6	SI (4880193.4/667752.6 = 7.31 >= 1.0)
19-5	2.30	6.59	793924.98	5228335.1	667559.6	SI (5228335.1/667559.6 = 7.83 >= 1.0)
19-6	2.30	6.16	783482.81	4827775.1	668307.6	SI (4827775.1/668307.6 = 7.22 >= 1.0)
19-7	2.30	6.32	784899.22	4961887.5	667556.6	SI (4961887.5/667556.6 = 7.43 >= 1.0)
19-8	2.30	5.92	774588.91	4582219.7	668304.6	SI (4582219.7/668304.6 = 6.86 >= 1.0)
19-9	2.30	6.26	794476.77	4974906.5	666999.6	SI (4974906.5/666999.6 = 7.46 >= 1.0)
19-10	2.30	6.29	784122.03	4931339.4	667747.6	SI (4931339.4/667747.6 = 7.39 >= 1.0)
19-11	2.30	6.01	785357.11	4718541.1	666996.6	SI (4718541.1/666996.6 = 7.07 >= 1.0)
19-12	2.30	6.03	775135.08	4677108.1	667745.6	SI (4677108.1/667745.6 = 7.00 >= 1.0)
19-13	2.30	6.37	786950.87	5013915.3	667551.6	SI (5013915.3/667551.6 = 7.51 >= 1.0)
19-14	2.30	5.96	776610.91	4630181.7	668300.6	SI (4630181.7/668300.6 = 6.93 >= 1.0)
19-15	2.30	6.11	777924.93	4755293	667548.6	SI (4755293/667548.6 = 7.12 >= 1.0)
19-16	2.30	5.72	767716.85	4391841.5	668297.6	SI (4391841.5/668297.6 = 6.57 >= 1.0)
20-1	2.30	7.24	813898.14	5895583.2	667474.6	SI (5895583.2/667474.6 = 8.83 >= 1.0)
20-2	2.30	6.33	783764.75	4964158.8	667465.6	SI (4964158.8/667465.6 = 7.44 >= 1.0)
20-3	2.30	7.1	810680.54	5758462.6	667698.6	SI (5758462.6/667698.6 = 8.62 >= 1.0)
20-4	2.30	6.21	780679.27	4849154.6	667689.6	SI (4849154.6/667689.6 = 7.26 >= 1.0)

20-5	2.30	6.5	790614.55	5139837.8	667448.6	SI (5139837.8/667448.6 = 7.70 >= 1.0)
20-6	2.30	5.65	760479.28	4296491.4	667439.6	SI (4296491.4/667439.6 = 6.44 >= 1.0)
20-7	2.30	6.38	787499.33	5020674.5	667673.6	SI (5020674.5/667673.6 = 7.52 >= 1.0)
20-8	2.30	5.54	757496.23	4197365.9	667664.6	SI (4197365.9/667664.6 = 6.29 >= 1.0)
20-9	2.30	7.13	811561.94	5787336.7	667639.6	SI (5787336.7/667639.6 = 8.67 >= 1.0)
20-10	2.30	6.24	781522.12	4873355.3	667630.6	SI (4873355.3/667630.6 = 7.30 >= 1.0)
20-11	2.30	6.99	808346.13	5651615.1	667864.6	SI (5651615.1/667864.6 = 8.46 >= 1.0)
20-12	2.30	6.11	778438.33	4759521.7	667855.6	SI (4759521.7/667855.6 = 7.13 >= 1.0)
20-13	2.30	6.4	788350.98	5045756.9	667614.6	SI (5045756.9/667614.6 = 7.56 >= 1.0)
20-14	2.30	5.56	758309.32	4218214.8	667605.6	SI (4218214.8/667605.6 = 6.32 >= 1.0)
20-15	2.30	6.28	785237.07	4927800	667839.6	SI (4927800/667839.6 = 7.38 >= 1.0)
20-16	2.30	5.45	755326.99	4120080.4	667829.6	SI (4120080.4/667829.6 = 6.17 >= 1.0)
21-1	2.30	6.57	845036.73	5548207.5	644395.6	SI (5548207.5/644395.6 = 8.61 >= 1.0)
21-2	2.30	6.59	854453.88	5631946	644991.6	SI (5631946/644991.6 = 8.73 >= 1.0)
21-3	2.30	6.34	837207.83	5308209	644420.6	SI (5308209/644420.6 = 8.24 >= 1.0)
21-4	2.30	6.37	846548.9	5388936.7	645016.6	SI (5388936.7/645016.6 = 8.35 >= 1.0)
21-5	2.30	6.6	853107.58	5632267.8	644947.6	SI (5632267.8/644947.6 = 8.73 >= 1.0)
21-6	2.30	6.25	862513.15	5388100.4	645543.6	SI (5388100.4/645543.6 = 8.35 >= 1.0)
21-7	2.30	6.38	845210.03	5389102.4	644972.6	SI (5389102.4/644972.6 = 8.36 >= 1.0)
21-8	2.30	6.03	854539.79	5156466.8	645568.6	SI (5156466.8/645568.6 = 7.99 >= 1.0)
21-9	2.30	6.35	837527.68	5317047.3	644387.6	SI (5317047.3/644387.6 = 8.25 >= 1.0)
21-10	2.30	6.37	846872.33	5397891	644983.6	SI (5397891/644983.6 = 8.37 >= 1.0)
21-11	2.30	6.13	829698.99	5084159.8	644412.6	SI (5084159.8/644412.6 = 7.89 >= 1.0)
21-12	2.30	6.15	838967.56	5162058.6	645008.6	SI (5162058.6/645008.6 = 8.00 >= 1.0)
21-13	2.30	6.38	845533.1	5398062.2	644939.6	SI (5398062.2/644939.6 = 8.37 >= 1.0)
21-14	2.30	6.04	854866.43	5164997.2	645535.6	SI (5164997.2/645535.6 = 8.00 >= 1.0)
21-15	2.30	6.16	837635.77	5162082.8	644964.6	SI (5162082.8/644964.6 = 8.00 >= 1.0)
21-16	2.30	5.83	846893.28	4940186.2	645560.6	SI (4940186.2/645560.6 = 7.65 >= 1.0)
22-1	2.30	7.25	869168.97	6300060.6	644776.6	SI (6300060.6/644776.6 = 9.77 >= 1.0)
22-2	2.30	6.46	842903.07	5449050.2	644860.6	SI (5449050.2/644860.6 = 8.45 >= 1.0)
22-3	2.30	7.13	872044.92	6217393.6	644955.6	SI (6217393.6/644955.6 = 9.64 >= 1.0)
22-4	2.30	6.36	845702.65	5378553.3	645038.6	SI (5378553.3/645038.6 = 8.34 >= 1.0)
22-5	2.30	6.49	843977.53	5479348.5	644751.6	SI (5479348.5/644751.6 = 8.50 >= 1.0)
22-6	2.30	5.76	817713.69	4709348.2	644834.6	SI (4709348.2/644834.6 = 7.30 >= 1.0)
22-7	2.30	6.39	846781.07	5408422.1	644930.6	SI (5408422.1/644930.6 = 8.39 >= 1.0)
22-8	2.30	5.67	820441.24	4649360.3	645013.6	SI (4649360.3/645013.6 = 7.21 >= 1.0)
22-9	2.30	7.13	871636.01	6217609.9	644942.6	SI (6217609.9/644942.6 = 9.64 >= 1.0)
22-10	2.30	6.36	845301.2	5378602.6	645025.6	SI (5378602.6/645025.6 = 8.34 >= 1.0)
22-11	2.30	7.02	874510.85	6135432.7	645121.6	SI (6135432.7/645121.6 = 9.51 >= 1.0)
22-12	2.30	6.26	848100.14	5308505	645204.6	SI (5308505/645204.6 = 8.23 >= 1.0)
22-13	2.30	6.39	846379.24	5408476.8	644917.6	SI (5408476.8/644917.6 = 8.39 >= 1.0)
22-14	2.30	5.67	820046.87	4649278.4	645000.6	SI (4649278.4/645000.6 = 7.21 >= 1.0)
22-15	2.30	6.29	849181.38	5337938.5	645095.6	SI (5337938.5/645095.6 = 8.27 >= 1.0)
22-16	2.30	5.58	822773.48	4589601.2	645179.6	SI (4589601.2/645179.6 = 7.11 >= 1.0)
23-1	2.30	7	859277.49	6015474.6	744828.6	SI (6015474.6/744828.6 = 8.08 >= 1.0)
23-2	2.30	7.37	851636.6	6278627.8	745424.6	SI (6278627.8/745424.6 = 8.42 >= 1.0)
23-3	2.30	6.79	852646.95	5793524	744853.6	SI (5793524/744853.6 = 7.78 >= 1.0)
23-4	2.30	7.16	845072.96	6046498.1	745448.6	SI (6046498.1/745448.6 = 8.11 >= 1.0)
23-5	2.30	7.35	851997.56	6265668.2	745380.6	SI (6265668.2/745380.6 = 8.41 >= 1.0)
23-6	2.30	7.12	844365.66	6013566.9	745976.6	SI (6013566.9/745976.6 = 8.06 >= 1.0)
23-7	2.30	7.14	845427.92	6033995.9	745405.6	SI (6033995.9/745405.6 = 8.09 >= 1.0)
23-8	2.30	6.91	837863.04	5791451.8	746001.6	SI (5791451.8/746001.6 = 7.76 >= 1.0)
23-9	2.30	6.8	852917.98	5801714.2	744820.6	SI (5801714.2/744820.6 = 7.79 >= 1.0)
23-10	2.30	7.16	845341.21	6055075.6	745416.6	SI (6055075.6/745416.6 = 8.12 >= 1.0)
23-11	2.30	6.6	846287.55	5585423.7	744845.6	SI (5585423.7/744845.6 = 7.50 >= 1.0)
23-12	2.30	6.95	838777.99	5828879.9	745441.6	SI (5828879.9/745441.6 = 7.82 >= 1.0)
23-13	2.30	7.15	845696.14	6042550.4	745372.6	SI (6042550.4/745372.6 = 8.11 >= 1.0)
23-14	2.30	6.92	838128.17	5799644.8	745968.6	SI (5799644.8/745968.6 = 7.77 >= 1.0)
23-15	2.30	6.93	839126.61	5816795.2	745397.6	SI (5816795.2/745397.6 = 7.80 >= 1.0)
23-16	2.30	6.71	831625.66	5583203.9	745993.6	SI (5583203.9/745993.6 = 7.48 >= 1.0)
23-17	2.30	7.39	849244.66	6279887.8	745576.6	SI (6279887.8/745576.6 = 8.42 >= 1.0)
23-18	2.30	7.04	841613.3	5921595.3	746172.6	SI (5921595.3/746172.6 = 7.94 >= 1.0)
23-19	2.30	7.18	842700.05	6047641.7	745601.6	SI (6047641.7/745601.6 = 8.11 >= 1.0)
23-20	2.30	6.83	835135.64	5702976.2	746197.6	SI (5702976.2/746197.6 = 7.64 >= 1.0)
23-21	2.30	7.05	841978.34	5933234.1	746128.6	SI (5933234.1/746128.6 = 7.95 >= 1.0)
23-22	2.30	6.7	834355.95	5586082.2	746724.6	SI (5586082.2/746724.6 = 7.48 >= 1.0)
23-23	2.30	6.84	835494.4	5714126.4	746153.6	SI (5714126.4/746153.6 = 7.66 >= 1.0)
23-24	2.30	6.5	827938.77	5380165.6	746749.6	SI (5380165.6/746749.6 = 7.20 >= 1.0)
23-25	2.30	7.18	842967.43	6056223.3	745569.6	SI (6056223.3/745569.6 = 8.12 >= 1.0)
23-26	2.30	6.84	835399.95	5711043.3	746165.6	SI (5711043.3/746165.6 = 7.65 >= 1.0)
23-27	2.30	6.97	836422.95	5829910.8	745594.6	SI (5829910.8/745594.6 = 7.82 >= 1.0)

23-28	2.30	6.63	828922.08	5498003	746189.6	SI (5498003/746189.6 = 7.37 >= 1.0)
23-29	2.30	6.85	835758.98	5722211.9	746121.6	SI (5722211.9/746121.6 = 7.67 >= 1.0)
23-30	2.30	6.51	828200.29	5387753.4	746717.6	SI (5387753.4/746717.6 = 7.22 >= 1.0)
23-31	2.30	6.64	829275.16	5508703	746146.6	SI (5508703/746146.6 = 7.38 >= 1.0)
23-32	2.30	6.31	821783.22	5187098.2	746742.6	SI (5187098.2/746742.6 = 6.95 >= 1.0)
23-33	2.30	6.76	851046.6	5749911.4	744825.6	SI (5749911.4/744825.6 = 7.72 >= 1.0)
23-34	2.30	7.11	843488.8	6000926.3	745421.6	SI (6000926.3/745421.6 = 8.05 >= 1.0)
23-35	2.30	6.55	844416.25	5535007.9	744850.6	SI (5535007.9/744850.6 = 7.43 >= 1.0)
23-36	2.30	6.9	836925.65	5776182.5	745446.6	SI (5776182.5/745446.6 = 7.75 >= 1.0)
23-37	2.30	7.1	843841.94	5988504	745377.6	SI (5988504/745377.6 = 8.03 >= 1.0)
23-38	2.30	6.87	836292.89	5747824.8	745973.6	SI (5747824.8/745973.6 = 7.71 >= 1.0)
23-39	2.30	6.88	837272.49	5764198.2	745402.6	SI (5764198.2/745402.6 = 7.73 >= 1.0)
23-40	2.30	6.67	829790.46	5532774	745998.6	SI (5532774/745998.6 = 7.42 >= 1.0)
23-41	2.30	6.56	844686.95	5542927.2	744817.6	SI (5542927.2/744817.6 = 7.44 >= 1.0)
23-42	2.30	6.91	837193.26	5784469.8	745413.6	SI (5784469.8/745413.6 = 7.76 >= 1.0)
23-43	2.30	6.36	838056.71	5333577	744842.6	SI (5333577/744842.6 = 7.16 >= 1.0)
23-44	2.30	6.7	830630.23	5565541.8	745438.6	SI (5565541.8/745438.6 = 7.47 >= 1.0)
23-45	2.30	6.89	837540.38	5772469.2	745369.6	SI (5772469.2/745369.6 = 7.74 >= 1.0)
23-46	2.30	6.68	830055.26	5540695.4	745965.6	SI (5540695.4/745965.6 = 7.43 >= 1.0)
23-47	2.30	6.68	830971.04	5553968.8	745394.6	SI (5553968.8/745394.6 = 7.45 >= 1.0)
23-48	2.30	6.47	823552.94	5331211.3	745990.6	SI (5331211.3/745990.6 = 7.15 >= 1.0)
23-49	2.30	7.14	841119.99	6002042.3	745573.6	SI (6002042.3/745573.6 = 8.05 >= 1.0)
23-50	2.30	6.79	833571.4	5660031.7	746169.6	SI (5660031.7/746169.6 = 7.59 >= 1.0)
23-51	2.30	6.92	834575.58	5777182.8	745598.6	SI (5777182.8/745598.6 = 7.75 >= 1.0)
23-52	2.30	6.59	827093.92	5448365.9	746194.6	SI (5448365.9/746194.6 = 7.30 >= 1.0)
23-53	2.30	6.8	833928.98	5671091.7	746126.6	SI (5671091.7/746126.6 = 7.60 >= 1.0)
23-54	2.30	6.46	826389.12	5339701.2	746722.6	SI (5339701.2/746722.6 = 7.15 >= 1.0)
23-55	2.30	6.6	827445.23	5458954.4	746151.6	SI (5458954.4/746151.6 = 7.32 >= 1.0)
23-56	2.30	6.27	819971.79	5140329	746746.6	SI (5140329/746746.6 = 6.88 >= 1.0)
23-57	2.30	6.93	834842.64	5785480.3	745566.6	SI (5785480.3/745566.6 = 7.76 >= 1.0)
23-58	2.30	6.59	827357.92	5456165.9	746162.6	SI (5456165.9/746162.6 = 7.31 >= 1.0)
23-59	2.30	6.72	828298.34	5566442.4	745591.6	SI (5566442.4/745591.6 = 7.47 >= 1.0)
23-60	2.30	6.4	820880.56	5249979.2	746187.6	SI (5249979.2/746187.6 = 7.04 >= 1.0)
23-61	2.30	6.6	827709.17	5466765.9	746118.6	SI (5466765.9/746118.6 = 7.33 >= 1.0)
23-62	2.30	6.28	820233	5147665.6	746714.6	SI (5147665.6/746714.6 = 6.89 >= 1.0)
23-63	2.30	6.41	821225.53	5260121	746143.6	SI (5260121/746143.6 = 7.05 >= 1.0)
23-64	2.30	6.09	813816.11	4953460.5	746739.6	SI (4953460.5/746739.6 = 6.63 >= 1.0)
24-1	2.30	8.25	875022.95	7219371.9	745474.6	SI (7219371.9/745474.6 = 9.68 >= 1.0)
24-2	2.30	7.49	853169.83	6388589.3	745558.6	SI (6388589.3/745558.6 = 8.57 >= 1.0)
24-3	2.30	8.15	872657.81	7111851.3	745653.6	SI (7111851.3/745653.6 = 9.54 >= 1.0)
24-4	2.30	7.4	850871.46	6293728.6	745736.6	SI (6293728.6/745736.6 = 8.44 >= 1.0)
24-5	2.30	7.52	854063.35	6418430.1	745449.6	SI (6418430.1/745449.6 = 8.61 >= 1.0)
24-6	2.30	6.8	832211.23	5655281.7	745532.6	SI (5655281.7/745532.6 = 7.59 >= 1.0)
24-7	2.30	7.42	851762.18	6323109.6	745628.6	SI (6323109.6/745628.6 = 8.48 >= 1.0)
24-8	2.30	6.71	829977.12	5571600.2	745711.6	SI (5571600.2/745711.6 = 7.47 >= 1.0)
24-9	2.30	8.15	872773.63	7115993	745640.6	SI (7115993/745640.6 = 9.54 >= 1.0)
24-10	2.30	7.4	850980.98	6297334.1	745723.6	SI (6297334.1/745723.6 = 8.44 >= 1.0)
24-11	2.30	8.03	870409.36	6991815.1	745819.6	SI (6991815.1/745819.6 = 9.37 >= 1.0)
24-12	2.30	7.29	848683.72	6187800.2	745902.6	SI (6187800.2/745902.6 = 8.30 >= 1.0)
24-13	2.30	7.43	851871.98	6326734.8	745615.6	SI (6326734.8/745615.6 = 8.49 >= 1.0)
24-14	2.30	6.72	830080.63	5574736.7	745698.6	SI (5574736.7/745698.6 = 7.48 >= 1.0)
24-15	2.30	7.32	849571.33	6216656.9	745793.6	SI (6216656.9/745793.6 = 8.34 >= 1.0)
24-16	2.30	6.62	827847.28	5478118.3	745877.6	SI (5478118.3/745877.6 = 7.34 >= 1.0)
24-17	2.30	7.35	847895.39	6231365.6	745465.6	SI (6231365.6/745465.6 = 8.36 >= 1.0)
24-18	2.30	6.64	826044.1	5484427	745548.6	SI (5484427/745548.6 = 7.36 >= 1.0)
24-19	2.30	7.26	845613.15	6138891.1	745644.6	SI (6138891.1/745644.6 = 8.23 >= 1.0)
24-20	2.30	6.56	823828.91	5403345.6	745727.6	SI (5403345.6/745727.6 = 7.25 >= 1.0)
24-21	2.30	6.66	826934.3	5511101.3	745440.6	SI (5511101.3/745440.6 = 7.39 >= 1.0)
24-22	2.30	6	805084.31	4827642	745523.6	SI (4827642/745523.6 = 6.48 >= 1.0)
24-23	2.30	6.58	824716.04	5429603.9	745619.6	SI (5429603.9/745619.6 = 7.28 >= 1.0)
24-24	2.30	5.92	802933.09	4756567.1	745702.6	SI (4756567.1/745702.6 = 6.38 >= 1.0)
24-25	2.30	7.26	845721.17	6142395	745631.6	SI (6142395/745631.6 = 8.24 >= 1.0)
24-26	2.30	6.56	823930.64	5406372.2	745714.6	SI (5406372.2/745714.6 = 7.25 >= 1.0)
24-27	2.30	7.16	843439.73	6035611.2	745810.6	SI (6035611.2/745810.6 = 8.09 >= 1.0)
24-28	2.30	6.47	821716.19	5312757.3	745893.6	SI (5312757.3/745893.6 = 7.12 >= 1.0)
24-29	2.30	6.59	824817.7	5432641.4	745605.6	SI (5432641.4/745605.6 = 7.29 >= 1.0)
24-30	2.30	5.93	803028.8	4759178.4	745689.6	SI (4759178.4/745689.6 = 6.38 >= 1.0)
24-31	2.30	6.49	822600.19	5338546	745784.6	SI (5338546/745784.6 = 7.16 >= 1.0)
24-32	2.30	5.84	800877.91	4677120.7	745867.6	SI (4677120.7/745867.6 = 6.27 >= 1.0)
24-33	2.30	8.12	871919.93	7083630.9	745699.6	SI (7083630.9/745699.6 = 9.50 >= 1.0)
24-34	2.30	7.37	850152.31	6268787.7	745782.6	SI (6268787.7/745782.6 = 8.41 >= 1.0)

24-35	2.30	8	869555.74	6959757.1	745878.6	SI (6959757.1/745878.6 = 9.33 >= 1.0)
24-36	2.30	7.26	847855.1	6159521.2	745961.6	SI (6159521.2/745961.6 = 8.26 >= 1.0)
24-37	2.30	7.4	851042.16	6298048	745674.6	SI (6298048/745674.6 = 8.45 >= 1.0)
24-38	2.30	6.69	829275.82	5549556.1	745757.6	SI (5549556.1/745757.6 = 7.44 >= 1.0)
24-39	2.30	7.29	848741.56	6188238.8	745852.6	SI (6188238.8/745852.6 = 8.30 >= 1.0)
24-40	2.30	6.59	827042.51	5453172.6	745936.6	SI (5453172.6/745936.6 = 7.31 >= 1.0)
24-41	2.30	8.01	869671.92	6963866.5	745865.6	SI (6963866.5/745865.6 = 9.34 >= 1.0)
24-42	2.30	7.27	847964.99	6163099.4	745948.6	SI (6163099.4/745948.6 = 8.26 >= 1.0)
24-43	2.30	7.89	867308.32	6841146.7	746043.6	SI (6841146.7/746043.6 = 9.17 >= 1.0)
24-44	2.30	7.16	845668.6	6054852.7	746127.6	SI (6054852.7/746127.6 = 8.12 >= 1.0)
24-45	2.30	7.29	848851.73	6191836.6	745839.6	SI (6191836.6/745839.6 = 8.30 >= 1.0)
24-46	2.30	6.6	827146.39	5456286.2	745923.6	SI (5456286.2/745923.6 = 7.31 >= 1.0)
24-47	2.30	7.19	846552.25	6083058.5	746018.6	SI (6083058.5/746018.6 = 8.15 >= 1.0)
24-48	2.30	6.5	824913.5	5360792.7	746101.6	SI (5360792.7/746101.6 = 7.19 >= 1.0)
24-49	2.30	7.24	844898.41	6114566.6	745690.6	SI (6114566.6/745690.6 = 8.20 >= 1.0)
24-50	2.30	6.54	823132.89	5381975.9	745773.6	SI (5381975.9/745773.6 = 7.22 >= 1.0)
24-51	2.30	7.13	842617.02	6008043.2	745869.6	SI (6008043.2/745869.6 = 8.06 >= 1.0)
24-52	2.30	6.44	820918.47	5288588.2	745952.6	SI (5288588.2/745952.6 = 7.09 >= 1.0)
24-53	2.30	6.56	824018.82	5408119.7	745664.6	SI (5408119.7/745664.6 = 7.25 >= 1.0)
24-54	2.30	5.91	802254.92	4737796.3	745748.6	SI (4737796.3/745748.6 = 6.35 >= 1.0)
24-55	2.30	6.47	821801.34	5314252.7	745843.6	SI (5314252.7/745843.6 = 7.13 >= 1.0)
24-56	2.30	5.82	800104.04	4655936.8	745926.6	SI (4655936.8/745926.6 = 6.24 >= 1.0)
24-57	2.30	7.13	842725.1	6011514.7	745855.6	SI (6011514.7/745855.6 = 8.06 >= 1.0)
24-58	2.30	6.45	821020.57	5291592.9	745939.6	SI (5291592.9/745939.6 = 7.09 >= 1.0)
24-59	2.30	7.03	840444.51	5905984.9	746034.6	SI (5905984.9/746034.6 = 7.92 >= 1.0)
24-60	2.30	6.35	818806.56	5199066.5	746117.6	SI (5199066.5/746117.6 = 6.97 >= 1.0)
24-61	2.30	6.47	821903.71	5317274.7	745830.6	SI (5317274.7/745830.6 = 7.13 >= 1.0)
24-62	2.30	5.82	800200.13	4658530	745913.6	SI (4658530/745913.6 = 6.25 >= 1.0)
24-63	2.30	6.37	819686.97	5224280	746009.6	SI (5224280/746009.6 = 7.00 >= 1.0)
24-64	2.30	5.74	798050.3	4577434	746092.6	SI (4577434/746092.6 = 6.14 >= 1.0)
25-1	2.30	5.36	771484.75	4133818.8	477528	SI (4133818.8/477528 = 8.66 >= 1.0)
25-2	2.30	5.36	771485.63	4133828.2	477528	SI (4133828.2/477528 = 8.66 >= 1.0)
25-3	2.30	4.95	738767.19	3655364.9	477519	SI (3655364.9/477519 = 7.65 >= 1.0)
25-4	2.30	4.95	738768.06	3655373.5	477519	SI (3655373.5/477519 = 7.65 >= 1.0)
25-5	2.30	5.36	771482.49	4133803.9	477528	SI (4133803.9/477528 = 8.66 >= 1.0)
25-6	2.30	5.36	771483.37	4133813.2	477528	SI (4133813.2/477528 = 8.66 >= 1.0)
25-7	2.30	4.95	738765.01	3655351.4	477519	SI (3655351.4/477519 = 7.65 >= 1.0)
25-8	2.30	4.95	738765.88	3655360.1	477519	SI (3655360.1/477519 = 7.65 >= 1.0)
25-9	2.30	5.08	746148.91	3787052.6	477523	SI (3787052.6/477523 = 7.93 >= 1.0)
25-10	2.30	5.08	746149.76	3787061.2	477523	SI (3787061.2/477523 = 7.93 >= 1.0)
25-11	2.30	4.68	714513.24	3347418.6	477515	SI (3347418.6/477515 = 7.01 >= 1.0)
25-12	2.30	4.68	714515.04	3347438.4	477516	SI (3347438.4/477516 = 7.01 >= 1.0)
25-13	2.30	5.08	746146.67	3787038.4	477523	SI (3787038.4/477523 = 7.93 >= 1.0)
25-14	2.30	5.08	746147.52	3787047.1	477523	SI (3787047.1/477523 = 7.93 >= 1.0)
25-15	2.30	4.68	714511.17	3347406.6	477515	SI (3347406.6/477515 = 7.01 >= 1.0)
25-16	2.30	4.68	714512.98	3347426.4	477516	SI (3347426.4/477516 = 7.01 >= 1.0)
26-1	2.30	5.61	794105.31	4453885.8	477530	SI (4453885.8/477530 = 9.33 >= 1.0)
26-2	2.30	5.61	794104.62	4453881	477530	SI (4453881/477530 = 9.33 >= 1.0)
26-3	2.30	5.52	786192.01	4338902.7	477529	SI (4338902.7/477529 = 9.09 >= 1.0)
26-4	2.30	5.52	786191.31	4338897.9	477529	SI (4338897.9/477529 = 9.09 >= 1.0)
26-5	2.30	5.61	794108.21	4453918.1	477530	SI (4453918.1/477530 = 9.33 >= 1.0)
26-6	2.30	5.61	794107.51	4453913.3	477530	SI (4453913.3/477530 = 9.33 >= 1.0)
26-7	2.30	5.52	786194.88	4338934.2	477529	SI (4338934.2/477529 = 9.09 >= 1.0)
26-8	2.30	5.52	786194.18	4338929.4	477529	SI (4338929.4/477529 = 9.09 >= 1.0)
26-9	2.30	4.28	686243.64	2938793.8	477503	SI (2938793.8/477503 = 6.15 >= 1.0)
26-10	2.30	4.28	686243.46	2938794.4	477503	SI (2938794.4/477503 = 6.15 >= 1.0)
26-11	2.30	4.21	679467.01	2862339	477522	SI (2862339/477522 = 5.99 >= 1.0)
26-12	2.30	4.21	679466.84	2862339.7	477522	SI (2862339.7/477522 = 5.99 >= 1.0)
26-13	2.30	4.28	686246.68	2938813.9	477503	SI (2938813.9/477503 = 6.15 >= 1.0)
26-14	2.30	4.28	686246.49	2938814.5	477503	SI (2938814.5/477503 = 6.15 >= 1.0)
26-15	2.30	4.21	679470.92	2862365.5	477522	SI (2862365.5/477522 = 5.99 >= 1.0)
26-16	2.30	4.21	679470.75	2862366.2	477522	SI (2862366.2/477522 = 5.99 >= 1.0)
27-1	2.30	7	847999.11	5931900.2	729413	SI (5931900.2/729413 = 8.13 >= 1.0)
27-2	2.30	7.19	840677.27	6042112.8	729953	SI (6042112.8/729953 = 8.28 >= 1.0)
27-3	2.30	7.24	842424.02	6100797.6	729843	SI (6100797.6/729843 = 8.36 >= 1.0)
27-4	2.30	6.93	835107.22	5787559.5	730383	SI (5787559.5/730383 = 7.92 >= 1.0)
27-5	2.30	7.25	842685.85	6109201.4	729811	SI (6109201.4/729811 = 8.37 >= 1.0)
27-6	2.30	6.94	835371.28	5795811.1	730351	SI (5795811.1/730351 = 7.94 >= 1.0)
27-7	2.30	6.99	837115.54	5853125.3	730241	SI (5853125.3/730241 = 8.02 >= 1.0)
27-8	2.30	6.68	829805.98	5547055.6	730781	SI (5547055.6/730781 = 7.59 >= 1.0)
27-9	2.30	6.81	841971.99	5736809.8	729411	SI (5736809.8/729411 = 7.86 >= 1.0)

27-10	2.30	7	834707.72	5843163	729951	SI (5843163/729951 = 8.00 >= 1.0)
27-11	2.30	7.05	836441.92	5899894.5	729841	SI (5899894.5/729841 = 8.08 >= 1.0)
27-12	2.30	6.75	829182.55	5597218.3	730381	SI (5597218.3/730381 = 7.66 >= 1.0)
27-13	2.30	7.06	836699.52	5907981.5	729809	SI (5907981.5/729809 = 8.10 >= 1.0)
27-14	2.30	6.76	829442.39	5605160.1	730349	SI (5605160.1/730349 = 7.67 >= 1.0)
27-15	2.30	6.81	831174.12	5660566.9	730239	SI (5660566.9/730239 = 7.75 >= 1.0)
27-16	2.30	6.51	823921.89	5364811.7	730779	SI (5364811.7/730779 = 7.34 >= 1.0)
27-17	2.30	6.84	843144.05	5768970.6	729431	SI (5768970.6/729431 = 7.91 >= 1.0)
27-18	2.30	7.03	835868.79	5875948.5	729971	SI (5875948.5/729971 = 8.05 >= 1.0)
27-19	2.30	7.08	837605.38	5932999.8	729861	SI (5932999.8/729861 = 8.13 >= 1.0)
27-20	2.30	6.78	830335.05	5628594.3	730401	SI (5628594.3/730401 = 7.71 >= 1.0)
27-21	2.30	7.09	837863.8	5941139.2	729829	SI (5941139.2/729829 = 8.14 >= 1.0)
27-22	2.30	6.79	830595.69	5636587.4	730369	SI (5636587.4/730369 = 7.72 >= 1.0)
27-23	2.30	6.84	832329.82	5692306.6	730259	SI (5692306.6/730259 = 7.79 >= 1.0)
27-24	2.30	6.54	825066.63	5394862.4	730799	SI (5394862.4/730799 = 7.38 >= 1.0)
27-25	2.30	6.66	837117.04	5577716.5	729429	SI (5577716.5/729429 = 7.65 >= 1.0)
27-26	2.30	6.85	829899.34	5680915.6	729969	SI (5680915.6/729969 = 7.78 >= 1.0)
27-27	2.30	6.9	831623.38	5736051.2	729859	SI (5736051.2/729859 = 7.86 >= 1.0)
27-28	2.30	6.6	824410.48	5442000.4	730399	SI (5442000.4/730399 = 7.45 >= 1.0)
27-29	2.30	6.9	831877.56	5743880.6	729827	SI (5743880.6/729827 = 7.87 >= 1.0)
27-30	2.30	6.61	824666.9	5449690.5	730367	SI (5449690.5/730367 = 7.46 >= 1.0)
27-31	2.30	6.66	826388.5	5503539	730257	SI (5503539/730257 = 7.54 >= 1.0)
27-32	2.30	6.37	819182.64	5216207	730797	SI (5216207/730797 = 7.14 >= 1.0)
27-33	2.30	6.85	843342.47	5775007.8	729408	SI (5775007.8/729408 = 7.92 >= 1.0)
27-34	2.30	7.04	836064.73	5882100.2	729947	SI (5882100.2/729947 = 8.06 >= 1.0)
27-35	2.30	7.09	837801.8	5939213.5	729837	SI (5939213.5/729837 = 8.14 >= 1.0)
27-36	2.30	6.78	830529.32	5634473.3	730377	SI (5634473.3/730377 = 7.71 >= 1.0)
27-37	2.30	7.1	838060.69	5947369.3	729806	SI (5947369.3/729806 = 8.15 >= 1.0)
27-38	2.30	6.79	830790.45	5642482.7	730346	SI (5642482.7/730346 = 7.73 >= 1.0)
27-39	2.30	6.84	832525.04	5698262.3	730236	SI (5698262.3/730236 = 7.80 >= 1.0)
27-40	2.30	6.54	825259.39	5400485.1	730775	SI (5400485.1/730775 = 7.39 >= 1.0)
27-41	2.30	6.67	837315.28	5583606	729406	SI (5583606/729406 = 7.66 >= 1.0)
27-42	2.30	6.85	830095.11	5686916.4	729945	SI (5686916.4/729945 = 7.79 >= 1.0)
27-43	2.30	6.9	831819.62	5742112.5	729835	SI (5742112.5/729835 = 7.87 >= 1.0)
27-44	2.30	6.61	824604.58	5447735.2	730375	SI (5447735.2/730375 = 7.46 >= 1.0)
27-45	2.30	6.91	832074.28	5749958.2	729804	SI (5749958.2/729804 = 7.88 >= 1.0)
27-46	2.30	6.61	824861.49	5455441.3	730344	SI (5455441.3/730344 = 7.47 >= 1.0)
27-47	2.30	6.67	826583.56	5509348.9	730234	SI (5509348.9/730234 = 7.54 >= 1.0)
27-48	2.30	6.37	819375.22	5221691.8	730773	SI (5221691.8/730773 = 7.15 >= 1.0)
27-49	2.30	6.7	838487.48	5615157.9	729426	SI (5615157.9/729426 = 7.70 >= 1.0)
27-50	2.30	6.88	831256.31	5719080.4	729965	SI (5719080.4/729965 = 7.83 >= 1.0)
27-51	2.30	6.93	832983.22	5774590.4	729855	SI (5774590.4/729855 = 7.91 >= 1.0)
27-52	2.30	6.63	825757.2	5478516.4	730395	SI (5478516.4/730395 = 7.50 >= 1.0)
27-53	2.30	6.94	833238.69	5782487.4	729824	SI (5782487.4/729824 = 7.92 >= 1.0)
27-54	2.30	6.64	826014.93	5486272.6	730364	SI (5486272.6/730364 = 7.51 >= 1.0)
27-55	2.30	6.69	827739.39	5540486.8	730254	SI (5540486.8/730254 = 7.59 >= 1.0)
27-56	2.30	6.4	820520.1	5251172.6	730793	SI (5251172.6/730793 = 7.19 >= 1.0)
27-57	2.30	6.52	832460.39	5427549.6	729424	SI (5427549.6/729424 = 7.44 >= 1.0)
27-58	2.30	6.7	825286.78	5527769.6	729963	SI (5527769.6/729963 = 7.57 >= 1.0)
27-59	2.30	6.75	827001.14	5581399.9	729853	SI (5581399.9/729853 = 7.65 >= 1.0)
27-60	2.30	6.46	819832.56	5295483.6	730393	SI (5295483.6/730393 = 7.25 >= 1.0)
27-61	2.30	6.76	827252.39	5588993.5	729822	SI (5588993.5/729822 = 7.66 >= 1.0)
27-62	2.30	6.47	820086.07	5302943.3	730362	SI (5302943.3/730362 = 7.26 >= 1.0)
27-63	2.30	6.52	821798	5355321.9	730252	SI (5355321.9/730252 = 7.33 >= 1.0)
27-64	2.30	6.23	814636.02	5075927.3	730791	SI (5075927.3/730791 = 6.95 >= 1.0)
28-1	2.30	7.81	859603.76	6715194.6	729880	SI (6715194.6/729880 = 9.20 >= 1.0)
28-2	2.30	7.17	839680.4	6018204.1	729873	SI (6018204.1/729873 = 8.25 >= 1.0)
28-3	2.30	7.27	843554.91	6130463.4	729940	SI (6130463.4/729940 = 8.40 >= 1.0)
28-4	2.30	6.65	823632.69	5477770.2	729933	SI (5477770.2/729933 = 7.50 >= 1.0)
28-5	2.30	7.29	844210	6151675.3	729861	SI (6151675.3/729861 = 8.43 >= 1.0)
28-6	2.30	6.67	824286.14	5497302	729855	SI (5497302/729855 = 7.53 >= 1.0)
28-7	2.30	6.77	828161.84	5602617.7	729921	SI (5602617.7/729921 = 7.68 >= 1.0)
28-8	2.30	6.18	808239.14	4990915.4	729915	SI (4990915.4/729915 = 6.84 >= 1.0)
28-9	2.30	7.71	857356.58	6610244.9	730042	SI (6610244.9/730042 = 9.05 >= 1.0)
28-10	2.30	7.07	837490.7	5924381.9	730035	SI (5924381.9/730035 = 8.12 >= 1.0)
28-11	2.30	7.17	841354.24	6034860.5	730102	SI (6034860.5/730102 = 8.27 >= 1.0)
28-12	2.30	6.56	821489.49	5392591	730095	SI (5392591/730095 = 7.39 >= 1.0)
28-13	2.30	7.19	842007.18	6055725.4	730023	SI (6055725.4/730023 = 8.30 >= 1.0)
28-14	2.30	6.58	822140.81	5411803.4	730017	SI (5411803.4/730017 = 7.41 >= 1.0)
28-15	2.30	6.68	826005.52	5515447.5	730083	SI (5515447.5/730083 = 7.55 >= 1.0)
28-16	2.30	6.1	806140.3	4913515.6	730077	SI (4913515.6/730077 = 6.73 >= 1.0)

28-17	2.30	7.73	857891.37	6629574.3	730008	SI (6629574.3/730008 = 9.08 >= 1.0)
28-18	2.30	7.09	838013.25	5941692.9	730002	SI (5941692.9/730002 = 8.14 >= 1.0)
28-19	2.30	7.19	841878.86	6052489.2	730068	SI (6052489.2/730068 = 8.29 >= 1.0)
28-20	2.30	6.58	822001.89	5408327.8	730062	SI (5408327.8/730062 = 7.41 >= 1.0)
28-21	2.30	7.21	842532.59	6073423.6	729990	SI (6073423.6/729990 = 8.32 >= 1.0)
28-22	2.30	6.6	822653.68	5427598.4	729984	SI (5427598.4/729984 = 7.44 >= 1.0)
28-23	2.30	6.69	826520.78	5531547	730050	SI (5531547/730050 = 7.58 >= 1.0)
28-24	2.30	6.11	806643.02	4927834	730044	SI (4927834/730044 = 6.75 >= 1.0)
28-25	2.30	7.63	855644.68	6525359.6	730170	SI (6525359.6/730170 = 8.94 >= 1.0)
28-26	2.30	7	835824.01	5848525.8	730164	SI (5848525.8/730164 = 8.01 >= 1.0)
28-27	2.30	7.1	839678.64	5957554.2	730230	SI (5957554.2/730230 = 8.16 >= 1.0)
28-28	2.30	6.49	819859.11	5323741.4	730224	SI (5323741.4/730224 = 7.29 >= 1.0)
28-29	2.30	7.11	840330.23	5978144.1	730152	SI (5978144.1/730152 = 8.19 >= 1.0)
28-30	2.30	6.51	820508.42	5342688.4	730145	SI (5342688.4/730145 = 7.32 >= 1.0)
28-31	2.30	6.61	824364.89	5444983.9	730212	SI (5444983.9/730212 = 7.46 >= 1.0)
28-32	2.30	6.03	804544.2	4850964.5	730205	SI (4850964.5/730205 = 6.64 >= 1.0)
28-33	2.30	7.73	857974.16	6632388.5	729999	SI (6632388.5/729999 = 9.09 >= 1.0)
28-34	2.30	7.09	838091.5	5944170.8	729992	SI (5944170.8/729992 = 8.14 >= 1.0)
28-35	2.30	7.19	841958.24	6055026.7	730059	SI (6055026.7/730059 = 8.29 >= 1.0)
28-36	2.30	6.58	822076.71	5410551.6	730052	SI (5410551.6/730052 = 7.41 >= 1.0)
28-37	2.30	7.21	842612.12	6075971.4	729981	SI (6075971.4/729981 = 8.32 >= 1.0)
28-38	2.30	6.6	822728.65	5429831.6	729974	SI (5429831.6/729974 = 7.44 >= 1.0)
28-39	2.30	6.69	826596.91	5533836.4	730041	SI (5533836.4/730041 = 7.58 >= 1.0)
28-40	2.30	6.11	806714.57	4929830.8	730034	SI (4929830.8/730034 = 6.75 >= 1.0)
28-41	2.30	7.63	855727.66	6528158	730161	SI (6528158/730161 = 8.94 >= 1.0)
28-42	2.30	7	835902.45	5850990.2	730154	SI (5850990.2/730154 = 8.01 >= 1.0)
28-43	2.30	7.1	839758.22	5960077.8	730221	SI (5960077.8/730221 = 8.16 >= 1.0)
28-44	2.30	6.5	819934.13	5325953.5	730214	SI (5325953.5/730214 = 7.29 >= 1.0)
28-45	2.30	7.12	840409.96	5980678	730143	SI (5980678/730143 = 8.19 >= 1.0)
28-46	2.30	6.51	820583.94	5344916.4	730136	SI (5344916.4/730136 = 7.32 >= 1.0)
28-47	2.30	6.61	824441.22	5447261.2	730203	SI (5447261.2/730203 = 7.46 >= 1.0)
28-48	2.30	6.03	804616.31	4852957.6	730196	SI (4852957.6/730196 = 6.65 >= 1.0)
28-49	2.30	7.65	856262.52	6547356.9	730128	SI (6547356.9/730128 = 8.97 >= 1.0)
28-50	2.30	7.02	836424.77	5868178.8	730121	SI (5868178.8/730121 = 8.04 >= 1.0)
28-51	2.30	7.11	840282.94	5977588.3	730188	SI (5977588.3/730188 = 8.19 >= 1.0)
28-52	2.30	6.51	820446.31	5341579.1	730181	SI (5341579.1/730181 = 7.32 >= 1.0)
28-53	2.30	7.13	840935.15	5998251.2	730110	SI (5998251.2/730110 = 8.22 >= 1.0)
28-54	2.30	6.53	821096.59	5360599.8	730103	SI (5360599.8/730103 = 7.34 >= 1.0)
28-55	2.30	6.62	824956.26	5463247	730170	SI (5463247/730170 = 7.48 >= 1.0)
28-56	2.30	6.05	805118.83	4867175.1	730163	SI (4867175.1/730163 = 6.67 >= 1.0)
28-57	2.30	7.55	854016.51	6443860.3	730290	SI (6443860.3/730290 = 8.82 >= 1.0)
28-58	2.30	6.92	834236.17	5775652.3	730283	SI (5775652.3/730283 = 7.91 >= 1.0)
28-59	2.30	7.02	838083.37	5883306.1	730350	SI (5883306.1/730350 = 8.06 >= 1.0)
28-60	2.30	6.42	818304.15	5257572.9	730343	SI (5257572.9/730343 = 7.20 >= 1.0)
28-61	2.30	7.04	838733.44	5903627.1	730272	SI (5903627.1/730272 = 8.08 >= 1.0)
28-62	2.30	6.44	818952.3	5276278.9	730265	SI (5276278.9/730265 = 7.23 >= 1.0)
28-63	2.30	6.54	822800.99	5377278.1	730332	SI (5377278.1/730332 = 7.36 >= 1.0)
28-64	2.30	5.97	803020.97	4790837.9	730325	SI (4790837.9/730325 = 6.56 >= 1.0)

Scorrimento.

Le seguenti tabelle elencano il valore dell'angolo di resistenza al taglio, della coesione efficace, dell'attrito e dell'aderenza fondazione-terreno, e della resistenza disponibile sul piano di posa e sulle pareti laterali.

Caso	γ_{ϕ}	γ_c	ϕ [°]	c' [daN/cm ²]	δ [°]	a [daN/cm ²]	γ_{R_h}	γ_{R_e}	R_h [daN]	R_e [daN]
1-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	219870.51	24724.68
2-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	270582.85	24724.36
3-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	259176.2	24724.68
4-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	256914.72	24720.55
5-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	309888.87	24724.36
6-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	307627.4	24720.24
7-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	296220.74	24720.55
8-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	346933.08	24720.24
9-1	-	-	27	0.07	20.2	0	1.10	1.30	160153.65	18529.01
9-2	-	-	27	0.07	20.2	0	1.10	1.30	160153.65	18529.01
9-3	-	-	27	0.07	20.2	0	1.10	1.30	160149.62	18524.2
9-4	-	-	27	0.07	20.2	0	1.10	1.30	160149.62	18524.2
9-5	-	-	27	0.07	20.2	0	1.10	1.30	160153.65	18529.01
9-6	-	-	27	0.07	20.2	0	1.10	1.30	160153.65	18529.01
9-7	-	-	27	0.07	20.2	0	1.10	1.30	160149.62	18524.2

9-8	-	-	27	0.07	20.2	0	1.10	1.30	160149.62	18524.2
9-9	-	-	27	0.07	20.2	0	1.10	1.30	160151.63	19513.51
9-10	-	-	27	0.07	20.2	0	1.10	1.30	160151.63	19513.51
9-11	-	-	27	0.07	20.2	0	1.10	1.30	160159.35	19459.99
9-12	-	-	27	0.07	20.2	0	1.10	1.30	160159.68	19459.99
9-13	-	-	27	0.07	20.2	0	1.10	1.30	160151.63	19513.51
9-14	-	-	27	0.07	20.2	0	1.10	1.30	160151.63	19513.51
9-15	-	-	27	0.07	20.2	0	1.10	1.30	160159.68	19459.99
9-16	-	-	27	0.07	20.2	0	1.10	1.30	160159.68	19459.99
10-1	-	-	27	0.07	20.2	0	1.10	1.30	160154.99	18880.33
10-2	-	-	27	0.07	20.2	0	1.10	1.30	160154.99	18880.33
10-3	-	-	27	0.07	20.2	0	1.10	1.30	160154.32	19232.09
10-4	-	-	27	0.07	20.2	0	1.10	1.30	160154.32	19232.09
10-5	-	-	27	0.07	20.2	0	1.10	1.30	160154.99	18880.33
10-6	-	-	27	0.07	20.2	0	1.10	1.30	160154.99	18880.33
10-7	-	-	27	0.07	20.2	0	1.10	1.30	160154.32	19232.09
10-8	-	-	27	0.07	20.2	0	1.10	1.30	160154.32	19232.09
10-9	-	-	27	0.07	20.2	0	1.10	1.30	160224.08	18793.26
10-10	-	-	27	0.07	20.2	0	1.10	1.30	160224.41	18793.26
10-11	-	-	27	0.07	20.2	0	1.10	1.30	160197.92	19086.83
10-12	-	-	27	0.07	20.2	0	1.10	1.30	160198.25	19086.83
10-13	-	-	27	0.07	20.2	0	1.10	1.30	160220.72	18793.26
10-14	-	-	27	0.07	20.2	0	1.10	1.30	160221.06	18793.26
10-15	-	-	27	0.07	20.2	0	1.10	1.30	160196.24	19086.83
10-16	-	-	27	0.07	20.2	0	1.10	1.30	160196.58	19086.83
11-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	199096.65	24271.88
11-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	199347.85	25419.7
11-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	199095.98	24254.96
11-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	199346.85	25360.37
12-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	199185.86	24512.62
12-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	199182.51	24416.03
12-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	199260.99	25054.72
12-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	199257.97	24878.91
13-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	191513.34	24088.73
13-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	191713.23	25325.27
13-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	191521.73	24084.04
13-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	191721.62	25274.35
14-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	191573.38	24556.22
14-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	191601.21	24466.25
14-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	191633.41	24999.81
14-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	191661.25	24853.87
15-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	190018.55	24058.43
15-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	190203.68	25303.19
15-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	190015.87	24055.53
15-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	190201	25254.17
16-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	190086.3	24559.14
16-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	190077.58	24471.73
16-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	190141.64	24985.13
16-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	190133.25	24845.57
17-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225196.7	25029.32
17-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225447.56	24910.09
17-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225195.69	24973.88
17-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225446.56	24859
17-5	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225396.25	24610.79
17-6	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225647.45	25728.55
17-7	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225395.58	24573.73
17-8	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225646.45	25688.95
17-9	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225205.08	24981.64
17-10	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225455.95	24866.12
17-11	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225204.08	24930.82
17-12	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225454.94	24819.56
17-13	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225404.64	24578.87
17-14	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225655.84	25695.02
17-15	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225403.96	24545.46
17-16	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225654.83	25652.3
18-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225345.61	24271.57
18-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225342.59	24213.89
18-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225421.07	24933.59
18-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225418.05	24756.14
18-5	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225373.45	24220.72
18-6	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225370.43	24181.29

18-7	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225448.91	24777.88
18-8	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225445.89	24649.77
18-9	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225405.64	24833.63
18-10	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225402.62	24671.24
18-11	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225481.1	25335.19
18-12	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225477.75	25117.04
18-13	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225433.48	24690.99
18-14	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225430.46	24575.08
18-15	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225508.94	25145
18-16	1.00	1.00	27	0.07	20.2	0	1.10	1.00	225505.92	24975.83
19-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223701.57	25007.59
19-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223952.77	24931.46
19-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223700.9	24952.94
19-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223951.76	24879.58
19-5	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223887.04	24574.7
19-6	1.00	1.00	27	0.07	20.2	0	1.10	1.00	224137.9	25720.29
19-7	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223886.03	24539.6
19-8	1.00	1.00	27	0.07	20.2	0	1.10	1.00	224136.89	25679.1
19-9	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223699.22	24962.18
19-10	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223950.09	24888.33
19-11	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223698.22	24911.98
19-12	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223949.42	24840.85
19-13	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223884.35	24545.49
19-14	1.00	1.00	27	0.07	20.2	0	1.10	1.00	224135.55	25686.66
19-15	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223883.35	24513.76
19-16	1.00	1.00	27	0.07	20.2	0	1.10	1.00	224134.55	25642.79
20-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223858.53	24276.56
20-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223855.51	24218.04
20-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223933.65	24934.86
20-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223930.63	24757.86
20-5	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223849.81	24226.47
20-6	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223846.79	24185.91
20-7	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223925.27	24784.22
20-8	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223922.25	24654.87
20-9	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223913.87	24815.85
20-10	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223910.85	24656.85
20-11	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223989.33	25321.36
20-12	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223986.31	25104.66
20-13	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223905.48	24680.34
20-14	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223902.46	24565.64
20-15	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223980.94	25138.31
20-16	1.00	1.00	27	0.07	20.2	0	1.10	1.00	223977.59	24969.17
21-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216118.26	24867.85
21-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216318.15	24786.16
21-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216126.65	24825.62
21-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216326.53	24747
21-5	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216303.39	24729.32
21-6	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216503.28	25675.86
21-7	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216311.78	24692.46
21-8	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216511.66	25635.27
21-9	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216115.58	24827.06
21-10	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216315.47	24748.33
21-11	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216123.96	24788.51
21-12	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216323.85	24712.7
21-13	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216300.71	24693.7
21-14	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216500.6	25636.74
21-15	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216309.09	24660.22
21-16	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216508.98	25595.1
22-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216246.04	24334.45
22-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216274.21	24273.41
22-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216306.08	24871.2
22-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216333.91	24726.56
22-5	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216237.66	24275.2
22-6	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216265.49	24232.69
22-7	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216297.69	24730.9
22-8	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216325.53	24625.71
22-9	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216301.72	24852.41
22-10	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216329.55	24710.23
22-11	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216361.75	25267.66
22-12	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216389.59	25084.55
22-13	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216293.33	24714.48

22-14	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216321.17	24611.3
22-15	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216353.03	25090.25
22-16	1.00	1.00	27	0.07	20.2	0	1.10	1.00	216381.2	24948.56
23-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249801.62	25529.88
23-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250001.5	24257.53
23-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249810	25478.28
23-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250009.55	24242.88
23-5	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249986.75	24328.71
23-6	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250186.63	25258.36
23-7	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249995.13	24310.16
23-8	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250195.02	25204.56
23-9	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249798.93	25480.09
23-10	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249998.82	24243.37
23-11	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249807.32	25430.11
23-12	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250007.2	24230.27
23-13	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249984.06	24310.78
23-14	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250183.95	25206.41
23-15	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249992.45	24294.16
23-16	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250192.34	25156.28
23-17	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250052.48	24147.49
23-18	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250252.37	25485.24
23-19	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250060.87	24139.08
23-20	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250260.75	25432.36
23-21	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250237.61	25453.43
23-22	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250437.5	25780.38
23-23	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250246	25399.91
23-24	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250445.88	25789.49
23-25	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250050.13	24139.36
23-26	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250250.02	25434.2
23-27	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250058.52	24131.86
23-28	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250258.07	25383.45
23-29	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250235.26	25401.77
23-30	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250435.15	25789.39
23-31	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250243.65	25350.7
23-32	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250443.54	25787.45
23-33	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249800.61	25469.6
23-34	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250000.5	24240.54
23-35	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249808.99	25420.01
23-36	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250008.88	24227.74
23-37	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249985.74	24307.19
23-38	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250185.63	25195.73
23-39	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249994.12	24290.95
23-40	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250194.01	25146.36
23-41	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249797.93	25421.74
23-42	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249997.81	24228.17
23-43	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249806.31	25374.12
23-44	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250006.2	24216.65
23-45	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249983.06	24291.5
23-46	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250182.94	25148.05
23-47	1.00	1.00	27	0.07	20.2	0	1.10	1.00	249991.44	24276.85
23-48	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250191.33	25102.04
23-49	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250051.48	24137.74
23-50	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250251.36	25423.51
23-51	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250059.86	24130.41
23-52	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250259.75	25373.25
23-53	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250236.94	25390.99
23-54	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250436.83	25789.82
23-55	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250245.33	25340.46
23-56	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250444.88	25785.91
23-57	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250049.13	24130.65
23-58	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250249.01	25374.99
23-59	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250057.51	24124.06
23-60	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250257.4	25327.06
23-61	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250234.26	25342.21
23-62	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250434.15	25786.2
23-63	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250242.64	25294.24
23-64	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250442.53	25774.6
24-1	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250018.27	24067.2
24-2	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250046.44	24053.71
24-3	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250078.31	24642.57
24-4	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250106.14	24515.81

24-5	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250009.89	24054.09
24-6	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250037.72	24045.27
24-7	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250069.92	24519.46
24-8	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250097.76	24433.33
24-9	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250073.95	24618.06
24-10	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250101.78	24495.61
24-11	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250133.98	25156.96
24-12	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250161.82	24957.47
24-13	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250065.56	24499.13
24-14	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250093.4	24416.11
24-15	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250125.26	24963.46
24-16	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250153.43	24818.51
24-17	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250015.25	24051.96
24-18	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250043.09	24043.82
24-19	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250075.29	24498.94
24-20	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250103.12	24418.96
24-21	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250006.87	24044.07
24-22	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250034.71	24038.25
24-23	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250066.9	24421.37
24-24	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250094.74	24362.95
24-25	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250070.93	24479.34
24-26	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250098.76	24402.28
24-27	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250130.96	24929.6
24-28	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250158.8	24793.63
24-29	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250062.21	24404.59
24-30	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250090.38	24348.37
24-31	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250122.24	24797.8
24-32	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250150.08	24694.81
24-33	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250093.73	24766.99
24-34	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250121.57	24619.3
24-35	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250153.77	25263.57
24-36	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250181.6	25055.32
24-37	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250085.35	24623.58
24-38	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250113.19	24522
24-39	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250145.05	25061.66
24-40	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250173.22	24906.83
24-41	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250149.41	25247.22
24-42	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250177.24	25040.1
24-43	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250209.1	25581.01
24-44	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250237.28	25375.36
24-45	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250140.69	25046.39
24-46	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250168.86	24893
24-47	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250200.72	25382.14
24-48	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250228.56	25208.94
24-49	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250090.71	24599.46
24-50	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250118.55	24504.98
24-51	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250150.75	25025.73
24-52	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250178.58	24880.02
24-53	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250081.99	24507.83
24-54	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250110.17	24438.34
24-55	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250142.03	24884.52
24-56	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250169.86	24772.86
24-57	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250146.05	25010.76
24-58	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250174.22	24866.48
24-59	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250206.09	25343.32
24-60	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250233.92	25177.51
24-61	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250137.67	24870.93
24-62	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250165.5	24760.58
24-63	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250197.7	25182.81
24-64	1.00	1.00	27	0.07	20.2	0	1.10	1.00	250225.54	25048.26
25-1	-	-	27	0.07	20.2	0	1.10	1.30	160153.98	18592.91
25-2	-	-	27	0.07	20.2	0	1.10	1.30	160153.98	18592.91
25-3	-	-	27	0.07	20.2	0	1.10	1.30	160150.96	18585.94
25-4	-	-	27	0.07	20.2	0	1.10	1.30	160150.96	18585.94
25-5	-	-	27	0.07	20.2	0	1.10	1.30	160153.98	18592.91
25-6	-	-	27	0.07	20.2	0	1.10	1.30	160153.98	18592.91
25-7	-	-	27	0.07	20.2	0	1.10	1.30	160150.96	18585.94
25-8	-	-	27	0.07	20.2	0	1.10	1.30	160150.96	18585.94
25-9	-	-	27	0.07	20.2	0	1.10	1.30	160152.3	19397.26
25-10	-	-	27	0.07	20.2	0	1.10	1.30	160152.3	19397.26
25-11	-	-	27	0.07	20.2	0	1.10	1.30	160149.62	19359.22

25-12	-	-	27	0.07	20.2	0	1.10	1.30	160149.96	19359.22
25-13	-	-	27	0.07	20.2	0	1.10	1.30	160152.3	19397.26
25-14	-	-	27	0.07	20.2	0	1.10	1.30	160152.3	19397.26
25-15	-	-	27	0.07	20.2	0	1.10	1.30	160149.62	19359.22
25-16	-	-	27	0.07	20.2	0	1.10	1.30	160149.96	19359.22
26-1	-	-	27	0.07	20.2	0	1.10	1.30	160154.65	18922.37
26-2	-	-	27	0.07	20.2	0	1.10	1.30	160154.65	18922.37
26-3	-	-	27	0.07	20.2	0	1.10	1.30	160154.32	19172.71
26-4	-	-	27	0.07	20.2	0	1.10	1.30	160154.32	19172.71
26-5	-	-	27	0.07	20.2	0	1.10	1.30	160154.65	18922.37
26-6	-	-	27	0.07	20.2	0	1.10	1.30	160154.65	18922.37
26-7	-	-	27	0.07	20.2	0	1.10	1.30	160154.32	19172.71
26-8	-	-	27	0.07	20.2	0	1.10	1.30	160154.32	19172.71
26-9	-	-	27	0.07	20.2	0	1.10	1.30	160145.6	18851.07
26-10	-	-	27	0.07	20.2	0	1.10	1.30	160145.6	18851.07
26-11	-	-	27	0.07	20.2	0	1.10	1.30	160151.97	19070.5
26-12	-	-	27	0.07	20.2	0	1.10	1.30	160151.97	19070.5
26-13	-	-	27	0.07	20.2	0	1.10	1.30	160145.6	18851.07
26-14	-	-	27	0.07	20.2	0	1.10	1.30	160145.6	18851.07
26-15	-	-	27	0.07	20.2	0	1.10	1.30	160151.97	19070.5
26-16	-	-	27	0.07	20.2	0	1.10	1.30	160151.97	19070.5
27-1	-	-	27	0.07	20.2	0	1.10	1.30	244631.51	19293.72
27-2	-	-	27	0.07	20.2	0	1.10	1.30	244812.62	18716.43
27-3	-	-	27	0.07	20.2	0	1.10	1.30	244775.73	18508.46
27-4	-	-	27	0.07	20.2	0	1.10	1.30	244956.83	19467.78
27-5	-	-	27	0.07	20.2	0	1.10	1.30	244764.99	18466.92
27-6	-	-	27	0.07	20.2	0	1.10	1.30	244946.1	19446.13
27-7	-	-	27	0.07	20.2	0	1.10	1.30	244909.21	19321.63
27-8	-	-	27	0.07	20.2	0	1.10	1.30	245090.31	19800.66
27-9	-	-	27	0.07	20.2	0	1.10	1.30	244630.84	19261.55
27-10	-	-	27	0.07	20.2	0	1.10	1.30	244811.95	18704.49
27-11	-	-	27	0.07	20.2	0	1.10	1.30	244775.05	18506.32
27-12	-	-	27	0.07	20.2	0	1.10	1.30	244956.16	19433.32
27-13	-	-	27	0.07	20.2	0	1.10	1.30	244764.32	18466.84
27-14	-	-	27	0.07	20.2	0	1.10	1.30	244945.43	19411.79
27-15	-	-	27	0.07	20.2	0	1.10	1.30	244908.54	19288.91
27-16	-	-	27	0.07	20.2	0	1.10	1.30	245089.64	19780.6
27-17	-	-	27	0.07	20.2	0	1.10	1.30	244637.55	19266.11
27-18	-	-	27	0.07	20.2	0	1.10	1.30	244818.65	18706.17
27-19	-	-	27	0.07	20.2	0	1.10	1.30	244781.76	18506.62
27-20	-	-	27	0.07	20.2	0	1.10	1.30	244962.87	19438.24
27-21	-	-	27	0.07	20.2	0	1.10	1.30	244771.03	18466.85
27-22	-	-	27	0.07	20.2	0	1.10	1.30	244952.14	19416.69
27-23	-	-	27	0.07	20.2	0	1.10	1.30	244915.24	19293.55
27-24	-	-	27	0.07	20.2	0	1.10	1.30	245096.35	19783.68
27-25	-	-	27	0.07	20.2	0	1.10	1.30	244636.88	19235.85
27-26	-	-	27	0.07	20.2	0	1.10	1.30	244817.98	18695.16
27-27	-	-	27	0.07	20.2	0	1.10	1.30	244781.09	18504.65
27-28	-	-	27	0.07	20.2	0	1.10	1.30	244962.2	19405.39
27-29	-	-	27	0.07	20.2	0	1.10	1.30	244770.36	18466.77
27-30	-	-	27	0.07	20.2	0	1.10	1.30	244951.47	19384.01
27-31	-	-	27	0.07	20.2	0	1.10	1.30	244914.57	19262.72
27-32	-	-	27	0.07	20.2	0	1.10	1.30	245095.68	19761.9
27-33	-	-	27	0.07	20.2	0	1.10	1.30	244629.83	19267.07
27-34	-	-	27	0.07	20.2	0	1.10	1.30	244810.61	18706.52
27-35	-	-	27	0.07	20.2	0	1.10	1.30	244773.71	18506.68
27-36	-	-	27	0.07	20.2	0	1.10	1.30	244954.82	19439.27
27-37	-	-	27	0.07	20.2	0	1.10	1.30	244763.32	18466.85
27-38	-	-	27	0.07	20.2	0	1.10	1.30	244944.42	19417.71
27-39	-	-	27	0.07	20.2	0	1.10	1.30	244907.53	19294.52
27-40	-	-	27	0.07	20.2	0	1.10	1.30	245088.3	19784.31
27-41	-	-	27	0.07	20.2	0	1.10	1.30	244629.16	19236.74
27-42	-	-	27	0.07	20.2	0	1.10	1.30	244809.93	18695.48
27-43	-	-	27	0.07	20.2	0	1.10	1.30	244773.04	18504.71
27-44	-	-	27	0.07	20.2	0	1.10	1.30	244954.15	19406.36
27-45	-	-	27	0.07	20.2	0	1.10	1.30	244762.65	18466.77
27-46	-	-	27	0.07	20.2	0	1.10	1.30	244943.75	19384.98
27-47	-	-	27	0.07	20.2	0	1.10	1.30	244906.86	19263.63
27-48	-	-	27	0.07	20.2	0	1.10	1.30	245087.63	19762.58
27-49	-	-	27	0.07	20.2	0	1.10	1.30	244635.87	19241.04
27-50	-	-	27	0.07	20.2	0	1.10	1.30	244816.64	18697.03

27-51	-	-	27	0.07	20.2	0	1.10	1.30	244779.75	18504.98
27-52	-	-	27	0.07	20.2	0	1.10	1.30	244960.86	19411.06
27-53	-	-	27	0.07	20.2	0	1.10	1.30	244769.35	18466.78
27-54	-	-	27	0.07	20.2	0	1.10	1.30	244950.46	19389.65
27-55	-	-	27	0.07	20.2	0	1.10	1.30	244913.57	19268.01
27-56	-	-	27	0.07	20.2	0	1.10	1.30	245094.34	19765.86
27-57	-	-	27	0.07	20.2	0	1.10	1.30	244635.2	19212.49
27-58	-	-	27	0.07	20.2	0	1.10	1.30	244815.97	18686.82
27-59	-	-	27	0.07	20.2	0	1.10	1.30	244779.08	18503.16
27-60	-	-	27	0.07	20.2	0	1.10	1.30	244960.19	19379.69
27-61	-	-	27	0.07	20.2	0	1.10	1.30	244768.68	18466.71
27-62	-	-	27	0.07	20.2	0	1.10	1.30	244949.79	19358.51
27-63	-	-	27	0.07	20.2	0	1.10	1.30	244912.9	19238.88
27-64	-	-	27	0.07	20.2	0	1.10	1.30	245093.67	19742.92
28-1	-	-	27	0.07	20.2	0	1.10	1.30	244788.13	18648.96
28-2	-	-	27	0.07	20.2	0	1.10	1.30	244785.79	18618.08
28-3	-	-	27	0.07	20.2	0	1.10	1.30	244808.26	18621.93
28-4	-	-	27	0.07	20.2	0	1.10	1.30	244805.91	18598.89
28-5	-	-	27	0.07	20.2	0	1.10	1.30	244781.76	18622.76
28-6	-	-	27	0.07	20.2	0	1.10	1.30	244779.75	18599.49
28-7	-	-	27	0.07	20.2	0	1.10	1.30	244801.89	18602.46
28-8	-	-	27	0.07	20.2	0	1.10	1.30	244799.87	18584.45
28-9	-	-	27	0.07	20.2	0	1.10	1.30	244842.47	19038.78
28-10	-	-	27	0.07	20.2	0	1.10	1.30	244840.12	18950.63
28-11	-	-	27	0.07	20.2	0	1.10	1.30	244862.59	18961.83
28-12	-	-	27	0.07	20.2	0	1.10	1.30	244860.24	18894.07
28-13	-	-	27	0.07	20.2	0	1.10	1.30	244836.09	18964.21
28-14	-	-	27	0.07	20.2	0	1.10	1.30	244834.08	18895.86
28-15	-	-	27	0.07	20.2	0	1.10	1.30	244856.22	18904.68
28-16	-	-	27	0.07	20.2	0	1.10	1.30	244854.2	18850.63
28-17	-	-	27	0.07	20.2	0	1.10	1.30	244831.06	18977.41
28-18	-	-	27	0.07	20.2	0	1.10	1.30	244829.05	18897.31
28-19	-	-	27	0.07	20.2	0	1.10	1.30	244851.19	18907.45
28-20	-	-	27	0.07	20.2	0	1.10	1.30	244849.17	18846.24
28-21	-	-	27	0.07	20.2	0	1.10	1.30	244825.03	18909.61
28-22	-	-	27	0.07	20.2	0	1.10	1.30	244823.01	18847.85
28-23	-	-	27	0.07	20.2	0	1.10	1.30	244845.15	18855.8
28-24	-	-	27	0.07	20.2	0	1.10	1.30	244843.14	18807.17
28-25	-	-	27	0.07	20.2	0	1.10	1.30	244885.4	19301.89
28-26	-	-	27	0.07	20.2	0	1.10	1.30	244883.38	19185.42
28-27	-	-	27	0.07	20.2	0	1.10	1.30	244905.52	19200.53
28-28	-	-	27	0.07	20.2	0	1.10	1.30	244903.51	19107.83
28-29	-	-	27	0.07	20.2	0	1.10	1.30	244879.36	19203.74
28-30	-	-	27	0.07	20.2	0	1.10	1.30	244877.01	19110.31
28-31	-	-	27	0.07	20.2	0	1.10	1.30	244899.48	19122.54
28-32	-	-	27	0.07	20.2	0	1.10	1.30	244897.13	19046.88
28-33	-	-	27	0.07	20.2	0	1.10	1.30	244828.04	18965.46
28-34	-	-	27	0.07	20.2	0	1.10	1.30	244825.7	18886.98
28-35	-	-	27	0.07	20.2	0	1.10	1.30	244848.17	18896.91
28-36	-	-	27	0.07	20.2	0	1.10	1.30	244845.82	18837
28-37	-	-	27	0.07	20.2	0	1.10	1.30	244822.01	18899.03
28-38	-	-	27	0.07	20.2	0	1.10	1.30	244819.66	18838.58
28-39	-	-	27	0.07	20.2	0	1.10	1.30	244842.13	18846.35
28-40	-	-	27	0.07	20.2	0	1.10	1.30	244839.78	18798.8
28-41	-	-	27	0.07	20.2	0	1.10	1.30	244882.38	19292.54
28-42	-	-	27	0.07	20.2	0	1.10	1.30	244880.03	19176.87
28-43	-	-	27	0.07	20.2	0	1.10	1.30	244902.5	19191.85
28-44	-	-	27	0.07	20.2	0	1.10	1.30	244900.15	19099.93
28-45	-	-	27	0.07	20.2	0	1.10	1.30	244876.34	19195.04
28-46	-	-	27	0.07	20.2	0	1.10	1.30	244873.99	19102.39
28-47	-	-	27	0.07	20.2	0	1.10	1.30	244896.46	19114.51
28-48	-	-	27	0.07	20.2	0	1.10	1.30	244894.12	19039.55
28-49	-	-	27	0.07	20.2	0	1.10	1.30	244871.31	19242.03
28-50	-	-	27	0.07	20.2	0	1.10	1.30	244868.96	19130.94
28-51	-	-	27	0.07	20.2	0	1.10	1.30	244891.43	19145.26
28-52	-	-	27	0.07	20.2	0	1.10	1.30	244889.08	19057.69
28-53	-	-	27	0.07	20.2	0	1.10	1.30	244865.27	19148.31
28-54	-	-	27	0.07	20.2	0	1.10	1.30	244862.92	19060.03
28-55	-	-	27	0.07	20.2	0	1.10	1.30	244885.4	19071.54
28-56	-	-	27	0.07	20.2	0	1.10	1.30	244883.05	19000.51
28-57	-	-	27	0.07	20.2	0	1.10	1.30	244925.64	19503.33

28-58	-	-	27	0.07	20.2	0	1.10	1.30	244923.29	19375.82
28-59	-	-	27	0.07	20.2	0	1.10	1.30	244945.76	19392.83
28-60	-	-	27	0.07	20.2	0	1.10	1.30	244943.42	19286.54
28-61	-	-	27	0.07	20.2	0	1.10	1.30	244919.6	19396.43
28-62	-	-	27	0.07	20.2	0	1.10	1.30	244917.26	19289.44
28-63	-	-	27	0.07	20.2	0	1.10	1.30	244939.73	19303.7
28-64	-	-	27	0.07	20.2	0	1.10	1.30	244937.38	19214.37

Segue il confronto fra la resistenza a scorrimento e l'azione applicata.

Caso	R_d [daN]	E_d [daN]	Verifica
1-1	244595.2	220848.2	SI (244595.2/220848.2 = 1.11 >= 1.0)
2-1	295307.2	220847.4	SI (295307.2/220847.4 = 1.34 >= 1.0)
3-1	283900.9	220848.2	SI (283900.9/220848.2 = 1.29 >= 1.0)
4-1	281635.3	220837.5	SI (281635.3/220837.5 = 1.28 >= 1.0)
5-1	334613.2	220847.4	SI (334613.2/220847.4 = 1.52 >= 1.0)
6-1	332347.6	220836.7	SI (332347.6/220836.7 = 1.50 >= 1.0)
7-1	320941.3	220837.5	SI (320941.3/220837.5 = 1.45 >= 1.0)
8-1	371653.3	220836.7	SI (371653.3/220836.7 = 1.68 >= 1.0)
9-1	178682.7	143403.2	SI (178682.7/143403.2 = 1.25 >= 1.0)
9-2	178682.7	143403.2	SI (178682.7/143403.2 = 1.25 >= 1.0)
9-3	178673.8	155246	SI (178673.8/155246 = 1.15 >= 1.0)
9-4	178673.8	155246	SI (178673.8/155246 = 1.15 >= 1.0)
9-5	178682.7	143403.2	SI (178682.7/143403.2 = 1.25 >= 1.0)
9-6	178682.7	143403.2	SI (178682.7/143403.2 = 1.25 >= 1.0)
9-7	178673.8	155246	SI (178673.8/155246 = 1.15 >= 1.0)
9-8	178673.8	155246	SI (178673.8/155246 = 1.15 >= 1.0)
9-9	179665.1	146111.2	SI (179665.1/146111.2 = 1.23 >= 1.0)
9-10	179665.1	146111.2	SI (179665.1/146111.2 = 1.23 >= 1.0)
9-11	179619.3	157750.9	SI (179619.3/157750.9 = 1.14 >= 1.0)
9-12	179619.7	157750.9	SI (179619.7/157750.9 = 1.14 >= 1.0)
9-13	179665.1	146111.2	SI (179665.1/146111.2 = 1.23 >= 1.0)
9-14	179665.1	146111.2	SI (179665.1/146111.2 = 1.23 >= 1.0)
9-15	179619.7	157750.9	SI (179619.7/157750.9 = 1.14 >= 1.0)
9-16	179619.7	157750.9	SI (179619.7/157750.9 = 1.14 >= 1.0)
10-1	179035.3	135977.8	SI (179035.3/135977.8 = 1.32 >= 1.0)
10-2	179035.3	135977.8	SI (179035.3/135977.8 = 1.32 >= 1.0)
10-3	179386.4	136806	SI (179386.4/136806 = 1.31 >= 1.0)
10-4	179386.4	136806	SI (179386.4/136806 = 1.31 >= 1.0)
10-5	179035.3	135977.8	SI (179035.3/135977.8 = 1.32 >= 1.0)
10-6	179035.3	135977.8	SI (179035.3/135977.8 = 1.32 >= 1.0)
10-7	179386.4	136806	SI (179386.4/136806 = 1.31 >= 1.0)
10-8	179386.4	136806	SI (179386.4/136806 = 1.31 >= 1.0)
10-9	179017.3	175396.2	SI (179017.3/175396.2 = 1.02 >= 1.0)
10-10	179017.7	175396.2	SI (179017.7/175396.2 = 1.02 >= 1.0)
10-11	179284.7	176039.1	SI (179284.7/176039.1 = 1.02 >= 1.0)
10-12	179285.1	176039.1	SI (179285.1/176039.1 = 1.02 >= 1.0)
10-13	179014	175396.2	SI (179014/175396.2 = 1.02 >= 1.0)
10-14	179014.3	175396.2	SI (179014.3/175396.2 = 1.02 >= 1.0)
10-15	179283.1	176039.1	SI (179283.1/176039.1 = 1.02 >= 1.0)
10-16	179283.4	176039.1	SI (179283.4/176039.1 = 1.02 >= 1.0)
11-1	223368.5	141761.9	SI (223368.5/141761.9 = 1.58 >= 1.0)
11-2	224767.6	144719.4	SI (224767.6/144719.4 = 1.55 >= 1.0)
11-3	223350.9	151737.1	SI (223350.9/151737.1 = 1.47 >= 1.0)
11-4	224707.2	154503.8	SI (224707.2/154503.8 = 1.45 >= 1.0)
12-1	223698.5	130278.6	SI (223698.5/130278.6 = 1.72 >= 1.0)
12-2	223598.5	163498	SI (223598.5/163498 = 1.37 >= 1.0)
12-3	224315.7	131250.5	SI (224315.7/131250.5 = 1.71 >= 1.0)
12-4	224136.9	164273.5	SI (224136.9/164273.5 = 1.36 >= 1.0)
13-1	215602.1	142436	SI (215602.1/142436 = 1.51 >= 1.0)
13-2	217038.5	144879.7	SI (217038.5/144879.7 = 1.50 >= 1.0)
13-3	215605.8	150955.4	SI (215605.8/150955.4 = 1.43 >= 1.0)
13-4	216996	153263.4	SI (216996/153263.4 = 1.42 >= 1.0)
14-1	216129.6	132759.7	SI (216129.6/132759.7 = 1.63 >= 1.0)
14-2	216067.5	161111.5	SI (216067.5/161111.5 = 1.34 >= 1.0)
14-3	216633.2	133550.6	SI (216633.2/133550.6 = 1.62 >= 1.0)
14-4	216515.1	161763.9	SI (216515.1/161763.9 = 1.34 >= 1.0)
15-1	214077	142584	SI (214077/142584 = 1.50 >= 1.0)
15-2	215506.9	144914.4	SI (215506.9/144914.4 = 1.49 >= 1.0)
15-3	214071.4	150800.6	SI (214071.4/150800.6 = 1.42 >= 1.0)
15-4	215455.2	153005.9	SI (215455.2/153005.9 = 1.41 >= 1.0)
16-1	214645.4	133268.8	SI (214645.4/133268.8 = 1.61 >= 1.0)

16-2	214549.3	160611.4	SI (214549.3/160611.4 = 1.34 >= 1.0)
16-3	215126.8	134020.8	SI (215126.8/134020.8 = 1.61 >= 1.0)
16-4	214978.8	161235.9	SI (214978.8/161235.9 = 1.33 >= 1.0)
17-1	250226	138624.5	SI (250226/138624.5 = 1.81 >= 1.0)
17-2	250357.7	138311.7	SI (250357.7/138311.7 = 1.81 >= 1.0)
17-3	250169.6	148524.2	SI (250169.6/148524.2 = 1.68 >= 1.0)
17-4	250305.6	148232.4	SI (250305.6/148232.4 = 1.69 >= 1.0)
17-5	250007	137784.7	SI (250007/137784.7 = 1.81 >= 1.0)
17-6	251376	144103.5	SI (251376/144103.5 = 1.74 >= 1.0)
17-7	249969.3	147740.8	SI (249969.3/147740.8 = 1.69 >= 1.0)
17-8	251335.4	153650.6	SI (251335.4/153650.6 = 1.64 >= 1.0)
17-9	250186.7	147075.7	SI (250186.7/147075.7 = 1.70 >= 1.0)
17-10	250322.1	146781	SI (250322.1/146781 = 1.71 >= 1.0)
17-11	250134.9	156984.1	SI (250134.9/156984.1 = 1.59 >= 1.0)
17-12	250274.5	156708	SI (250274.5/156708 = 1.60 >= 1.0)
17-13	249983.5	146284.5	SI (249983.5/146284.5 = 1.71 >= 1.0)
17-14	251350.9	152250.9	SI (251350.9/152250.9 = 1.65 >= 1.0)
17-15	249949.4	156243.1	SI (249949.4/156243.1 = 1.60 >= 1.0)
17-16	251307.1	161842.8	SI (251307.1/161842.8 = 1.55 >= 1.0)
18-1	249617.2	115908.4	SI (249617.2/115908.4 = 2.15 >= 1.0)
18-2	249556.5	149161.5	SI (249556.5/149161.5 = 1.67 >= 1.0)
18-3	250354.7	116640	SI (250354.7/116640 = 2.15 >= 1.0)
18-4	250174.2	149730.7	SI (250174.2/149730.7 = 1.67 >= 1.0)
18-5	249594.2	144297.8	SI (249594.2/144297.8 = 1.73 >= 1.0)
18-6	249551.7	177554.5	SI (249551.7/177554.5 = 1.41 >= 1.0)
18-7	250226.8	144886.2	SI (250226.8/144886.2 = 1.73 >= 1.0)
18-8	250095.7	178033	SI (250095.7/178033 = 1.40 >= 1.0)
18-9	250239.3	116452.7	SI (250239.3/116452.7 = 2.15 >= 1.0)
18-10	250073.9	149584.9	SI (250073.9/149584.9 = 1.67 >= 1.0)
18-11	250816.3	117896.1	SI (250816.3/117896.1 = 2.13 >= 1.0)
18-12	250594.8	150711.2	SI (250594.8/150711.2 = 1.66 >= 1.0)
18-13	250124.5	144735.4	SI (250124.5/144735.4 = 1.73 >= 1.0)
18-14	250005.5	177910.4	SI (250005.5/177910.4 = 1.41 >= 1.0)
18-15	250653.9	145899.2	SI (250653.9/145899.2 = 1.72 >= 1.0)
18-16	250481.7	178858.4	SI (250481.7/178858.4 = 1.40 >= 1.0)
19-1	248709.2	138714.8	SI (248709.2/138714.8 = 1.79 >= 1.0)
19-2	248884.2	138515.1	SI (248884.2/138515.1 = 1.80 >= 1.0)
19-3	248653.8	148618.7	SI (248653.8/148618.7 = 1.67 >= 1.0)
19-4	248831.3	148432.4	SI (248831.3/148432.4 = 1.68 >= 1.0)
19-5	248461.7	137892.7	SI (248461.7/137892.7 = 1.80 >= 1.0)
19-6	249858.2	144059.5	SI (249858.2/144059.5 = 1.73 >= 1.0)
19-7	248425.6	147851.6	SI (248425.6/147851.6 = 1.68 >= 1.0)
19-8	249816	153619.2	SI (249816/153619.2 = 1.63 >= 1.0)
19-9	248661.4	146868.7	SI (248661.4/146868.7 = 1.69 >= 1.0)
19-10	248838.4	146680.2	SI (248838.4/146680.2 = 1.70 >= 1.0)
19-11	248610.2	156780.5	SI (248610.2/156780.5 = 1.59 >= 1.0)
19-12	248790.3	156604	SI (248790.3/156604 = 1.59 >= 1.0)
19-13	248429.8	146092.5	SI (248429.8/146092.5 = 1.70 >= 1.0)
19-14	249822.2	151926.9	SI (249822.2/151926.9 = 1.64 >= 1.0)
19-15	248397.1	156053.7	SI (248397.1/156053.7 = 1.59 >= 1.0)
19-16	249777.3	161528.6	SI (249777.3/161528.6 = 1.55 >= 1.0)
20-1	248135.1	116415.6	SI (248135.1/116415.6 = 2.13 >= 1.0)
20-2	248073.5	149668.2	SI (248073.5/149668.2 = 1.66 >= 1.0)
20-3	248868.5	117151	SI (248868.5/117151 = 2.12 >= 1.0)
20-4	248688.5	150241	SI (248688.5/150241 = 1.66 >= 1.0)
20-5	248076.3	143794.8	SI (248076.3/143794.8 = 1.73 >= 1.0)
20-6	248032.7	177051.1	SI (248032.7/177051.1 = 1.40 >= 1.0)
20-7	248709.5	144390.9	SI (248709.5/144390.9 = 1.72 >= 1.0)
20-8	248577.1	177535.6	SI (248577.1/177535.6 = 1.40 >= 1.0)
20-9	248729.7	116930.5	SI (248729.7/116930.5 = 2.13 >= 1.0)
20-10	248567.7	150069.1	SI (248567.7/150069.1 = 1.66 >= 1.0)
20-11	249310.7	118346.9	SI (249310.7/118346.9 = 2.11 >= 1.0)
20-12	249091	151175.3	SI (249091/151175.3 = 1.65 >= 1.0)
20-13	248585.8	144212.1	SI (248585.8/144212.1 = 1.72 >= 1.0)
20-14	248468.1	177390.2	SI (248468.1/177390.2 = 1.40 >= 1.0)
20-15	249119.3	145362.9	SI (249119.3/145362.9 = 1.71 >= 1.0)
20-16	248946.8	178327	SI (248946.8/178327 = 1.40 >= 1.0)
21-1	240986.1	139103.2	SI (240986.1/139103.2 = 1.73 >= 1.0)
21-2	241104.3	138939.6	SI (241104.3/138939.6 = 1.74 >= 1.0)
21-3	240952.3	147577.8	SI (240952.3/147577.8 = 1.63 >= 1.0)
21-4	241073.5	147423.7	SI (241073.5/147423.7 = 1.64 >= 1.0)

21-5	241032.7	138840.5	SI (241032.7/138840.5 = 1.74 >= 1.0)
21-6	242179.1	143934.7	SI (242179.1/143934.7 = 1.68 >= 1.0)
21-7	241004.2	147330.3	SI (241004.2/147330.3 = 1.64 >= 1.0)
21-8	242146.9	152140.5	SI (242146.9/152140.5 = 1.59 >= 1.0)
21-9	240942.6	147276.3	SI (240942.6/147276.3 = 1.64 >= 1.0)
21-10	241063.8	147121.9	SI (241063.8/147121.9 = 1.64 >= 1.0)
21-11	240912.5	155755.8	SI (240912.5/155755.8 = 1.55 >= 1.0)
21-12	241036.5	155609.7	SI (241036.5/155609.7 = 1.55 >= 1.0)
21-13	240994.4	147028.3	SI (240994.4/147028.3 = 1.64 >= 1.0)
21-14	242137.3	151848	SI (242137.3/151848 = 1.59 >= 1.0)
21-15	240969.3	155521.2	SI (240969.3/155521.2 = 1.55 >= 1.0)
21-16	242104.1	160085.5	SI (242104.1/160085.5 = 1.51 >= 1.0)
22-1	240580.5	118875.7	SI (240580.5/118875.7 = 2.02 >= 1.0)
22-2	240547.6	147259.6	SI (240547.6/147259.6 = 1.63 >= 1.0)
22-3	241177.3	119473.1	SI (241177.3/119473.1 = 2.02 >= 1.0)
22-4	241060.5	147742.3	SI (241060.5/147742.3 = 1.63 >= 1.0)
22-5	240512.9	146250	SI (240512.9/146250 = 1.64 >= 1.0)
22-6	240498.2	174638.7	SI (240498.2/174638.7 = 1.38 >= 1.0)
22-7	241028.6	146736	SI (241028.6/146736 = 1.64 >= 1.0)
22-8	240951.2	175045.9	SI (240951.2/175045.9 = 1.38 >= 1.0)
22-9	241154.1	119438.6	SI (241154.1/119438.6 = 2.02 >= 1.0)
22-10	241039.8	147714.3	SI (241039.8/147714.3 = 1.63 >= 1.0)
22-11	241629.4	120588.9	SI (241629.4/120588.9 = 2.00 >= 1.0)
22-12	241474.1	148646	SI (241474.1/148646 = 1.62 >= 1.0)
22-13	241007.8	146707.8	SI (241007.8/146707.8 = 1.64 >= 1.0)
22-14	240932.5	175022.3	SI (240932.5/175022.3 = 1.38 >= 1.0)
22-15	241443.3	147645.9	SI (241443.3/147645.9 = 1.64 >= 1.0)
22-16	241329.8	175809.4	SI (241329.8/175809.4 = 1.37 >= 1.0)
23-1	275331.5	137007	SI (275331.5/137007 = 2.01 >= 1.0)
23-2	274259	133383.6	SI (274259/133383.6 = 2.06 >= 1.0)
23-3	275288.3	145311.5	SI (275288.3/145311.5 = 1.89 >= 1.0)
23-4	274252.4	141900.3	SI (274252.4/141900.3 = 1.93 >= 1.0)
23-5	274315.5	133418.6	SI (274315.5/133418.6 = 2.06 >= 1.0)
23-6	275445	135302.6	SI (275445/135302.6 = 2.04 >= 1.0)
23-7	274305.3	141933.2	SI (274305.3/141933.2 = 1.93 >= 1.0)
23-8	275399.6	143705.6	SI (275399.6/143705.6 = 1.92 >= 1.0)
23-9	275279	145015.7	SI (275279/145015.7 = 1.90 >= 1.0)
23-10	274242.2	141597.4	SI (274242.2/141597.4 = 1.94 >= 1.0)
23-11	275237.4	153343	SI (275237.4/153343 = 1.79 >= 1.0)
23-12	274237.5	150114.4	SI (274237.5/150114.4 = 1.83 >= 1.0)
23-13	274294.8	141630.4	SI (274294.8/141630.4 = 1.94 >= 1.0)
23-14	275390.4	143406.5	SI (275390.4/143406.5 = 1.92 >= 1.0)
23-15	274286.6	150145.5	SI (274286.6/150145.5 = 1.83 >= 1.0)
23-16	275348.6	151822.1	SI (275348.6/151822.1 = 1.81 >= 1.0)
23-17	274200	133348	SI (274200/133348 = 2.06 >= 1.0)
23-18	275737.6	136637.3	SI (275737.6/136637.3 = 2.02 >= 1.0)
23-19	274199.9	141866.8	SI (274199.9/141866.8 = 1.93 >= 1.0)
23-20	275693.1	144962.9	SI (275693.1/144962.9 = 1.90 >= 1.0)
23-21	275691	136401.6	SI (275691/136401.6 = 2.02 >= 1.0)
23-22	276217.9	144842.8	SI (276217.9/144842.8 = 1.91 >= 1.0)
23-23	275645.9	144740.8	SI (275645.9/144740.8 = 1.90 >= 1.0)
23-24	276235.4	152721.8	SI (276235.4/152721.8 = 1.81 >= 1.0)
23-25	274189.5	141563.8	SI (274189.5/141563.8 = 1.94 >= 1.0)
23-26	275684.2	144666.5	SI (275684.2/144666.5 = 1.91 >= 1.0)
23-27	274190.4	150082.8	SI (274190.4/150082.8 = 1.83 >= 1.0)
23-28	275641.5	153012.7	SI (275641.5/153012.7 = 1.80 >= 1.0)
23-29	275637	144443.8	SI (275637/144443.8 = 1.91 >= 1.0)
23-30	276224.5	152440.4	SI (276224.5/152440.4 = 1.81 >= 1.0)
23-31	275594.3	152802.3	SI (275594.3/152802.3 = 1.80 >= 1.0)
23-32	276231	160382.7	SI (276231/160382.7 = 1.72 >= 1.0)
23-33	275270.2	146736.6	SI (275270.2/146736.6 = 1.88 >= 1.0)
23-34	274241	143359.3	SI (274241/143359.3 = 1.91 >= 1.0)
23-35	275229	155068.3	SI (275229/155068.3 = 1.77 >= 1.0)
23-36	274236.6	151876.4	SI (274236.6/151876.4 = 1.81 >= 1.0)
23-37	274292.9	143391.9	SI (274292.9/143391.9 = 1.91 >= 1.0)
23-38	275381.4	145146.5	SI (275381.4/145146.5 = 1.90 >= 1.0)
23-39	274285.1	151907.2	SI (274285.1/151907.2 = 1.81 >= 1.0)
23-40	275340.4	153564.5	SI (275340.4/153564.5 = 1.79 >= 1.0)
23-41	275219.7	154771.6	SI (275219.7/154771.6 = 1.78 >= 1.0)
23-42	274226	151573.5	SI (274226/151573.5 = 1.81 >= 1.0)
23-43	275180.4	163122.1	SI (275180.4/163122.1 = 1.69 >= 1.0)

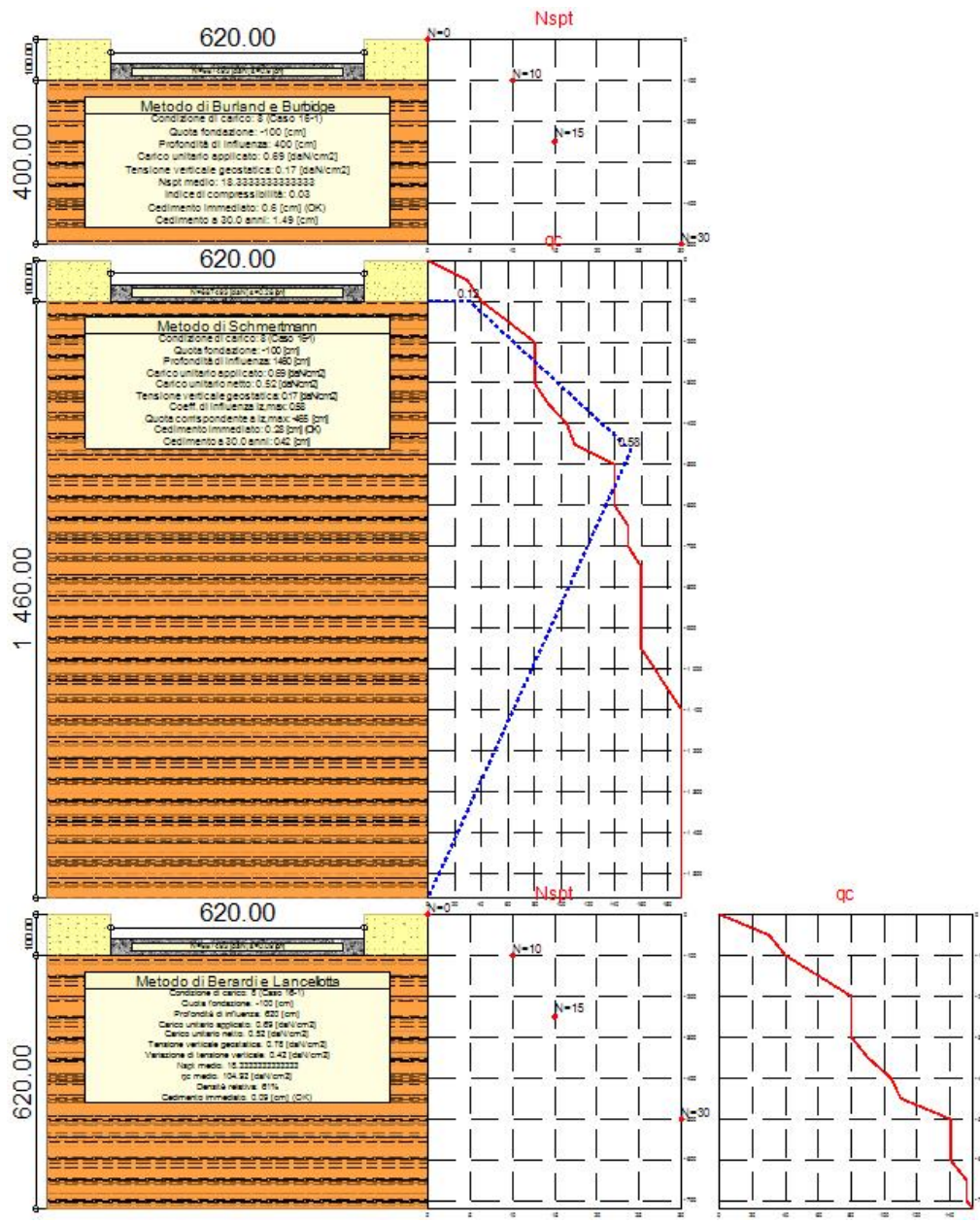
23-44	274222.8	160090.9	SI (274222.8/160090.9 = 1.71 >= 1.0)
23-45	274274.6	151604.3	SI (274274.6/151604.3 = 1.81 >= 1.0)
23-46	275331	153264.9	SI (275331/153264.9 = 1.80 >= 1.0)
23-47	274268.3	160120	SI (274268.3/160120 = 1.71 >= 1.0)
23-48	275293.4	161693.2	SI (275293.4/161693.2 = 1.70 >= 1.0)
23-49	274189.2	143326.2	SI (274189.2/143326.2 = 1.91 >= 1.0)
23-50	275674.9	146391.4	SI (275674.9/146391.4 = 1.88 >= 1.0)
23-51	274190.3	151845.1	SI (274190.3/151845.1 = 1.81 >= 1.0)
23-52	275633	154741.7	SI (275633/154741.7 = 1.78 >= 1.0)
23-53	275627.9	146171.4	SI (275627.9/146171.4 = 1.89 >= 1.0)
23-54	276226.6	154078.4	SI (276226.6/154078.4 = 1.79 >= 1.0)
23-55	275585.8	154533.6	SI (275585.8/154533.6 = 1.78 >= 1.0)
23-56	276230.8	162033	SI (276230.8/162033 = 1.70 >= 1.0)
23-57	274179.8	151542.1	SI (274179.8/151542.1 = 1.81 >= 1.0)
23-58	275624	154444.4	SI (275624/154444.4 = 1.78 >= 1.0)
23-59	274181.6	160061.2	SI (274181.6/160061.2 = 1.71 >= 1.0)
23-60	275584.5	162811.7	SI (275584.5/162811.7 = 1.69 >= 1.0)
23-61	275576.5	154235.9	SI (275576.5/154235.9 = 1.79 >= 1.0)
23-62	276220.3	161749.1	SI (276220.3/161749.1 = 1.71 >= 1.0)
23-63	275536.9	162613.9	SI (275536.9/162613.9 = 1.69 >= 1.0)
23-64	276217.1	169756.7	SI (276217.1/169756.7 = 1.63 >= 1.0)
24-1	274085.5	102165.9	SI (274085.5/102165.9 = 2.68 >= 1.0)
24-2	274100.2	130564.7	SI (274100.2/130564.7 = 2.10 >= 1.0)
24-3	274720.9	102450.5	SI (274720.9/102450.5 = 2.68 >= 1.0)
24-4	274622	130787.5	SI (274622/130787.5 = 2.10 >= 1.0)
24-5	274064	129554.7	SI (274064/129554.7 = 2.12 >= 1.0)
24-6	274083	157953.6	SI (274083/157953.6 = 1.74 >= 1.0)
24-7	274589.4	129779.2	SI (274589.4/129779.2 = 2.12 >= 1.0)
24-8	274531.1	158137.8	SI (274531.1/158137.8 = 1.74 >= 1.0)
24-9	274692	102426.4	SI (274692/102426.4 = 2.68 >= 1.0)
24-10	274597.4	130768.6	SI (274597.4/130768.6 = 2.10 >= 1.0)
24-11	275290.9	103359.2	SI (275290.9/103359.2 = 2.66 >= 1.0)
24-12	275119.3	131500.6	SI (275119.3/131500.6 = 2.09 >= 1.0)
24-13	274564.7	129760.2	SI (274564.7/129760.2 = 2.12 >= 1.0)
24-14	274509.5	158122.2	SI (274509.5/158122.2 = 1.74 >= 1.0)
24-15	275088.7	130497.8	SI (275088.7/130497.8 = 2.11 >= 1.0)
24-16	274971.9	158728.1	SI (274971.9/158728.1 = 1.73 >= 1.0)
24-17	274067.2	135429.6	SI (274067.2/135429.6 = 2.02 >= 1.0)
24-18	274086.9	163828.6	SI (274086.9/163828.6 = 1.67 >= 1.0)
24-19	274574.2	135644.4	SI (274574.2/135644.4 = 2.02 >= 1.0)
24-20	274522.1	164006.2	SI (274522.1/164006.2 = 1.67 >= 1.0)
24-21	274050.9	162818.5	SI (274050.9/162818.5 = 1.68 >= 1.0)
24-22	274073	191217.6	SI (274073/191217.6 = 1.43 >= 1.0)
24-23	274488.3	162997.3	SI (274488.3/162997.3 = 1.68 >= 1.0)
24-24	274457.7	191369.8	SI (274457.7/191369.8 = 1.43 >= 1.0)
24-25	274550.3	135626.2	SI (274550.3/135626.2 = 2.02 >= 1.0)
24-26	274501	163991.1	SI (274501/163991.1 = 1.67 >= 1.0)
24-27	275060.6	136332.1	SI (275060.6/136332.1 = 2.02 >= 1.0)
24-28	274952.4	164575.4	SI (274952.4/164575.4 = 1.67 >= 1.0)
24-29	274466.8	162982.1	SI (274466.8/162982.1 = 1.68 >= 1.0)
24-30	274438.8	191356.9	SI (274438.8/191356.9 = 1.43 >= 1.0)
24-31	274920	163570	SI (274920/163570 = 1.68 >= 1.0)
24-32	274844.9	191857.8	SI (274844.9/191857.8 = 1.43 >= 1.0)
24-33	274860.7	102594.3	SI (274860.7/102594.3 = 2.68 >= 1.0)
24-34	274740.9	130900.2	SI (274740.9/130900.2 = 2.10 >= 1.0)
24-35	275417.3	103691.5	SI (275417.3/103691.5 = 2.66 >= 1.0)
24-36	275236.9	131761.9	SI (275236.9/131761.9 = 2.09 >= 1.0)
24-37	274708.9	129892.8	SI (274708.9/129892.8 = 2.11 >= 1.0)
24-38	274635.2	158231.1	SI (274635.2/158231.1 = 1.74 >= 1.0)
24-39	275206.7	130761.1	SI (275206.7/130761.1 = 2.10 >= 1.0)
24-40	275080.1	158944.6	SI (275080.1/158944.6 = 1.73 >= 1.0)
24-41	275396.6	103635.7	SI (275396.6/103635.7 = 2.66 >= 1.0)
24-42	275217.3	131718	SI (275217.3/131718 = 2.09 >= 1.0)
24-43	275790.1	105358.6	SI (275790.1/105358.6 = 2.62 >= 1.0)
24-44	275612.6	133077.8	SI (275612.6/133077.8 = 2.07 >= 1.0)
24-45	275187.1	130716.9	SI (275187.1/130716.9 = 2.11 >= 1.0)
24-46	275061.9	158908.3	SI (275061.9/158908.3 = 1.73 >= 1.0)
24-47	275582.9	132087	SI (275582.9/132087 = 2.09 >= 1.0)
24-48	275437.5	160037.2	SI (275437.5/160037.2 = 1.72 >= 1.0)
24-49	274690.2	135753.1	SI (274690.2/135753.1 = 2.02 >= 1.0)
24-50	274623.5	164096.1	SI (274623.5/164096.1 = 1.67 >= 1.0)

24-51	275176.5	136584.2	SI (275176.5/136584.2 = 2.01 >= 1.0)
24-52	275058.6	164784.3	SI (275058.6/164784.3 = 1.67 >= 1.0)
24-53	274589.8	163087.7	SI (274589.8/163087.7 = 1.68 >= 1.0)
24-54	274548.5	191446.9	SI (274548.5/191446.9 = 1.43 >= 1.0)
24-55	275026.5	163780.1	SI (275026.5/163780.1 = 1.68 >= 1.0)
24-56	274942.7	192037.1	SI (274942.7/192037.1 = 1.43 >= 1.0)
24-57	275156.8	136541.8	SI (275156.8/136541.8 = 2.02 >= 1.0)
24-58	275040.7	164749.2	SI (275040.7/164749.2 = 1.67 >= 1.0)
24-59	275549.4	137854	SI (275549.4/137854 = 2.00 >= 1.0)
24-60	275411.4	165838.4	SI (275411.4/165838.4 = 1.66 >= 1.0)
24-61	275008.6	163744.8	SI (275008.6/163744.8 = 1.68 >= 1.0)
24-62	274926.1	192006.9	SI (274926.1/192006.9 = 1.43 >= 1.0)
24-63	275380.5	164840.6	SI (275380.5/164840.6 = 1.67 >= 1.0)
24-64	275273.8	192942.3	SI (275273.8/192942.3 = 1.43 >= 1.0)
25-1	178746.9	144339.6	SI (178746.9/144339.6 = 1.24 >= 1.0)
25-2	178746.9	144339.6	SI (178746.9/144339.6 = 1.24 >= 1.0)
25-3	178736.9	152877.3	SI (178736.9/152877.3 = 1.17 >= 1.0)
25-4	178736.9	152877.3	SI (178736.9/152877.3 = 1.17 >= 1.0)
25-5	178746.9	144339.6	SI (178746.9/144339.6 = 1.24 >= 1.0)
25-6	178746.9	144339.6	SI (178746.9/144339.6 = 1.24 >= 1.0)
25-7	178736.9	152877.3	SI (178736.9/152877.3 = 1.17 >= 1.0)
25-8	178736.9	152877.3	SI (178736.9/152877.3 = 1.17 >= 1.0)
25-9	179549.6	146254.2	SI (179549.6/146254.2 = 1.23 >= 1.0)
25-10	179549.6	146254.2	SI (179549.6/146254.2 = 1.23 >= 1.0)
25-11	179508.8	154686.3	SI (179508.8/154686.3 = 1.16 >= 1.0)
25-12	179509.2	154686.3	SI (179509.2/154686.3 = 1.16 >= 1.0)
25-13	179549.6	146254.2	SI (179549.6/146254.2 = 1.23 >= 1.0)
25-14	179549.6	146254.2	SI (179549.6/146254.2 = 1.23 >= 1.0)
25-15	179508.8	154686.3	SI (179508.8/154686.3 = 1.16 >= 1.0)
25-16	179509.2	154686.3	SI (179509.2/154686.3 = 1.16 >= 1.0)
26-1	179077	139109.7	SI (179077/139109.7 = 1.29 >= 1.0)
26-2	179077	139109.7	SI (179077/139109.7 = 1.29 >= 1.0)
26-3	179327	139691.1	SI (179327/139691.1 = 1.28 >= 1.0)
26-4	179327	139691.1	SI (179327/139691.1 = 1.28 >= 1.0)
26-5	179077	139109.7	SI (179077/139109.7 = 1.29 >= 1.0)
26-6	179077	139109.7	SI (179077/139109.7 = 1.29 >= 1.0)
26-7	179327	139691.1	SI (179327/139691.1 = 1.28 >= 1.0)
26-8	179327	139691.1	SI (179327/139691.1 = 1.28 >= 1.0)
26-9	178996.7	167516.5	SI (178996.7/167516.5 = 1.07 >= 1.0)
26-10	178996.7	167516.5	SI (178996.7/167516.5 = 1.07 >= 1.0)
26-11	179222.5	167999.6	SI (179222.5/167999.6 = 1.07 >= 1.0)
26-12	179222.5	167999.6	SI (179222.5/167999.6 = 1.07 >= 1.0)
26-13	178996.7	167516.5	SI (178996.7/167516.5 = 1.07 >= 1.0)
26-14	178996.7	167516.5	SI (178996.7/167516.5 = 1.07 >= 1.0)
26-15	179222.5	167999.6	SI (179222.5/167999.6 = 1.07 >= 1.0)
26-16	179222.5	167999.6	SI (179222.5/167999.6 = 1.07 >= 1.0)
27-1	263925.2	138401.2	SI (263925.2/138401.2 = 1.91 >= 1.0)
27-2	263529	137149.4	SI (263529/137149.4 = 1.92 >= 1.0)
27-3	263284.2	137061.4	SI (263284.2/137061.4 = 1.92 >= 1.0)
27-4	264424.6	139326.5	SI (264424.6/139326.5 = 1.90 >= 1.0)
27-5	263231.9	137059	SI (263231.9/137059 = 1.92 >= 1.0)
27-6	264392.2	139186.5	SI (264392.2/139186.5 = 1.90 >= 1.0)
27-7	264230.8	138522.8	SI (264230.8/138522.8 = 1.91 >= 1.0)
27-8	264891	144039	SI (264891/144039 = 1.84 >= 1.0)
27-9	263892.4	145529.9	SI (263892.4/145529.9 = 1.81 >= 1.0)
27-10	263516.4	144340	SI (263516.4/144340 = 1.83 >= 1.0)
27-11	263281.4	144256.4	SI (263281.4/144256.4 = 1.83 >= 1.0)
27-12	264389.5	146410.1	SI (264389.5/146410.1 = 1.81 >= 1.0)
27-13	263231.2	144254	SI (263231.2/144254 = 1.82 >= 1.0)
27-14	264357.2	146276.9	SI (264357.2/146276.9 = 1.81 >= 1.0)
27-15	264197.4	145645.6	SI (264197.4/145645.6 = 1.81 >= 1.0)
27-16	264870.2	150901.6	SI (264870.2/150901.6 = 1.76 >= 1.0)
27-17	263903.7	144486.9	SI (263903.7/144486.9 = 1.83 >= 1.0)
27-18	263524.8	143288.3	SI (263524.8/143288.3 = 1.84 >= 1.0)
27-19	263288.4	143204.1	SI (263288.4/143204.1 = 1.84 >= 1.0)
27-20	264401.1	145373.4	SI (264401.1/145373.4 = 1.82 >= 1.0)
27-21	263237.9	143201.7	SI (263237.9/143201.7 = 1.84 >= 1.0)
27-22	264368.8	145239.3	SI (264368.8/145239.3 = 1.82 >= 1.0)
27-23	264208.8	144603.4	SI (264208.8/144603.4 = 1.83 >= 1.0)
27-24	264880	149896	SI (264880/149896 = 1.77 >= 1.0)
27-25	263872.7	151621	SI (263872.7/151621 = 1.74 >= 1.0)

27-26	263513.1	150479.2	SI (263513.1/150479.2 = 1.75 >= 1.0)
27-27	263285.7	150399	SI (263285.7/150399 = 1.75 >= 1.0)
27-28	264367.6	152466	SI (264367.6/152466 = 1.73 >= 1.0)
27-29	263237.1	150396.8	SI (263237.1/150396.8 = 1.75 >= 1.0)
27-30	264335.5	152338.1	SI (264335.5/152338.1 = 1.74 >= 1.0)
27-31	264177.3	151732	SI (264177.3/151732 = 1.74 >= 1.0)
27-32	264857.6	156784.2	SI (264857.6/156784.2 = 1.69 >= 1.0)
27-33	263896.9	144270.4	SI (263896.9/144270.4 = 1.83 >= 1.0)
27-34	263517.1	143070	SI (263517.1/143070 = 1.84 >= 1.0)
27-35	263280.4	142985.6	SI (263280.4/142985.6 = 1.84 >= 1.0)
27-36	264394.1	145158.2	SI (264394.1/145158.2 = 1.82 >= 1.0)
27-37	263230.2	142983.2	SI (263230.2/142983.2 = 1.84 >= 1.0)
27-38	264362.1	145023.9	SI (264362.1/145023.9 = 1.82 >= 1.0)
27-39	264202.1	144387.1	SI (264202.1/144387.1 = 1.83 >= 1.0)
27-40	264872.6	149687.3	SI (264872.6/149687.3 = 1.77 >= 1.0)
27-41	263865.9	151404.3	SI (263865.9/151404.3 = 1.74 >= 1.0)
27-42	263505.4	150260.9	SI (263505.4/150260.9 = 1.75 >= 1.0)
27-43	263277.7	150180.5	SI (263277.7/150180.5 = 1.75 >= 1.0)
27-44	264360.5	152250.5	SI (264360.5/152250.5 = 1.74 >= 1.0)
27-45	263229.4	150178.3	SI (263229.4/150178.3 = 1.75 >= 1.0)
27-46	264328.7	152122.4	SI (264328.7/152122.4 = 1.74 >= 1.0)
27-47	264170.5	151515.5	SI (264170.5/151515.5 = 1.74 >= 1.0)
27-48	264850.2	156574.6	SI (264850.2/156574.6 = 1.69 >= 1.0)
27-49	263876.9	150360.6	SI (263876.9/150360.6 = 1.75 >= 1.0)
27-50	263513.7	149209.2	SI (263513.7/149209.2 = 1.77 >= 1.0)
27-51	263284.7	149128.3	SI (263284.7/149128.3 = 1.77 >= 1.0)
27-52	264371.9	151212.7	SI (264371.9/151212.7 = 1.75 >= 1.0)
27-53	263236.1	149126	SI (263236.1/149126 = 1.77 >= 1.0)
27-54	264340.1	151083.7	SI (264340.1/151083.7 = 1.75 >= 1.0)
27-55	264181.6	150472.5	SI (264181.6/150472.5 = 1.76 >= 1.0)
27-56	264860.2	155565.6	SI (264860.2/155565.6 = 1.70 >= 1.0)
27-57	263847.7	157499.3	SI (263847.7/157499.3 = 1.68 >= 1.0)
27-58	263502.8	156400.4	SI (263502.8/156400.4 = 1.68 >= 1.0)
27-59	263282.2	156323.2	SI (263282.2/156323.2 = 1.68 >= 1.0)
27-60	264339.9	158312.9	SI (264339.9/158312.9 = 1.67 >= 1.0)
27-61	263235.4	156321.1	SI (263235.4/156321.1 = 1.68 >= 1.0)
27-62	264308.3	158189.7	SI (264308.3/158189.7 = 1.67 >= 1.0)
27-63	264151.8	157606.1	SI (264151.8/157606.1 = 1.68 >= 1.0)
27-64	264836.6	162475.7	SI (264836.6/162475.7 = 1.63 >= 1.0)
28-1	263437.1	114625.9	SI (263437.1/114625.9 = 2.30 >= 1.0)
28-2	263403.9	138602.6	SI (263403.9/138602.6 = 1.90 >= 1.0)
28-3	263430.2	135095.8	SI (263430.2/135095.8 = 1.95 >= 1.0)
28-4	263404.8	159074.3	SI (263404.8/159074.3 = 1.66 >= 1.0)
28-5	263404.5	134367.7	SI (263404.5/134367.7 = 1.96 >= 1.0)
28-6	263379.2	158346.2	SI (263379.2/158346.2 = 1.66 >= 1.0)
28-7	263404.3	154839.2	SI (263404.3/154839.2 = 1.70 >= 1.0)
28-8	263384.3	178818.8	SI (263384.3/178818.8 = 1.47 >= 1.0)
28-9	263881.2	115045.6	SI (263881.2/115045.6 = 2.29 >= 1.0)
28-10	263790.8	138949.9	SI (263790.8/138949.9 = 1.90 >= 1.0)
28-11	263824.4	135452.1	SI (263824.4/135452.1 = 1.95 >= 1.0)
28-12	263754.3	159377	SI (263754.3/159377 = 1.65 >= 1.0)
28-13	263800.3	134726	SI (263800.3/134726 = 1.96 >= 1.0)
28-14	263729.9	158650.3	SI (263729.9/158650.3 = 1.66 >= 1.0)
28-15	263760.9	155150.1	SI (263760.9/155150.1 = 1.70 >= 1.0)
28-16	263704.8	179088.1	SI (263704.8/179088.1 = 1.47 >= 1.0)
28-17	263808.5	114941	SI (263808.5/114941 = 2.30 >= 1.0)
28-18	263726.4	138863.3	SI (263726.4/138863.3 = 1.90 >= 1.0)
28-19	263758.6	135363.3	SI (263758.6/135363.3 = 1.95 >= 1.0)
28-20	263695.4	159301.5	SI (263695.4/159301.5 = 1.66 >= 1.0)
28-21	263734.6	134636.6	SI (263734.6/134636.6 = 1.96 >= 1.0)
28-22	263670.9	158574.4	SI (263670.9/158574.4 = 1.66 >= 1.0)
28-23	263700.9	155072.6	SI (263700.9/155072.6 = 1.70 >= 1.0)
28-24	263650.3	179020.9	SI (263650.3/179020.9 = 1.47 >= 1.0)
28-25	264187.3	115737.7	SI (264187.3/115737.7 = 2.28 >= 1.0)
28-26	264068.8	139523.5	SI (264068.8/139523.5 = 1.89 >= 1.0)
28-27	264106	136040.4	SI (264106/136040.4 = 1.94 >= 1.0)
28-28	264011.3	159877.3	SI (264011.3/159877.3 = 1.65 >= 1.0)
28-29	264083.1	135317.4	SI (264083.1/135317.4 = 1.95 >= 1.0)
28-30	263987.3	159152.9	SI (263987.3/159152.9 = 1.66 >= 1.0)
28-31	264022	155664	SI (264022/155664 = 1.70 >= 1.0)
28-32	263944	179533.5	SI (263944/179533.5 = 1.47 >= 1.0)

28-33	263793.5	114922.6	SI (263793.5/114922.6 = 2.30 >= 1.0)
28-34	263712.7	138848.1	SI (263712.7/138848.1 = 1.90 >= 1.0)
28-35	263745.1	135347.6	SI (263745.1/135347.6 = 1.95 >= 1.0)
28-36	263682.8	159288.2	SI (263682.8/159288.2 = 1.66 >= 1.0)
28-37	263721	134620.9	SI (263721/134620.9 = 1.96 >= 1.0)
28-38	263658.2	158561.1	SI (263658.2/158561.1 = 1.66 >= 1.0)
28-39	263688.5	155059	SI (263688.5/155059 = 1.70 >= 1.0)
28-40	263638.6	179009.1	SI (263638.6/179009.1 = 1.47 >= 1.0)
28-41	264174.9	115704.5	SI (264174.9/115704.5 = 2.28 >= 1.0)
28-42	264056.9	139496	SI (264056.9/139496 = 1.89 >= 1.0)
28-43	264094.4	136012.2	SI (264094.4/136012.2 = 1.94 >= 1.0)
28-44	264000.1	159853.3	SI (264000.1/159853.3 = 1.65 >= 1.0)
28-45	264071.4	135289.1	SI (264071.4/135289.1 = 1.95 >= 1.0)
28-46	263976.4	159128.7	SI (263976.4/159128.7 = 1.66 >= 1.0)
28-47	264011	155639.4	SI (264011/155639.4 = 1.70 >= 1.0)
28-48	263933.7	179512.1	SI (263933.7/179512.1 = 1.47 >= 1.0)
28-49	264113.3	115538.2	SI (264113.3/115538.2 = 2.29 >= 1.0)
28-50	263999.9	139358	SI (263999.9/139358 = 1.89 >= 1.0)
28-51	264036.7	135870.7	SI (264036.7/135870.7 = 1.94 >= 1.0)
28-52	263946.8	159732.9	SI (263946.8/159732.9 = 1.65 >= 1.0)
28-53	264013.6	135146.8	SI (264013.6/135146.8 = 1.95 >= 1.0)
28-54	263923	159007.8	SI (263923/159007.8 = 1.66 >= 1.0)
28-55	263956.9	155515.7	SI (263956.9/155515.7 = 1.70 >= 1.0)
28-56	263883.6	179404.9	SI (263883.6/179404.9 = 1.47 >= 1.0)
28-57	264429	116691	SI (264429/116691 = 2.27 >= 1.0)
28-58	264299.1	140315.3	SI (264299.1/140315.3 = 1.88 >= 1.0)
28-59	264338.6	136852.4	SI (264338.6/136852.4 = 1.93 >= 1.0)
28-60	264230	160568.8	SI (264230/160568.8 = 1.65 >= 1.0)
28-61	264316	136133.7	SI (264316/136133.7 = 1.94 >= 1.0)
28-62	264206.7	159847.5	SI (264206.7/159847.5 = 1.65 >= 1.0)
28-63	264243.4	156374.1	SI (264243.4/156374.1 = 1.69 >= 1.0)
28-64	264151.7	180149.5	SI (264151.7/180149.5 = 1.47 >= 1.0)

10.5 VERIFICA CEDIMENTI



Rappresentazione della fondazione.

Descrizione del metodo di calcolo.

Viene valutato il cedimento di una fondazione nastriforme su suolo sabbioso, utilizzando i metodi di seguito descritti. Il metodo di Burland e Burbidge (1985), utilizza i dati raccolti con una prova SPT. Il valore medio di Nspt, entro la profondità di influenza al di sotto della base della fondazione, viene utilizzato per valutare un indice di compressibilità, che con il sovraccarico applicato e le dimensioni della fondazione concorre a valutare il cedimento totale. La profondità di influenza è stata specificata dall'utente, pari a 400.0[cm]. Il metodo di Schmertmann (1970, 1978), utilizza i dati raccolti con una prova CPT. La deformazione verticale del terreno, entro la profondità di influenza al di sotto della base della fondazione, viene calcolata utilizzando il carico netto applicato ed un indice di influenza, funzione delle dimensioni della fondazione e della resistenza alla punta alla quota di interesse. Il cedimento totale è calcolato discretizzando la profondità di influenza in strati di 5 [cm] e sommando i cedimenti parziali ottenuti. Il metodo di Berardi e

Lancellotta (1991), utilizza l'espressione del cedimento fornita dalla teoria dell'elasticità. La densità relativa del deposito sabbioso, la tensione verticale geostatica media e la sua variazione, entro la profondità di influenza al di sotto della base della fondazione, sono utilizzate per calcolare il modulo elastico del terreno, utilizzato per valutare il cedimento totale. La densità relativa può essere correlata ai risultati di prove penetrometriche statiche o dinamiche.

Si verifica che il cedimento immediato sia minore di 4 [cm], e che il cedimento a lungo termine sia minore di 5 [cm].

Descrizione della fondazione.

Fondazione.

La fondazione ha forma rettangolare, con base $B = 620$ [cm] e lunghezza $L = 1610$ [cm]. Il piano di posa è approfondito di 100 [cm].

Terreno.

La stratigrafia è eterogenea, presenta 3 strati

n.	nome	z_i [cm]	z_f [cm]	γ_d [daN/cm ³]	γ_s [daN/cm ³]	OCR
1	Sabbia	0	-100	0.0017	0.00215	1.00
2	Sabbia	-100	-200	0.0019	0.00215	1.00
3	Sabbia	-200	-1000	0.002	0.00215	1.00

La stratigrafia non contiene una falda

Prove penetrometriche.

Segue la tabella dei risultati della prova penetrometrica dinamica utilizzati nei calcoli. Per il calcolo del cedimento col metodo di Berardi e Lancellotta, si utilizzano i valori di N per calcolare la densità relativa del deposito sabbioso con la relazione di Skempton (1986): $D_R = 100 (C_N N_{SPT}/60)^{0.5}$.

z [cm]	$N (N_2+N_3)$
0 [cm]	0
-100 [cm]	10
-250 [cm]	15
-500 [cm]	30
-750 [cm]	30
-1000 [cm]	45
-1500 [cm]	50

Segue la tabella dei risultati della prova penetrometrica statica utilizzati nei calcoli. Per il calcolo del cedimento col metodo di Berardi e Lancellotta, si utilizzano i valori di q_c per calcolare la densità relativa del deposito sabbioso con la relazione di Jamiolkowski (1985): $D_R = -98 + 66 \log_{10}(q_c/(\sigma'_{v0})^{0.5})$

z [cm]	q_c [daN/cm ²]
0	0
-50	30
-100	40
-150	60
-200	80
-250	80
-300	80
-350	90
-400	104
-450	110
-500	140
-550	140
-600	140
-650	150
-700	150
-750	160
-800	160
-850	160
-900	160

-950	160
-1000	170
-1100	190
-1200	190

Risultati.

Sollecitazioni.

Il calcolo è stato eseguito considerando le seguenti condizioni di carico, costituite da una sollecitazione di sforzo normale, applicata alla fondazione in corrispondenza del centro della base.

Numero	Nome	N [daN]
1	Caso 9-1	434966
2	Caso 10-1	535808
3	Caso 11-1	513051
4	Caso 12-1	508604
5	Caso 13-1	613857
6	Caso 14-1	609362
7	Caso 15-1	586688
8	Caso 16-1	687493
9	Caso 19-1	627215

Cedimenti.

Segue l'elenco dei cedimenti corrispondenti a ciascuna condizione di carico. Per il metodo di Burland e Burbidge, i cedimenti differiti sono calcolati per un tempo di 30.0 anni. Per il metodo di Schmertmann, i cedimenti differiti sono calcolati per un tempo di 30.0 anni. Il metodo di Berardi e Lancellotta calcola solo i cedimenti immediati.

Cond. di carico	Ced. immediato [cm]	Ver.	Ced. differito [cm]	Ver.
1) Caso 9-1 (Bur.&Bur.)	0.33	SI	0.84	-
1) Caso 9-1 (Schmer.)	0.11	SI	0.17	-
1) Caso 9-1 (Ber.&Lan.)	0.01	SI	-	-
2) Caso 10-1 (Bur.&Bur.)	0.44	SI	1.1	-
2) Caso 10-1 (Schmer.)	0.18	SI	0.27	-
2) Caso 10-1 (Ber.&Lan.)	0.03	SI	-	-
3) Caso 11-1 (Bur.&Bur.)	0.42	SI	1.04	-
3) Caso 11-1 (Schmer.)	0.16	SI	0.25	-
3) Caso 11-1 (Ber.&Lan.)	0.03	SI	-	-
4) Caso 12-1 (Bur.&Bur.)	0.41	SI	1.03	-
4) Caso 12-1 (Schmer.)	0.16	SI	0.24	-
4) Caso 12-1 (Ber.&Lan.)	0.03	SI	-	-
5) Caso 13-1 (Bur.&Bur.)	0.52	SI	1.3	-
5) Caso 13-1 (Schmer.)	0.23	SI	0.35	-
5) Caso 13-1 (Ber.&Lan.)	0.06	SI	-	-
6) Caso 14-1 (Bur.&Bur.)	0.52	SI	1.29	-
6) Caso 14-1 (Schmer.)	0.23	SI	0.34	-
6) Caso 14-1 (Ber.&Lan.)	0.06	SI	-	-
7) Caso 15-1 (Bur.&Bur.)	0.49	SI	1.23	-
7) Caso 15-1 (Schmer.)	0.21	SI	0.32	-
7) Caso 15-1 (Ber.&Lan.)	0.05	SI	-	-
8) Caso 16-1 (Bur.&Bur.)	0.6	SI	1.49	-
8) Caso 16-1 (Schmer.)	0.28	SI	0.42	-
8) Caso 16-1 (Ber.&Lan.)	0.09	SI	-	-
9) Caso 19-1 (Bur.&Bur.)	0.53	-	1.34	SI
9) Caso 19-1 (Schmer.)	0.24	-	0.36	SI
9) Caso 19-1 (Ber.&Lan.)	0.07	-	-	-

Metodo di Burland e Burbidge.

La tabella successiva riassume i risultati del calcolo col metodo di Burland e Burbidge per la condizione di carico 8, a cui corrisponde il cedimento immediato maggiore.

$$w = \sigma'_{vp} B^{0.7} l_c / 3 + (q' - \sigma'_{vp}) B^{0.7} l_c$$

Il cedimento w viene moltiplicato per f .

Simbolo	Valore	Descrizione
Z _{fon}	-100 [cm]	Quota di base della fondazione
B	620 [cm]	Larghezza della base della fondazione
Z _i	400 [cm]	Profondità di influenza
q'	0.69 [daN/cm ²]	Carico unitario applicato
σ' _{v0}	0.17 [daN/cm ²]	Tensione verticale geostatica alla quota della base
σ' _{vp}	0.17 [daN/cm ²]	Tensione verticale di preconsolidazione alla quota della base
N	18.3333333333333	Valore medio di N _{spt} nella profondità di influenza
I _c	0.029	Indice di compressibilità
f _i	2.50	Coefficiente per il cedimento differito (30.0 anni)

Il cedimento immediato è pari a 0.6 [cm] (Verificato).

Il cedimento differito a 30.0 anni, nel caso di carichi ciclici, vale 1.49 [cm].

Metodo di Schmertmann.

La tabella successiva riassume i risultati del calcolo col metodo di Schmertmann per la condizione di carico 8, a cui corrisponde il cedimento immediato maggiore.

$$w = C_1 C_2 \Delta q \Sigma (\Delta z / z / E)_i$$

Per tenere conto della sovraconsolidazione del terreno (OCR = 1.0), il cedimento w viene diviso per 2.00.

Simbolo	Valore	Descrizione
Z _{fon}	-100 [cm]	Quota di base della fondazione
Z _i	1460 [cm]	Profondità di influenza
σ' _{v0}	0.17 [daN/cm ²]	Tensione verticale geostatica alla quota della base
Δq	0.52 [daN/cm ²]	Carico unitario netto
I _{z,0}	0.1	Valore iniziale di I _z
Z _{i,max}	365 [cm]	Approfondimento corrispondente al valore max di I _z
I _{z,max}	0.6	Valore massimo di I _z
σ' _{v0,max}	0.89 [daN/cm ²]	Tensione verticale geostatica alla quota Z _{i,max}
C ₁	0.84	Coefficiente per la profondità del piano di posa
C ₂	1.50	Coefficiente per il cedimento differito (30.0 anni)

Il cedimento immediato è pari a 0.28 [cm] (Verificato).

Il cedimento differito a 30.0 anni vale 0.42 [cm].

Metodo di Berardi e Lancellotta.

La tabella successiva riassume i risultati del calcolo col metodo di Berardi e Lancellotta per la condizione di carico 8, a cui corrisponde il cedimento immediato maggiore.

$$w = B(125 q' I (1-\nu) / (E'_{0.1}))^{10/3}$$

Simbolo	Valore	Descrizione
Z _{fon}	-100 [cm]	Quota di base della fondazione
B	620 [cm]	Larghezza della base della fondazione
Z _i	620 [cm]	Profondità di influenza
q	0.69 [daN/cm ²]	Carico unitario applicato
q'	0.52 [daN/cm ²]	Carico unitario netto
σ' _{v0}	0.78 [daN/cm ²]	Tensione verticale geostatica a metà della zona di influenza
Δσ' _{v0}	0.42 [daN/cm ²]	Incremento della tensione verticale a metà della zona di influenza
I _c	0.708	Coefficiente di influenza di Egorov
N	18.3333333333333	Valore medio di N _{spt} nella profondità di influenza
q _c	104.92 [daN/cm ²]	Valore medio di q _c nella profondità di influenza
D _R [%]	61	Valore medio stimato della densità relativa nella profondità di influenza
K _E	629.5	Numero del modulo
E'_{0.1}	626.41 [daN/cm ²]	Modulo elastico del terreno allo 0.1%

Il cedimento immediato è pari a 0.09 [cm] (Verificato).

11 ALLEGATI

*** DATI STRUTTURA

Unita` di misura :
 LUNGHEZZE : cm
 SUPERFICI : cm2
 DATI SEZIONALI : cm
 ANGOLI : gradi
 FORZE : daN
 MOMENTI : daNcm
 CARI CHI LINEARI : daN/m
 CARI CHI SUPERFIC. : daN/m2
 TENSIONI : daN/cm2
 PESI DI VOLUME : daN/cm3
 COEFF. DI WINKLER: daN/cm3
 RIGIDENZE VINCOL. : daN/cm - daNcm/rad

NODI --	Coord. X	Coord. Y	Coord. Z	num. =
1	140.000	88.300	0.000	482
2	140.000	0.000	0.000	
3	235.000	0.000	0.000	
4	235.000	88.300	0.000	
5	45.000	0.000	0.000	
6	45.000	88.300	0.000	
7	140.000	176.700	0.000	
8	235.000	176.700	0.000	
9	45.000	176.700	0.000	
10	140.000	265.000	0.000	
11	235.000	265.000	0.000	
12	45.000	265.000	0.000	
13	140.000	353.300	0.000	
14	235.000	353.300	0.000	
15	45.000	353.300	0.000	
16	140.000	441.700	0.000	
17	235.000	441.700	0.000	
18	45.000	441.700	0.000	
19	140.000	530.000	0.000	
20	235.000	530.000	0.000	
21	45.000	530.000	0.000	
22	330.000	0.000	0.000	
23	330.000	88.300	0.000	
24	330.000	176.700	0.000	
25	330.000	265.000	0.000	
26	330.000	353.300	0.000	
27	330.000	441.700	0.000	
28	330.000	530.000	0.000	
29	425.000	0.000	0.000	
30	425.000	88.300	0.000	
31	425.000	176.700	0.000	
32	425.000	265.000	0.000	
33	425.000	353.300	0.000	
34	425.000	441.700	0.000	
35	425.000	530.000	0.000	
36	520.000	0.000	0.000	
37	520.000	88.300	0.000	
38	520.000	155.000	0.000	
39	520.000	265.000	0.000	
40	520.000	353.300	0.000	
41	520.000	441.700	0.000	
42	520.000	530.000	0.000	
43	624.000	530.000	0.000	
44	624.000	441.700	0.000	
45	728.000	441.700	0.000	
46	728.000	530.000	0.000	
47	624.000	353.300	0.000	
48	728.000	353.300	0.000	
49	624.000	265.000	0.000	
50	728.000	265.000	0.000	
51	832.000	441.700	0.000	
52	832.000	530.000	0.000	
53	832.000	353.300	0.000	
54	832.000	265.000	0.000	
55	936.000	441.700	0.000	
56	936.000	530.000	0.000	
57	936.000	353.300	0.000	
58	936.000	265.000	0.000	
59	1040.000	440.000	0.000	
60	1040.000	530.000	0.000	
61	1040.000	350.000	0.000	
62	1040.000	265.000	0.000	
63	936.000	155.000	0.000	
64	1040.000	155.000	0.000	
65	832.000	155.000	0.000	
66	728.000	155.000	0.000	
67	624.000	155.000	0.000	
68	1145.000	87.500	0.000	
69	1145.000	0.000	0.000	

70	1250.000	0.000	0.000
71	1250.000	87.500	0.000
72	1040.000	0.000	0.000
73	1040.000	88.300	0.000
74	1145.000	175.000	0.000
75	1250.000	175.000	0.000
76	1145.000	262.500	0.000
77	1250.000	262.500	0.000
78	1145.000	350.000	0.000
79	1250.000	350.000	0.000
80	1355.000	0.000	0.000
81	1355.000	87.500	0.000
82	1355.000	175.000	0.000
83	1355.000	262.500	0.000
84	1355.000	350.000	0.000
85	1460.000	0.000	0.000
86	1460.000	87.500	0.000
87	1460.000	175.000	0.000
88	1460.000	262.500	0.000
89	1460.000	350.000	0.000
90	1565.000	0.000	0.000
91	1565.000	87.500	0.000
92	1565.000	175.000	0.000
93	1565.000	262.500	0.000
94	1565.000	350.000	0.000
95	1085.000	395.000	0.000
96	1085.000	440.000	0.000
97	1085.000	530.000	0.000
98	624.000	0.000	0.000
99	624.000	88.300	0.000
100	728.000	0.000	0.000
101	728.000	88.300	0.000
102	832.000	0.000	0.000
103	832.000	88.300	0.000
104	936.000	88.300	0.000
105	936.000	0.000	0.000
106	425.000	575.000	0.000
107	520.000	575.000	0.000
108	330.000	575.000	0.000
109	235.000	575.000	0.000
110	140.000	575.000	0.000
111	45.000	575.000	0.000
112	936.000	575.000	0.000
113	1040.000	575.000	0.000
114	832.000	575.000	0.000
115	728.000	575.000	0.000
116	624.000	575.000	0.000
117	425.000	-45.000	0.000
118	520.000	-45.000	0.000
119	330.000	-45.000	0.000
120	235.000	-45.000	0.000
121	140.000	-45.000	0.000
122	45.000	-45.000	0.000
123	1460.000	-45.000	0.000
124	1565.000	-45.000	0.000
125	1355.000	-45.000	0.000
126	1250.000	-45.000	0.000
127	1145.000	-45.000	0.000
128	1040.000	-45.000	0.000
129	936.000	-45.000	0.000
130	832.000	-45.000	0.000
131	728.000	-45.000	0.000
132	624.000	-45.000	0.000
133	1610.000	175.000	0.000
134	1610.000	87.500	0.000
135	1610.000	262.500	0.000
136	1610.000	350.000	0.000
137	0.000	88.300	0.000
138	0.000	0.000	0.000
139	0.000	176.700	0.000
140	0.000	265.000	0.000
141	0.000	353.300	0.000
142	0.000	441.700	0.000
143	0.000	530.000	0.000
144	0.000	575.000	0.000
145	1085.000	575.000	0.000
146	1565.000	395.000	0.000
147	1610.000	395.000	0.000
148	0.000	-45.000	0.000
149	1145.000	395.000	0.000
150	1250.000	395.000	0.000
151	1355.000	395.000	0.000
152	1460.000	395.000	0.000
153	1610.000	-45.000	0.000
154	1610.000	0.000	0.000
155	45.000	530.000	94.000
156	140.000	530.000	94.000
157	45.000	441.700	94.000
158	45.000	530.000	188.000
159	140.000	530.000	188.000
160	45.000	441.700	188.000

161	45.000	530.000	282.000
162	140.000	530.000	282.000
163	45.000	441.700	282.000
164	45.000	530.000	376.000
165	140.000	530.000	376.000
166	45.000	441.700	376.000
167	45.000	530.000	470.000
168	140.000	530.000	470.000
169	45.000	441.700	470.000
170	235.000	530.000	94.000
171	235.000	530.000	188.000
172	235.000	530.000	282.000
173	235.000	530.000	376.000
174	235.000	530.000	470.000
175	330.000	530.000	94.000
176	330.000	530.000	188.000
177	330.000	530.000	282.000
178	330.000	530.000	376.000
179	330.000	530.000	470.000
180	425.000	530.000	94.000
181	425.000	530.000	188.000
182	425.000	530.000	282.000
183	425.000	530.000	376.000
184	425.000	530.000	470.000
185	520.000	530.000	94.000
186	520.000	530.000	188.000
187	520.000	530.000	282.000
188	520.000	530.000	376.000
189	520.000	530.000	470.000
190	624.000	530.000	94.000
191	624.000	530.000	188.000
192	624.000	530.000	282.000
193	624.000	530.000	376.000
194	624.000	530.000	470.000
195	728.000	530.000	94.000
196	728.000	530.000	188.000
197	728.000	530.000	282.000
198	728.000	530.000	376.000
199	728.000	530.000	470.000
200	832.000	530.000	94.000
201	832.000	530.000	188.000
202	832.000	530.000	282.000
203	832.000	530.000	376.000
204	832.000	530.000	470.000
205	936.000	530.000	94.000
206	936.000	530.000	188.000
207	936.000	530.000	282.000
208	936.000	530.000	376.000
209	936.000	530.000	470.000
210	1040.000	530.000	94.000
211	1040.000	530.000	188.000
212	1040.000	530.000	282.000
213	1040.000	530.000	376.000
214	1040.000	530.000	470.000
215	1040.000	440.000	94.000
216	1040.000	440.000	188.000
217	1040.000	440.000	282.000
218	1040.000	440.000	376.000
219	1040.000	440.000	470.000
220	1565.000	0.000	94.000
221	1565.000	87.500	94.000
222	1565.000	87.500	188.000
223	1565.000	0.000	188.000
224	1565.000	175.000	94.000
225	1565.000	175.000	188.000
226	1565.000	262.500	94.000
227	1565.000	262.500	188.000
228	1565.000	350.000	94.000
229	1565.000	350.000	188.000
230	1565.000	87.500	282.000
231	1565.000	0.000	282.000
232	1565.000	175.000	282.000
233	1565.000	262.500	282.000
234	1565.000	350.000	282.000
235	1565.000	87.500	376.000
236	1565.000	0.000	376.000
237	1565.000	175.000	376.000
238	1565.000	262.500	376.000
239	1565.000	350.000	376.000
240	1565.000	87.500	470.000
241	1565.000	0.000	470.000
242	1565.000	175.000	470.000
243	1565.000	262.500	470.000
244	1565.000	350.000	470.000
245	1460.000	0.000	376.000
246	1460.000	0.000	470.000
247	1460.000	0.000	282.000
248	1460.000	0.000	188.000
249	1460.000	0.000	94.000
250	1460.000	350.000	376.000
251	1460.000	350.000	470.000

252	1460.000	350.000	282.000
253	1460.000	350.000	188.000
254	1460.000	350.000	94.000
255	1040.000	350.000	94.000
256	1145.000	350.000	94.000
257	1040.000	350.000	188.000
258	1145.000	350.000	188.000
259	1040.000	350.000	282.000
260	1145.000	350.000	282.000
261	1040.000	350.000	376.000
262	1145.000	350.000	376.000
263	1040.000	350.000	470.000
264	1145.000	350.000	470.000
265	1250.000	350.000	94.000
266	1250.000	350.000	188.000
267	1250.000	350.000	282.000
268	1250.000	350.000	376.000
269	1250.000	350.000	470.000
270	1355.000	350.000	94.000
271	1355.000	350.000	188.000
272	1355.000	350.000	282.000
273	1355.000	350.000	376.000
274	1355.000	350.000	470.000
275	1040.000	0.000	94.000
276	1145.000	0.000	94.000
277	936.000	0.000	94.000
278	1040.000	0.000	188.000
279	1145.000	0.000	188.000
280	936.000	0.000	188.000
281	1040.000	0.000	282.000
282	1145.000	0.000	282.000
283	936.000	0.000	282.000
284	1040.000	0.000	376.000
285	1145.000	0.000	376.000
286	936.000	0.000	376.000
287	1040.000	0.000	470.000
288	1145.000	0.000	470.000
289	936.000	0.000	470.000
290	1250.000	0.000	94.000
291	1250.000	0.000	188.000
292	1250.000	0.000	282.000
293	1250.000	0.000	376.000
294	1250.000	0.000	470.000
295	1355.000	0.000	94.000
296	1355.000	0.000	188.000
297	1355.000	0.000	282.000
298	1355.000	0.000	376.000
299	1355.000	0.000	470.000
300	45.000	88.300	94.000
301	45.000	0.000	94.000
302	140.000	0.000	94.000
303	45.000	0.000	188.000
304	140.000	0.000	188.000
305	45.000	88.300	188.000
306	45.000	0.000	282.000
307	140.000	0.000	282.000
308	45.000	88.300	282.000
309	45.000	0.000	376.000
310	140.000	0.000	376.000
311	45.000	88.300	376.000
312	45.000	0.000	470.000
313	140.000	0.000	470.000
314	45.000	88.300	470.000
315	235.000	0.000	94.000
316	235.000	0.000	188.000
317	235.000	0.000	282.000
318	235.000	0.000	376.000
319	235.000	0.000	470.000
320	330.000	0.000	94.000
321	330.000	0.000	188.000
322	330.000	0.000	282.000
323	330.000	0.000	376.000
324	330.000	0.000	470.000
325	425.000	0.000	94.000
326	425.000	0.000	188.000
327	425.000	0.000	282.000
328	425.000	0.000	376.000
329	425.000	0.000	470.000
330	520.000	0.000	94.000
331	520.000	0.000	188.000
332	520.000	0.000	282.000
333	520.000	0.000	376.000
334	520.000	0.000	470.000
335	624.000	0.000	94.000
339	624.000	0.000	470.000
340	728.000	0.000	94.000
341	728.000	0.000	188.000
342	728.000	0.000	282.000
343	728.000	0.000	376.000
344	728.000	0.000	470.000
345	832.000	0.000	94.000

346	832.000	0.000	188.000
347	832.000	0.000	282.000
348	832.000	0.000	376.000
349	832.000	0.000	470.000
350	45.000	176.700	94.000
351	45.000	176.700	188.000
352	45.000	265.000	94.000
353	45.000	265.000	188.000
354	45.000	353.300	94.000
355	45.000	353.300	188.000
356	45.000	176.700	282.000
357	45.000	265.000	282.000
358	45.000	353.300	282.000
359	45.000	176.700	376.000
360	45.000	265.000	376.000
361	45.000	353.300	376.000
362	45.000	176.700	470.000
363	45.000	265.000	470.000
364	45.000	353.300	470.000
365	520.000	441.700	94.000
366	520.000	441.700	188.000
367	520.000	441.700	282.000
368	520.000	441.700	376.000
369	520.000	441.700	470.000
370	520.000	88.300	94.000
371	520.000	88.300	188.000
372	520.000	88.300	282.000
373	520.000	88.300	376.000
374	520.000	88.300	470.000
375	520.000	155.000	94.000
376	520.000	155.000	188.000
377	520.000	155.000	282.000
378	520.000	155.000	376.000
379	520.000	155.000	470.000
380	520.000	265.000	94.000
381	520.000	353.300	94.000
382	520.000	353.300	188.000
383	520.000	265.000	188.000
384	520.000	353.300	282.000
385	520.000	265.000	282.000
386	520.000	353.300	376.000
387	520.000	265.000	376.000
388	520.000	353.300	470.000
389	520.000	265.000	470.000
390	1040.000	155.000	376.000
391	936.000	155.000	376.000
392	936.000	155.000	470.000
393	1040.000	155.000	470.000
394	1040.000	155.000	282.000
395	936.000	155.000	282.000
396	1040.000	155.000	188.000
397	936.000	155.000	188.000
398	1040.000	155.000	94.000
399	936.000	155.000	94.000
400	624.000	155.000	94.000
401	624.000	155.000	188.000
402	624.000	155.000	282.000
403	624.000	155.000	376.000
404	601.000	155.000	470.000
405	728.000	155.000	94.000
406	728.000	155.000	188.000
407	728.000	155.000	282.000
408	728.000	155.000	376.000
409	728.000	155.000	470.000
410	832.000	155.000	94.000
411	832.000	155.000	188.000
412	832.000	155.000	282.000
413	832.000	155.000	376.000
414	832.000	155.000	470.000
415	1040.000	265.000	94.000
416	1040.000	265.000	188.000
417	1040.000	265.000	282.000
418	1040.000	265.000	376.000
419	1040.000	265.000	470.000
420	45.000	530.000	570.000
421	45.000	441.700	570.000
423	140.000	530.000	570.000
425	235.000	530.000	570.000
427	330.000	530.000	570.000
429	425.000	530.000	570.000
431	520.000	530.000	570.000
433	624.000	530.000	570.000
435	728.000	530.000	570.000
437	832.000	530.000	570.000
439	936.000	530.000	570.000
440	1040.000	440.000	570.000
441	1040.000	530.000	570.000
443	1460.000	0.000	570.000
444	1565.000	0.000	570.000
445	1565.000	87.500	570.000
447	1565.000	175.000	570.000

449	1565.000	262.500	570.000
450	1460.000	350.000	570.000
451	1565.000	350.000	570.000
452	1040.000	350.000	570.000
455	1145.000	350.000	570.000
457	1250.000	350.000	570.000
459	1355.000	350.000	570.000
461	1040.000	0.000	570.000
462	1145.000	0.000	570.000
464	1250.000	0.000	570.000
466	1355.000	0.000	570.000
468	45.000	88.300	570.000
469	45.000	0.000	570.000
470	140.000	0.000	570.000
472	235.000	0.000	570.000
474	330.000	0.000	570.000
476	425.000	0.000	570.000
478	520.000	0.000	570.000
480	624.000	0.000	570.000
482	728.000	0.000	570.000
484	832.000	0.000	570.000
486	936.000	0.000	570.000
488	45.000	176.700	570.000
490	45.000	265.000	570.000
492	45.000	353.300	570.000
522	1040.000	88.300	94.000
523	1040.000	88.300	188.000
524	1040.000	88.300	282.000
525	1040.000	88.300	376.000
537	580.000	0.000	170.000
538	680.000	0.000	170.000
539	580.000	0.000	282.000
540	580.000	0.000	376.000
541	580.000	0.000	453.000
542	680.000	0.000	282.000
543	680.000	0.000	376.000
544	680.000	0.000	453.000
545	624.000	0.000	170.000
546	624.000	0.000	453.000
551	1145.000	0.000	164.400
552	832.000	0.000	130.400
553	1040.000	0.000	153.000
554	936.000	0.000	141.700
556	520.000	107.500	470.000
557	520.000	42.500	470.000
558	1040.000	42.500	470.000
560	1040.000	107.500	470.000
562	1040.000	88.300	470.000
564	666.000	155.000	470.000

ASTE--	Proprieta`	Nodo i n i z.	Nodo f i n.	Ril asci i n.	Ril asci f i n.	num. =	Ori ent.
1	1	420	423			42	0.0
2	1	423	425				0.0
3	1	425	427				0.0
4	1	427	429				0.0
5	1	429	431				0.0
6	1	431	433				0.0
7	1	433	435				0.0
8	1	435	437				0.0
9	1	437	439				0.0
10	1	439	441				0.0
11	1	452	455				0.0
12	1	455	457				0.0
13	1	457	459				0.0
14	1	459	450				0.0
15	1	450	451				0.0
16	1	469	468				0.0
17	1	468	488				0.0
18	1	488	490				0.0
19	1	490	492				0.0
20	1	492	421				0.0
21	1	421	420				0.0
22	1	452	440				0.0
23	1	440	441				0.0
24	1	461	462				0.0
25	1	462	464				0.0
26	1	464	466				0.0
27	1	466	443				0.0
28	1	443	444				0.0
29	1	469	470				0.0
30	1	470	472				0.0
31	1	472	474				0.0
32	1	474	476				0.0
33	1	476	478				0.0
34	1	478	480				0.0
35	1	480	482				0.0
36	1	482	484				0.0
37	1	484	486				0.0
38	1	486	461				0.0

39	1	444	445	0.0
40	1	445	447	0.0
41	1	447	449	0.0
42	1	449	451	0.0

GUSCI TRI ANGOLARI		num. = 34		
Nome	Proprietà	Nodo 1	Nodo 2	Nodo 3
547	2	331	537	330
548	2	340	538	341
560	2	222	223	230
561	2	230	223	231
562	2	232	230	237
563	2	237	230	235
564	2	238	237	243
565	2	243	237	242
566	2	300	350	351
567	2	305	300	351
568	2	351	353	357
569	2	356	351	357
570	2	357	358	361
571	2	360	357	361
572	2	361	166	169
573	2	361	169	364
574	2	421	169	420
575	2	169	167	420
576	2	451	243	449
577	2	244	243	451
578	2	291	551	279
579	2	552	345	340
588	2	541	339	334
589	2	541	546	339
590	2	546	544	339
591	2	544	339	344
592	3	522	275	553
593	3	522	553	523
594	3	523	553	278
605	3	378	379	556
606	3	333	557	334
613	3	284	558	287
616	3	390	393	560
627	3	403	404	564

GUSCI RETTANGOLARI		num. = 447			
Nome	Proprietà	Nodo 1	Nodo 2	Nodo 3	Nodo 4
1	1	1	2	3	4
2	1	5	2	1	6
3	1	7	1	4	8
4	1	6	1	7	9
5	1	10	7	8	11
6	1	9	7	10	12
7	1	13	10	11	14
8	1	12	10	13	15
9	1	16	13	14	17
10	1	15	13	16	18
11	1	19	16	17	20
12	1	18	16	19	21
13	1	4	3	22	23
14	1	8	4	23	24
15	1	11	8	24	25
16	1	14	11	25	26
17	1	17	14	26	27
18	1	20	17	27	28
19	1	23	22	29	30
20	1	24	23	30	31
21	1	25	24	31	32
22	1	26	25	32	33
23	1	27	26	33	34
24	1	28	27	34	35
25	1	30	29	36	37
26	1	31	30	37	38
27	1	32	31	38	39
28	1	33	32	39	40
29	1	34	33	40	41
30	1	35	34	41	42
31	1	43	44	45	46
32	1	41	44	43	42
33	1	44	47	48	45
34	1	40	47	44	41
35	1	47	49	50	48
36	1	39	49	47	40
37	1	46	45	51	52
38	1	45	48	53	51
39	1	48	50	54	53
40	1	52	51	55	56
41	1	51	53	57	55
42	1	53	54	58	57
43	1	56	55	59	60
44	1	55	57	61	59
45	1	57	58	62	61
46	1	58	63	64	62
47	1	54	65	63	58

48	1	50	66	65	54
49	1	49	67	66	50
50	1	39	38	67	49
51	1	68	69	70	71
52	1	72	69	68	73
53	1	74	68	71	75
54	1	73	68	74	64
55	1	76	74	75	77
56	1	64	74	76	62
57	1	78	76	77	79
58	1	62	76	78	61
59	1	71	70	80	81
60	1	75	71	81	82
61	1	77	75	82	83
62	1	79	77	83	84
63	1	81	80	85	86
64	1	82	81	86	87
65	1	83	82	87	88
66	1	84	83	88	89
67	1	86	85	90	91
68	1	87	86	91	92
69	1	88	87	92	93
70	1	89	88	93	94
71	1	59	61	95	96
72	1	60	59	96	97
73	1	37	36	98	99
74	1	38	37	99	67
75	1	99	98	100	101
76	1	67	99	101	66
77	1	101	100	102	103
78	1	66	101	103	65
79	1	65	103	104	63
80	1	103	102	105	104
81	1	104	105	72	73
82	1	63	104	73	64
83	1	106	35	42	107
84	1	108	28	35	106
85	1	109	20	28	108
86	1	110	19	20	109
87	1	111	21	19	110
88	1	112	56	60	113
89	1	114	52	56	112
90	1	115	46	52	114
91	1	116	43	46	115
92	1	107	42	43	116
93	1	29	117	118	36
94	1	22	119	117	29
95	1	3	120	119	22
96	1	2	121	120	3
97	1	5	122	121	2
98	1	85	123	124	90
99	1	80	125	123	85
100	1	70	126	125	80
101	1	69	127	126	70
102	1	72	128	127	69
103	1	105	129	128	72
104	1	102	130	129	105
105	1	100	131	130	102
106	1	98	132	131	100
107	1	36	118	132	98
108	1	133	92	91	134
109	1	135	93	92	133
110	1	136	94	93	135
111	1	137	138	5	6
112	1	139	137	6	9
113	1	140	139	9	12
114	1	141	140	12	15
115	1	142	141	15	18
116	1	143	142	18	21
117	1	144	143	21	111
118	1	113	60	97	145
119	1	146	94	136	147
120	1	5	138	148	122
121	1	149	78	79	150
122	1	150	79	84	151
123	1	151	84	89	152
124	1	152	89	94	146
125	1	95	61	78	149
126	1	90	124	153	154
127	1	91	90	154	134
128	2	21	19	156	155
129	2	18	21	155	157
130	2	155	156	159	158
131	2	157	155	158	160
132	2	158	159	162	161
133	2	160	158	161	163
134	2	161	162	165	164
135	2	163	161	164	166
136	2	164	165	168	167
137	2	166	164	167	169
138	2	19	20	170	156

139	2	156	170	171	159
140	2	159	171	172	162
141	2	162	172	173	165
142	2	165	173	174	168
143	2	20	28	175	170
144	2	170	175	176	171
145	2	171	176	177	172
146	2	172	177	178	173
147	2	173	178	179	174
148	2	28	35	180	175
149	2	175	180	181	176
150	2	176	181	182	177
151	2	177	182	183	178
152	2	178	183	184	179
153	2	35	42	185	180
154	2	180	185	186	181
155	2	181	186	187	182
156	2	182	187	188	183
157	2	183	188	189	184
158	2	42	43	190	185
159	2	185	190	191	186
160	2	186	191	192	187
161	2	187	192	193	188
162	2	188	193	194	189
163	2	43	46	195	190
164	2	190	195	196	191
165	2	191	196	197	192
166	2	192	197	198	193
167	2	193	198	199	194
168	2	46	52	200	195
169	2	195	200	201	196
170	2	196	201	202	197
171	2	197	202	203	198
172	2	198	203	204	199
173	2	52	56	205	200
174	2	200	205	206	201
175	2	201	206	207	202
176	2	202	207	208	203
177	2	203	208	209	204
178	2	56	60	210	205
179	2	205	210	211	206
180	2	206	211	212	207
181	2	207	212	213	208
182	2	208	213	214	209
183	2	60	59	215	210
184	2	210	215	216	211
185	2	211	216	217	212
186	2	212	217	218	213
187	2	213	218	219	214
188	2	221	220	223	222
189	2	91	90	220	221
190	2	224	221	222	225
191	2	92	91	221	224
192	2	226	224	225	227
193	2	93	92	224	226
194	2	228	226	227	229
195	2	94	93	226	228
197	2	225	222	230	232
198	2	227	225	232	233
199	2	229	227	233	234
200	2	230	231	236	235
202	2	233	232	237	238
203	2	234	233	238	239
204	2	235	236	241	240
205	2	237	235	240	242
207	2	239	238	243	244
208	2	236	245	246	241
209	2	231	247	245	236
210	2	223	248	247	231
211	2	220	249	248	223
212	2	90	85	249	220
213	2	250	239	244	251
214	2	252	234	239	250
215	2	253	229	234	252
216	2	254	228	229	253
217	2	89	94	228	254
218	2	59	61	255	215
219	2	61	78	256	255
220	2	255	256	258	257
221	2	215	255	257	216
222	2	257	258	260	259
223	2	216	257	259	217
224	2	259	260	262	261
225	2	217	259	261	218
226	2	261	262	264	263
227	2	218	261	263	219
228	2	78	79	265	256
229	2	256	265	266	258
230	2	258	266	267	260
231	2	260	267	268	262
232	2	262	268	269	264

233	2	79	84	270	265
234	2	265	270	271	266
235	2	266	271	272	267
236	2	267	272	273	268
237	2	268	273	274	269
238	2	84	89	254	270
239	2	270	254	253	271
240	2	271	253	252	272
241	2	272	252	250	273
242	2	273	250	251	274
243	2	69	72	275	276
244	2	72	105	277	275
247	2	279	278	281	282
248	2	278	280	283	281
249	2	282	281	284	285
250	2	281	283	286	284
251	2	285	284	287	288
252	2	284	286	289	287
253	2	70	69	276	290
255	2	291	279	282	292
256	2	292	282	285	293
257	2	293	285	288	294
258	2	80	70	290	295
259	2	295	290	291	296
260	2	296	291	292	297
261	2	297	292	293	298
262	2	298	293	294	299
263	2	85	80	295	249
264	2	249	295	296	248
265	2	248	296	297	247
266	2	247	297	298	245
267	2	245	298	299	246
268	2	5	6	300	301
269	2	2	5	301	302
270	2	302	301	303	304
271	2	301	300	305	303
272	2	304	303	306	307
273	2	303	305	308	306
274	2	307	306	309	310
275	2	306	308	311	309
276	2	310	309	312	313
277	2	309	311	314	312
278	2	3	2	302	315
279	2	315	302	304	316
280	2	316	304	307	317
281	2	317	307	310	318
282	2	318	310	313	319
283	2	22	3	315	320
284	2	320	315	316	321
285	2	321	316	317	322
286	2	322	317	318	323
287	2	323	318	319	324
288	2	29	22	320	325
289	2	325	320	321	326
290	2	326	321	322	327
291	2	327	322	323	328
292	2	328	323	324	329
293	2	36	29	325	330
294	2	330	325	326	331
295	2	331	326	327	332
296	2	332	327	328	333
297	2	333	328	329	334
298	2	98	36	330	335
303	2	100	98	335	340
308	2	102	100	340	345
310	2	346	341	342	347
311	2	347	342	343	348
312	2	348	343	344	349
313	2	105	102	345	277
315	2	280	346	347	283
316	2	283	347	348	286
317	2	286	348	349	289
319	2	300	6	9	350
320	2	350	352	353	351
321	2	350	9	12	352
322	2	352	354	355	353
323	2	352	12	15	354
324	2	354	157	160	355
325	2	354	15	18	157
326	2	305	351	356	308
328	2	353	355	358	357
329	2	355	160	163	358
330	2	308	356	359	311
331	2	356	357	360	359
333	2	358	163	166	361
334	2	311	359	362	314
335	2	359	360	363	362
336	2	360	361	364	363
338	3	41	42	185	365
339	3	365	185	186	366
340	3	366	186	187	367

341	3	367	187	188	368
342	3	368	188	189	369
343	3	36	37	370	330
344	3	330	370	371	331
345	3	331	371	372	332
346	3	332	372	373	333
348	3	37	38	375	370
349	3	370	375	376	371
350	3	371	376	377	372
351	3	372	377	378	373
353	3	38	39	380	375
354	3	39	40	381	380
355	3	380	381	382	383
356	3	375	380	383	376
357	3	383	382	384	385
358	3	376	383	385	377
359	3	385	384	386	387
360	3	377	385	387	378
361	3	387	386	388	389
362	3	378	387	389	379
363	3	40	41	365	381
364	3	381	365	366	382
365	3	382	366	367	384
366	3	384	367	368	386
367	3	386	368	369	388
368	3	390	391	392	393
369	3	394	395	391	390
370	3	396	397	395	394
371	3	398	399	397	396
372	3	64	63	399	398
373	3	67	38	375	400
374	3	400	375	376	401
375	3	401	376	377	402
376	3	402	377	378	403
377	3	403	378	379	404
378	3	66	67	400	405
379	3	405	400	401	406
380	3	406	401	402	407
381	3	407	402	403	408
383	3	65	66	405	410
384	3	410	405	406	411
385	3	411	406	407	412
386	3	412	407	408	413
387	3	413	408	409	414
388	3	63	65	410	399
389	3	399	410	411	397
390	3	397	411	412	395
391	3	395	412	413	391
392	3	391	413	414	392
393	3	61	62	415	255
394	3	255	415	416	257
395	3	257	416	417	259
396	3	259	417	418	261
397	3	261	418	419	263
398	3	418	390	393	419
399	3	417	394	390	418
400	3	416	396	394	417
401	3	415	398	396	416
402	3	62	64	398	415
483	2	184	189	431	429
484	2	179	184	429	427
485	2	174	179	427	425
486	2	168	174	425	423
487	2	167	168	423	420
488	2	209	214	441	439
489	2	204	209	439	437
490	2	199	204	437	435
491	2	194	199	435	433
492	2	189	194	433	431
493	2	240	241	444	445
494	2	242	240	445	447
495	2	243	242	447	449
497	2	251	244	451	450
498	2	274	251	450	459
499	2	269	274	459	457
500	2	264	269	457	455
501	2	263	264	455	452
502	2	241	246	443	444
503	2	246	299	466	443
504	2	299	294	464	466
505	2	294	288	462	464
506	2	288	287	461	462
507	2	334	329	476	478
508	2	329	324	474	476
509	2	324	319	472	474
510	2	319	313	470	472
511	2	313	312	469	470
512	2	287	289	486	461
513	2	289	349	484	486
514	2	349	344	482	484
515	2	344	339	480	482

516	2	339	334	478	480
517	2	469	312	314	468
518	2	468	314	362	488
519	2	488	362	363	490
520	2	490	363	364	492
521	2	492	364	169	421
523	2	219	263	452	440
524	2	214	219	440	441
525	3	73	72	275	522
527	3	523	278	281	524
528	3	524	281	284	525
530	3	64	73	522	398
531	3	398	522	523	396
532	3	396	523	524	394
533	3	394	524	525	390
549	2	537	331	332	539
550	2	539	332	333	540
551	2	540	333	334	541
552	2	341	538	542	342
553	2	342	542	543	343
554	2	343	543	544	344
555	2	340	335	545	538
556	2	335	330	537	545
580	2	290	276	551	291
581	2	276	275	553	551
582	2	553	278	279	551
583	2	552	340	341	346
584	2	275	277	554	553
585	2	277	345	552	554
586	2	554	280	278	553
587	2	552	346	280	554
607	3	333	373	374	557
608	3	373	378	556	374
614	3	284	525	562	558
615	3	525	390	560	562
628	3	408	403	564	409

PROPRIETA` ASTE----	-----	-----	-----	-----	-----	num. =	1
Nome Materiale	Base	Al tezza	Area	Area tag. Y	Area tag. Z		
	Kw vertic.	Kw orizz.	J tors.	J fless. Y	J fless. Z		
1	1	30.00	20.00	6.00000E+02	5.00000E+02	5.00000E+02	
		0.000000	0.000000	4.69526E+04	4.50000E+04	2.00000E+04	

PROPRIETA` GUSCI--	-----	-----	-----	-----	-----	num. =	3
Nome Materiale	Sp. membr.	Sp. piastra	Kw				
1	1	40.00	40.00	5.000000			
2	1	30.00	30.00	0.000000			
3	1	20.00	20.00	0.000000			

MATERIALI-----	-----	-----	-----	-----	-----	num. =	1
Nome Mod. elast.	Coeff. nu	Mod. tang.	Peso spec.	Dil. te.			
1	3.00000E+05	1.50000E-01	1.30000E+05	2.50000E-03	1.00000E-05		

VINCOLI-----	-----	-----	-----	-----	-----	num. =	54
Nodo	Ri gi d. X	Ri gi d. Y	Ri gi d. Z	Ri gi d. RX	Ri gi d. RY	Ri gi d. RZ	
19	bl occato	bl occato	libero	libero	libero	libero	
20	bl occato	bl occato	libero	libero	libero	libero	
21	bl occato	bl occato	libero	libero	libero	libero	
28	bl occato	bl occato	libero	libero	libero	libero	
35	bl occato	bl occato	libero	libero	libero	libero	
42	bl occato	bl occato	libero	libero	libero	libero	
43	bl occato	bl occato	libero	libero	libero	libero	
46	bl occato	bl occato	libero	libero	libero	libero	
52	bl occato	bl occato	libero	libero	libero	libero	
56	bl occato	bl occato	libero	libero	libero	libero	
60	bl occato	bl occato	libero	libero	libero	libero	
59	bl occato	bl occato	libero	libero	libero	libero	
61	bl occato	bl occato	libero	libero	libero	libero	
78	bl occato	bl occato	libero	libero	libero	libero	
79	bl occato	bl occato	libero	libero	libero	libero	
84	bl occato	bl occato	libero	libero	libero	libero	
89	bl occato	bl occato	libero	libero	libero	libero	
94	bl occato	bl occato	libero	libero	libero	libero	
90	bl occato	bl occato	libero	libero	libero	libero	
91	bl occato	bl occato	libero	libero	libero	libero	
92	bl occato	bl occato	libero	libero	libero	libero	
93	bl occato	bl occato	libero	libero	libero	libero	
2	bl occato	bl occato	libero	libero	libero	libero	
3	bl occato	bl occato	libero	libero	libero	libero	
5	bl occato	bl occato	libero	libero	libero	libero	
22	bl occato	bl occato	libero	libero	libero	libero	
29	bl occato	bl occato	libero	libero	libero	libero	
69	bl occato	bl occato	libero	libero	libero	libero	
70	bl occato	bl occato	libero	libero	libero	libero	
80	bl occato	bl occato	libero	libero	libero	libero	
85	bl occato	bl occato	libero	libero	libero	libero	
72	bl occato	bl occato	libero	libero	libero	libero	
100	bl occato	bl occato	libero	libero	libero	libero	
102	bl occato	bl occato	libero	libero	libero	libero	
105	bl occato	bl occato	libero	libero	libero	libero	
36	bl occato	bl occato	libero	libero	libero	libero	

1536	S002-permanente_cop	29	Z	FT	glo	-2650.0	-2650.0	0.000	0.000
1537	S002-permanente_cop	30	Z	FT	glo	-2650.0	-2650.0	0.000	0.000
1538	S002-permanente_cop	31	Z	FT	glo	-2650.0	-2650.0	0.000	0.000
1539	S002-permanente_cop	32	Z	FT	glo	-2650.0	-2650.0	0.000	0.000
1540	S002-permanente_cop	33	Z	FT	glo	-2650.0	-2650.0	0.000	0.000
1541	S001-Neve	6	Z	FT	glo	-363.1	-363.1	0.000	0.000
1542	S001-Neve	7	Z	FT	glo	-363.1	-363.1	0.000	0.000
1543	S001-Neve	8	Z	FT	glo	-363.1	-363.1	0.000	0.000
1544	S001-Neve	9	Z	FT	glo	-363.1	-363.1	0.000	0.000
1545	S001-Neve	10	Z	FT	glo	-363.1	-363.1	0.000	0.000
1546	S001-Neve	11	Z	FT	glo	-239.8	-239.8	0.000	0.000
1547	S001-Neve	12	Z	FT	glo	-239.8	-239.8	0.000	0.000
1548	S001-Neve	13	Z	FT	glo	-239.8	-239.8	0.000	0.000
1549	S001-Neve	14	Z	FT	glo	-239.8	-239.8	0.000	0.000
1550	S001-Neve	15	Z	FT	glo	-239.8	-239.8	0.000	0.000
1551	S001-Neve	24	Z	FT	glo	-239.8	-239.8	0.000	0.000
1552	S001-Neve	25	Z	FT	glo	-239.8	-239.8	0.000	0.000
1553	S001-Neve	26	Z	FT	glo	-239.8	-239.8	0.000	0.000
1554	S001-Neve	27	Z	FT	glo	-239.8	-239.8	0.000	0.000
1555	S001-Neve	28	Z	FT	glo	-239.8	-239.8	0.000	0.000
1556	S001-Neve	34	Z	FT	glo	-363.1	-363.1	0.000	0.000
1557	S001-Neve	35	Z	FT	glo	-363.1	-363.1	0.000	0.000
1558	S001-Neve	36	Z	FT	glo	-363.1	-363.1	0.000	0.000
1559	S001-Neve	37	Z	FT	glo	-363.1	-363.1	0.000	0.000
1560	S001-Neve	38	Z	FT	glo	-363.1	-363.1	0.000	0.000
1561	S002-Neve	1	Z	FT	glo	-363.1	-363.1	0.000	0.000
1562	S002-Neve	2	Z	FT	glo	-363.1	-363.1	0.000	0.000
1563	S002-Neve	3	Z	FT	glo	-363.1	-363.1	0.000	0.000
1564	S002-Neve	4	Z	FT	glo	-363.1	-363.1	0.000	0.000
1565	S002-Neve	5	Z	FT	glo	-363.1	-363.1	0.000	0.000
1566	S002-Neve	29	Z	FT	glo	-363.1	-363.1	0.000	0.000
1567	S002-Neve	30	Z	FT	glo	-363.1	-363.1	0.000	0.000
1568	S002-Neve	31	Z	FT	glo	-363.1	-363.1	0.000	0.000
1569	S002-Neve	32	Z	FT	glo	-363.1	-363.1	0.000	0.000
1570	S002-Neve	33	Z	FT	glo	-363.1	-363.1	0.000	0.000

CARICHI DI LINEA |-----|-----|-----| num. = 0
 numero coordi nata -----|-----|-----|
 Nome ini zio fi ne Cond. Di rez. ini zio fi ne Descr izi one

CARICHI GUSCI -----|-----|-----|-----| num. = 1701

Nome	Gusci o	Di r	Tip	RIF	Intensi ta`			
1571	spintel	ateral	i	188	Z	FD	loc	2574.0
1572	spintel	ateral	i	190	Z	FD	loc	2574.0
1573	spintel	ateral	i	192	Z	FD	loc	2574.0
1574	spintel	ateral	i	193	Z	FD	loc	3138.0
1575	spintel	ateral	i	194	Z	FD	loc	2574.0
1576	spintel	ateral	i	197	Z	FD	loc	2010.0
1577	spintel	ateral	i	198	Z	FD	loc	2010.0
1578	spintel	ateral	i	199	Z	FD	loc	2010.0
1579	spintel	ateral	i	202	Z	FD	loc	1446.0
1580	spintel	ateral	i	203	Z	FD	loc	1446.0
1581	spintel	ateral	i	207	Z	FD	loc	882.0
1582	spintel	ateral	i	560	Z	FD	loc	2104.0
1583	spintel	ateral	i	562	Z	FD	loc	1540.0
1584	spintel	ateral	i	564	Z	FD	loc	976.0
1585	spintel	ateral	i	577	Z	FD	loc	400.0
1586	spintel	ateral	i	195	Z	FD	loc	3138.0
1587	spintel	ateral	i	189	Z	FD	loc	3138.0
1588	spintel	ateral	i	191	Z	FD	loc	3138.0
1589	spintel	ateral	i	129	Z	FD	loc	3138.0
1590	spintel	ateral	i	131	Z	FD	loc	2574.0
1591	spintel	ateral	i	133	Z	FD	loc	2010.0
1592	spintel	ateral	i	135	Z	FD	loc	1446.0
1593	spintel	ateral	i	137	Z	FD	loc	882.0
1594	spintel	ateral	i	268	Z	FD	loc	3138.0
1595	spintel	ateral	i	319	Z	FD	loc	3138.0
1596	spintel	ateral	i	320	Z	FD	loc	2574.0
1597	spintel	ateral	i	321	Z	FD	loc	3138.0
1598	spintel	ateral	i	322	Z	FD	loc	2574.0
1599	spintel	ateral	i	323	Z	FD	loc	3138.0
1600	spintel	ateral	i	324	Z	FD	loc	2574.0
1601	spintel	ateral	i	325	Z	FD	loc	3138.0
1602	spintel	ateral	i	328	Z	FD	loc	2010.0
1603	spintel	ateral	i	329	Z	FD	loc	2010.0
1604	spintel	ateral	i	333	Z	FD	loc	1446.0
1605	spintel	ateral	i	566	Z	FD	loc	2668.0
1606	spintel	ateral	i	568	Z	FD	loc	2104.0
1607	spintel	ateral	i	570	Z	FD	loc	1540.0
1608	spintel	ateral	i	572	Z	FD	loc	976.0
1609	spintel	ateral	i	575	Z	FD	loc	400.0
1610	spintafrontal	e		211	Z	FD	loc	315.0
1611	spintafrontal	e		212	Z	FD	loc	945.0
1612	spintafrontal	e		243	Z	FD	loc	945.0
1613	spintafrontal	e		253	Z	FD	loc	945.0
1614	spintafrontal	e		258	Z	FD	loc	945.0
1615	spintafrontal	e		259	Z	FD	loc	315.0
1616	spintafrontal	e		263	Z	FD	loc	945.0
1617	spintafrontal	e		264	Z	FD	loc	315.0
1618	spintafrontal	e		269	Z	FD	loc	945.0
1619	spintafrontal	e		278	Z	FD	loc	945.0

1620	spintafrontale	283	Z	FD	Ioc	945.0
1621	spintafrontale	288	Z	FD	Ioc	945.0
1622	spintafrontale	293	Z	FD	Ioc	945.0
1623	spintafrontale	298	Z	FD	Ioc	945.0
1624	spintafrontale	303	Z	FD	Ioc	945.0
1625	spintafrontale	308	Z	FD	Ioc	945.0
1626	spintafrontale	313	Z	FD	Ioc	945.0
1627	spintafrontale	244	Z	FD	Ioc	945.0
1628	spintafrontale	579	Z	FD	Ioc	548.6
1629	spintafrontale	584	Z	FD	Ioc	450.5
1630	spintafrontale	585	Z	FD	Ioc	488.2
1631	spintafrontale	581	Z	FD	Ioc	412.6
1632	spintafrontale	580	Z	FD	Ioc	352.6
1633	spintaretro	183	Z	FD	Ioc	4707.0
1634	spintaretro	184	Z	FD	Ioc	3861.0
1635	spintaretro	185	Z	FD	Ioc	3015.0
1636	spintaretro	186	Z	FD	Ioc	2169.0
1637	spintaretro	187	Z	FD	Ioc	1323.0
1638	spintaretro	218	Z	FD	Ioc	4707.0
1639	spintaretro	221	Z	FD	Ioc	3861.0
1640	spintaretro	223	Z	FD	Ioc	3015.0
1641	spintaretro	225	Z	FD	Ioc	2169.0
1642	spintaretro	227	Z	FD	Ioc	1323.0
1643	spintaretro	523	Z	FD	Ioc	450.0
1644	spintaretro	524	Z	FD	Ioc	450.0
1645	spintaretro	128	Z	FD	Ioc	4707.0
1646	spintaretro	130	Z	FD	Ioc	3861.0
1647	spintaretro	132	Z	FD	Ioc	3015.0
1648	spintaretro	134	Z	FD	Ioc	2169.0
1649	spintaretro	136	Z	FD	Ioc	1323.0
1650	spintaretro	138	Z	FD	Ioc	4707.0
1651	spintaretro	139	Z	FD	Ioc	3861.0
1652	spintaretro	140	Z	FD	Ioc	3015.0
1653	spintaretro	141	Z	FD	Ioc	2169.0
1654	spintaretro	142	Z	FD	Ioc	1323.0
1655	spintaretro	143	Z	FD	Ioc	4707.0
1656	spintaretro	144	Z	FD	Ioc	3861.0
1657	spintaretro	145	Z	FD	Ioc	3015.0
1658	spintaretro	146	Z	FD	Ioc	2169.0
1659	spintaretro	147	Z	FD	Ioc	1323.0
1660	spintaretro	148	Z	FD	Ioc	4707.0
1661	spintaretro	149	Z	FD	Ioc	3861.0
1662	spintaretro	150	Z	FD	Ioc	3015.0
1663	spintaretro	151	Z	FD	Ioc	2169.0
1664	spintaretro	152	Z	FD	Ioc	1323.0
1665	spintaretro	153	Z	FD	Ioc	4707.0
1666	spintaretro	154	Z	FD	Ioc	3861.0
1667	spintaretro	155	Z	FD	Ioc	3015.0
1668	spintaretro	156	Z	FD	Ioc	2169.0
1669	spintaretro	157	Z	FD	Ioc	1323.0
1670	spintaretro	158	Z	FD	Ioc	4707.0
1671	spintaretro	159	Z	FD	Ioc	3861.0
1672	spintaretro	160	Z	FD	Ioc	3015.0
1673	spintaretro	161	Z	FD	Ioc	2169.0
1674	spintaretro	162	Z	FD	Ioc	1323.0
1675	spintaretro	163	Z	FD	Ioc	4707.0
1676	spintaretro	164	Z	FD	Ioc	3861.0
1677	spintaretro	165	Z	FD	Ioc	3015.0
1678	spintaretro	166	Z	FD	Ioc	2169.0
1679	spintaretro	167	Z	FD	Ioc	1323.0
1680	spintaretro	168	Z	FD	Ioc	4707.0
1681	spintaretro	169	Z	FD	Ioc	3861.0
1682	spintaretro	170	Z	FD	Ioc	3015.0
1683	spintaretro	171	Z	FD	Ioc	2169.0
1684	spintaretro	172	Z	FD	Ioc	1323.0
1685	spintaretro	173	Z	FD	Ioc	4707.0
1686	spintaretro	174	Z	FD	Ioc	3861.0
1687	spintaretro	175	Z	FD	Ioc	3015.0
1688	spintaretro	176	Z	FD	Ioc	2169.0
1689	spintaretro	177	Z	FD	Ioc	1323.0
1690	spintaretro	178	Z	FD	Ioc	4707.0
1691	spintaretro	179	Z	FD	Ioc	3861.0
1692	spintaretro	180	Z	FD	Ioc	3015.0
1693	spintaretro	181	Z	FD	Ioc	2169.0
1694	spintaretro	182	Z	FD	Ioc	1323.0
1695	spintaretro	483	Z	FD	Ioc	450.0
1696	spintaretro	484	Z	FD	Ioc	450.0
1697	spintaretro	485	Z	FD	Ioc	450.0
1698	spintaretro	486	Z	FD	Ioc	450.0
1699	spintaretro	487	Z	FD	Ioc	450.0
1700	spintaretro	489	Z	FD	Ioc	450.0
1701	spintaretro	490	Z	FD	Ioc	450.0
1702	spintaretro	491	Z	FD	Ioc	450.0
1703	spintaretro	492	Z	FD	Ioc	450.0
1704	spintaretro	488	Z	FD	Ioc	450.0
1705	spintaretro	213	Z	FD	Ioc	1323.0
1706	spintaretro	214	Z	FD	Ioc	2169.0
1707	spintaretro	215	Z	FD	Ioc	3015.0
1708	spintaretro	216	Z	FD	Ioc	3861.0
1709	spintaretro	217	Z	FD	Ioc	4707.0
1710	spintaretro	220	Z	FD	Ioc	3861.0

1711	spi ntaretro	222	Z	FD	I oc	3015.0
1712	spi ntaretro	224	Z	FD	I oc	2169.0
1713	spi ntaretro	226	Z	FD	I oc	1323.0
1714	spi ntaretro	228	Z	FD	I oc	4707.0
1715	spi ntaretro	229	Z	FD	I oc	3861.0
1716	spi ntaretro	230	Z	FD	I oc	3015.0
1717	spi ntaretro	231	Z	FD	I oc	2169.0
1718	spi ntaretro	232	Z	FD	I oc	1323.0
1719	spi ntaretro	233	Z	FD	I oc	4707.0
1720	spi ntaretro	234	Z	FD	I oc	3861.0
1721	spi ntaretro	235	Z	FD	I oc	3015.0
1722	spi ntaretro	236	Z	FD	I oc	2169.0
1723	spi ntaretro	237	Z	FD	I oc	1323.0
1724	spi ntaretro	238	Z	FD	I oc	4707.0
1725	spi ntaretro	239	Z	FD	I oc	3861.0
1726	spi ntaretro	240	Z	FD	I oc	3015.0
1727	spi ntaretro	241	Z	FD	I oc	2169.0
1728	spi ntaretro	242	Z	FD	I oc	1323.0
1729	spi ntaretro	497	Z	FD	I oc	450.0
1730	spi ntaretro	498	Z	FD	I oc	450.0
1731	spi ntaretro	499	Z	FD	I oc	450.0
1732	spi ntaretro	500	Z	FD	I oc	450.0
1733	spi ntaretro	501	Z	FD	I oc	450.0
1734	spi ntaretro	219	Z	FD	I oc	4707.0
1735	massettopl atea	1	Z	FD	gl o	-420.0
1736	massettopl atea	2	Z	FD	gl o	-420.0
1737	massettopl atea	3	Z	FD	gl o	-420.0
1738	massettopl atea	4	Z	FD	gl o	-420.0
1739	massettopl atea	5	Z	FD	gl o	-420.0
1740	massettopl atea	6	Z	FD	gl o	-420.0
1741	massettopl atea	7	Z	FD	gl o	-420.0
1742	massettopl atea	8	Z	FD	gl o	-420.0
1743	massettopl atea	9	Z	FD	gl o	-420.0
1744	massettopl atea	10	Z	FD	gl o	-420.0
1745	massettopl atea	11	Z	FD	gl o	-420.0
1746	massettopl atea	12	Z	FD	gl o	-420.0
1747	massettopl atea	13	Z	FD	gl o	-420.0
1748	massettopl atea	14	Z	FD	gl o	-420.0
1749	massettopl atea	15	Z	FD	gl o	-420.0
1750	massettopl atea	16	Z	FD	gl o	-420.0
1751	massettopl atea	17	Z	FD	gl o	-420.0
1752	massettopl atea	18	Z	FD	gl o	-420.0
1753	massettopl atea	19	Z	FD	gl o	-420.0
1754	massettopl atea	20	Z	FD	gl o	-420.0
1755	massettopl atea	21	Z	FD	gl o	-420.0
1756	massettopl atea	22	Z	FD	gl o	-420.0
1757	massettopl atea	23	Z	FD	gl o	-420.0
1758	massettopl atea	24	Z	FD	gl o	-420.0
1759	massettopl atea	25	Z	FD	gl o	-420.0
1760	massettopl atea	26	Z	FD	gl o	-420.0
1761	massettopl atea	27	Z	FD	gl o	-420.0
1762	massettopl atea	28	Z	FD	gl o	-420.0
1763	massettopl atea	29	Z	FD	gl o	-420.0
1764	massettopl atea	30	Z	FD	gl o	-420.0
1765	massettopl atea	31	Z	FD	gl o	-420.0
1766	massettopl atea	32	Z	FD	gl o	-420.0
1767	massettopl atea	33	Z	FD	gl o	-420.0
1768	massettopl atea	34	Z	FD	gl o	-420.0
1769	massettopl atea	35	Z	FD	gl o	-420.0
1770	massettopl atea	36	Z	FD	gl o	-420.0
1771	massettopl atea	37	Z	FD	gl o	-420.0
1772	massettopl atea	38	Z	FD	gl o	-420.0
1773	massettopl atea	39	Z	FD	gl o	-420.0
1774	massettopl atea	40	Z	FD	gl o	-420.0
1775	massettopl atea	41	Z	FD	gl o	-420.0
1776	massettopl atea	42	Z	FD	gl o	-420.0
1777	massettopl atea	43	Z	FD	gl o	-420.0
1778	massettopl atea	44	Z	FD	gl o	-420.0
1779	massettopl atea	45	Z	FD	gl o	-420.0
1780	massettopl atea	46	Z	FD	gl o	-420.0
1781	massettopl atea	47	Z	FD	gl o	-420.0
1782	massettopl atea	48	Z	FD	gl o	-420.0
1783	massettopl atea	49	Z	FD	gl o	-420.0
1784	massettopl atea	50	Z	FD	gl o	-420.0
1785	massettopl atea	51	Z	FD	gl o	-420.0
1786	massettopl atea	52	Z	FD	gl o	-420.0
1787	massettopl atea	53	Z	FD	gl o	-420.0
1788	massettopl atea	54	Z	FD	gl o	-420.0
1789	massettopl atea	55	Z	FD	gl o	-420.0
1790	massettopl atea	56	Z	FD	gl o	-420.0
1791	massettopl atea	57	Z	FD	gl o	-420.0
1792	massettopl atea	58	Z	FD	gl o	-420.0
1793	massettopl atea	59	Z	FD	gl o	-420.0
1794	massettopl atea	60	Z	FD	gl o	-420.0
1795	massettopl atea	61	Z	FD	gl o	-420.0
1796	massettopl atea	62	Z	FD	gl o	-420.0
1797	massettopl atea	63	Z	FD	gl o	-420.0
1798	massettopl atea	64	Z	FD	gl o	-420.0
1799	massettopl atea	65	Z	FD	gl o	-420.0
1800	massettopl atea	66	Z	FD	gl o	-420.0
1801	massettopl atea	67	Z	FD	gl o	-420.0

1802	massettopl atea	68	Z	FD gl o	-420.0
1803	massettopl atea	69	Z	FD gl o	-420.0
1804	massettopl atea	70	Z	FD gl o	-420.0
1805	massettopl atea	73	Z	FD gl o	-420.0
1806	massettopl atea	74	Z	FD gl o	-420.0
1807	massettopl atea	75	Z	FD gl o	-420.0
1808	massettopl atea	76	Z	FD gl o	-420.0
1809	massettopl atea	77	Z	FD gl o	-420.0
1810	massettopl atea	78	Z	FD gl o	-420.0
1811	massettopl atea	79	Z	FD gl o	-420.0
1812	massettopl atea	80	Z	FD gl o	-420.0
1813	massettopl atea	81	Z	FD gl o	-420.0
1814	massettopl atea	82	Z	FD gl o	-420.0
1815	ph1+	338	Z	FD loc	3530.0
1816	ph1+	339	Z	FD loc	2590.0
1817	ph1+	340	Z	FD loc	1650.0
1818	ph1+	341	Z	FD loc	710.0
1819	ph1+	342	Z	FD loc	30.6
1820	ph1+	343	Z	FD loc	3530.0
1821	ph1+	344	Z	FD loc	2590.0
1822	ph1+	345	Z	FD loc	1650.0
1823	ph1+	346	Z	FD loc	710.0
1824	ph1+	348	Z	FD loc	3530.0
1825	ph1+	349	Z	FD loc	2590.0
1826	ph1+	350	Z	FD loc	1650.0
1827	ph1+	351	Z	FD loc	710.0
1828	ph1+	353	Z	FD loc	3530.0
1829	ph1+	354	Z	FD loc	3530.0
1830	ph1+	355	Z	FD loc	2590.0
1831	ph1+	356	Z	FD loc	2590.0
1832	ph1+	357	Z	FD loc	1650.0
1833	ph1+	358	Z	FD loc	1650.0
1834	ph1+	359	Z	FD loc	710.0
1835	ph1+	360	Z	FD loc	710.0
1836	ph1+	361	Z	FD loc	30.6
1837	ph1+	362	Z	FD loc	30.6
1838	ph1+	363	Z	FD loc	3530.0
1839	ph1+	364	Z	FD loc	2590.0
1840	ph1+	365	Z	FD loc	1650.0
1841	ph1+	366	Z	FD loc	710.0
1842	ph1+	367	Z	FD loc	30.6
1843	ph1+	606	Z	FD loc	5.2
1844	ph1+	607	Z	FD loc	38.7
1845	ph1+	608	Z	FD loc	44.7
1846	ph1+	605	Z	FD loc	5.2
1847	ph1-	129	Z	FD loc	-3530.0
1848	ph1-	131	Z	FD loc	-2590.0
1849	ph1-	133	Z	FD loc	-1650.0
1850	ph1-	135	Z	FD loc	-710.0
1851	ph1-	137	Z	FD loc	-30.6
1852	ph1-	268	Z	FD loc	-3530.0
1853	ph1-	319	Z	FD loc	-3530.0
1854	ph1-	320	Z	FD loc	-2590.0
1855	ph1-	321	Z	FD loc	-3530.0
1856	ph1-	322	Z	FD loc	-2590.0
1857	ph1-	323	Z	FD loc	-3530.0
1858	ph1-	324	Z	FD loc	-2590.0
1859	ph1-	325	Z	FD loc	-3530.0
1860	ph1-	328	Z	FD loc	-1650.0
1861	ph1-	329	Z	FD loc	-1650.0
1862	ph1-	333	Z	FD loc	-710.0
1863	ph1-	277	Z	FD loc	-30.6
1864	ph1-	334	Z	FD loc	-30.6
1865	ph1-	335	Z	FD loc	-30.6
1866	ph1-	336	Z	FD loc	-30.6
1867	ph1-	275	Z	FD loc	-710.0
1868	ph1-	330	Z	FD loc	-710.0
1869	ph1-	331	Z	FD loc	-710.0
1870	ph1-	273	Z	FD loc	-1650.0
1871	ph1-	326	Z	FD loc	-1650.0
1872	ph1-	271	Z	FD loc	-2590.0
1873	ph1-	567	Z	FD loc	-2433.3
1874	ph1-	569	Z	FD loc	-1493.3
1875	ph1-	571	Z	FD loc	-553.3
1876	ph1-	573	Z	FD loc	-5.2
1877	ph1-	566	Z	FD loc	-2746.7
1878	ph1-	568	Z	FD loc	-1806.7
1879	ph1-	570	Z	FD loc	-866.7
1880	ph1-	572	Z	FD loc	-40.9
1881	ph1-	269	Z	FD loc	-3530.0
1882	ph1-	278	Z	FD loc	-3530.0
1883	ph1-	283	Z	FD loc	-3530.0
1884	ph1-	288	Z	FD loc	-3530.0
1885	ph1-	293	Z	FD loc	-3530.0
1886	ph1-	276	Z	FD loc	-30.6
1887	ph1-	282	Z	FD loc	-30.6
1888	ph1-	287	Z	FD loc	-30.6
1889	ph1-	292	Z	FD loc	-30.6
1890	ph1-	297	Z	FD loc	-30.6
1891	ph1-	296	Z	FD loc	-710.0
1892	ph1-	291	Z	FD loc	-710.0

1893	ph1-	286	Z	FD	I oc	-710.0
1894	ph1-	281	Z	FD	I oc	-710.0
1895	ph1-	274	Z	FD	I oc	-710.0
1896	ph1-	272	Z	FD	I oc	-1650.0
1897	ph1-	280	Z	FD	I oc	-1650.0
1898	ph1-	285	Z	FD	I oc	-1650.0
1899	ph1-	290	Z	FD	I oc	-1650.0
1900	ph1-	295	Z	FD	I oc	-1650.0
1901	ph1-	294	Z	FD	I oc	-2590.0
1902	ph1-	289	Z	FD	I oc	-2590.0
1903	ph1-	284	Z	FD	I oc	-2590.0
1904	ph1-	279	Z	FD	I oc	-2590.0
1905	ph1-	270	Z	FD	I oc	-2590.0
1906	ph1-	128	Z	FD	I oc	-3530.0
1907	ph1-	130	Z	FD	I oc	-2590.0
1908	ph1-	132	Z	FD	I oc	-1650.0
1909	ph1-	134	Z	FD	I oc	-710.0
1910	ph1-	136	Z	FD	I oc	-30.6
1911	ph1-	138	Z	FD	I oc	-3530.0
1912	ph1-	139	Z	FD	I oc	-2590.0
1913	ph1-	140	Z	FD	I oc	-1650.0
1914	ph1-	141	Z	FD	I oc	-710.0
1915	ph1-	142	Z	FD	I oc	-30.6
1916	ph1-	143	Z	FD	I oc	-3530.0
1917	ph1-	144	Z	FD	I oc	-2590.0
1918	ph1-	145	Z	FD	I oc	-1650.0
1919	ph1-	146	Z	FD	I oc	-710.0
1920	ph1-	147	Z	FD	I oc	-30.6
1921	ph1-	148	Z	FD	I oc	-3530.0
1922	ph1-	149	Z	FD	I oc	-2590.0
1923	ph1-	150	Z	FD	I oc	-1650.0
1924	ph1-	151	Z	FD	I oc	-710.0
1925	ph1-	152	Z	FD	I oc	-30.6
1926	ph1-	153	Z	FD	I oc	-3530.0
1927	ph1-	154	Z	FD	I oc	-2590.0
1928	ph1-	155	Z	FD	I oc	-1650.0
1929	ph1-	156	Z	FD	I oc	-710.0
1930	ph1-	157	Z	FD	I oc	-30.6
1931	phv	1	Z	FD	gl o	-4000.0
1932	phv	2	Z	FD	gl o	-4000.0
1933	phv	3	Z	FD	gl o	-4000.0
1934	phv	4	Z	FD	gl o	-4000.0
1935	phv	5	Z	FD	gl o	-4000.0
1936	phv	6	Z	FD	gl o	-4000.0
1937	phv	7	Z	FD	gl o	-4000.0
1938	phv	8	Z	FD	gl o	-4000.0
1939	phv	9	Z	FD	gl o	-4000.0
1940	phv	10	Z	FD	gl o	-4000.0
1941	phv	11	Z	FD	gl o	-4000.0
1942	phv	12	Z	FD	gl o	-4000.0
1943	phv	13	Z	FD	gl o	-4000.0
1944	phv	14	Z	FD	gl o	-4000.0
1945	phv	15	Z	FD	gl o	-4000.0
1946	phv	16	Z	FD	gl o	-4000.0
1947	phv	17	Z	FD	gl o	-4000.0
1948	phv	18	Z	FD	gl o	-4000.0
1949	phv	19	Z	FD	gl o	-4000.0
1950	phv	20	Z	FD	gl o	-4000.0
1951	phv	21	Z	FD	gl o	-4000.0
1952	phv	22	Z	FD	gl o	-4000.0
1953	phv	23	Z	FD	gl o	-4000.0
1954	phv	24	Z	FD	gl o	-4000.0
1955	phv	25	Z	FD	gl o	-4000.0
1956	phv	26	Z	FD	gl o	-4000.0
1957	phv	27	Z	FD	gl o	-4000.0
1958	phv	28	Z	FD	gl o	-4000.0
1959	phv	29	Z	FD	gl o	-4000.0
1960	phv	30	Z	FD	gl o	-4000.0
1961	phv	31	Z	FD	gl o	-4000.0
1962	phv	32	Z	FD	gl o	-4000.0
1963	phv	33	Z	FD	gl o	-4000.0
1964	phv	34	Z	FD	gl o	-4000.0
1965	phv	35	Z	FD	gl o	-4000.0
1966	phv	36	Z	FD	gl o	-4000.0
1967	phv	37	Z	FD	gl o	-4000.0
1968	phv	38	Z	FD	gl o	-4000.0
1969	phv	39	Z	FD	gl o	-4000.0
1970	phv	40	Z	FD	gl o	-4000.0
1971	phv	41	Z	FD	gl o	-4000.0
1972	phv	42	Z	FD	gl o	-4000.0
1973	phv	43	Z	FD	gl o	-4000.0
1974	phv	44	Z	FD	gl o	-4000.0
1975	phv	45	Z	FD	gl o	-4000.0
1976	phv	46	Z	FD	gl o	-4000.0
1977	phv	47	Z	FD	gl o	-4000.0
1978	phv	48	Z	FD	gl o	-4000.0
1979	phv	49	Z	FD	gl o	-4000.0
1980	phv	50	Z	FD	gl o	-4000.0
1981	ph1-	338	Z	FD	I oc	-3530.0
1982	ph1-	339	Z	FD	I oc	-2590.0
1983	ph1-	340	Z	FD	I oc	-1650.0

1984	ph1-	341	Z	FD	loc	-710.0
1985	ph1-	342	Z	FD	loc	-30.6
1986	ph1-	353	Z	FD	loc	-3530.0
1987	ph1-	354	Z	FD	loc	-3530.0
1988	ph1-	355	Z	FD	loc	-2590.0
1989	ph1-	356	Z	FD	loc	-2590.0
1990	ph1-	357	Z	FD	loc	-1650.0
1991	ph1-	358	Z	FD	loc	-1650.0
1992	ph1-	359	Z	FD	loc	-710.0
1993	ph1-	360	Z	FD	loc	-710.0
1994	ph1-	361	Z	FD	loc	-30.6
1995	ph1-	362	Z	FD	loc	-30.6
1996	ph1-	363	Z	FD	loc	-3530.0
1997	ph1-	364	Z	FD	loc	-2590.0
1998	ph1-	365	Z	FD	loc	-1650.0
1999	ph1-	366	Z	FD	loc	-710.0
2000	ph1-	367	Z	FD	loc	-30.6
2001	ph1-	368	Z	FD	loc	-30.6
2002	ph1-	369	Z	FD	loc	-710.0
2003	ph1-	370	Z	FD	loc	-1650.0
2004	ph1-	371	Z	FD	loc	-2590.0
2005	ph1-	372	Z	FD	loc	-3530.0
2006	ph1-	373	Z	FD	loc	-3530.0
2007	ph1-	374	Z	FD	loc	-2590.0
2008	ph1-	375	Z	FD	loc	-1650.0
2009	ph1-	376	Z	FD	loc	-710.0
2010	ph1-	378	Z	FD	loc	-3530.0
2011	ph1-	379	Z	FD	loc	-2590.0
2012	ph1-	380	Z	FD	loc	-1650.0
2013	ph1-	381	Z	FD	loc	-710.0
2014	ph1-	383	Z	FD	loc	-3530.0
2015	ph1-	384	Z	FD	loc	-2590.0
2016	ph1-	385	Z	FD	loc	-1650.0
2017	ph1-	386	Z	FD	loc	-710.0
2018	ph1-	387	Z	FD	loc	-30.6
2019	ph1-	388	Z	FD	loc	-3530.0
2020	ph1-	389	Z	FD	loc	-2590.0
2021	ph1-	390	Z	FD	loc	-1650.0
2022	ph1-	391	Z	FD	loc	-710.0
2023	ph1-	392	Z	FD	loc	-30.6
2024	ph1-	183	Z	FD	loc	-3530.0
2025	ph1-	184	Z	FD	loc	-2590.0
2026	ph1-	185	Z	FD	loc	-1650.0
2027	ph1-	186	Z	FD	loc	-710.0
2028	ph1-	187	Z	FD	loc	-30.6
2029	ph1-	218	Z	FD	loc	-3530.0
2030	ph1-	221	Z	FD	loc	-2590.0
2031	ph1-	223	Z	FD	loc	-1650.0
2032	ph1-	225	Z	FD	loc	-710.0
2033	ph1-	227	Z	FD	loc	-30.6
2034	ph1-	393	Z	FD	loc	-3530.0
2035	ph1-	394	Z	FD	loc	-2590.0
2036	ph1-	395	Z	FD	loc	-1650.0
2037	ph1-	396	Z	FD	loc	-710.0
2038	ph1-	397	Z	FD	loc	-30.6
2039	ph1-	398	Z	FD	loc	-30.6
2040	ph1-	399	Z	FD	loc	-710.0
2041	ph1-	400	Z	FD	loc	-1650.0
2042	ph1-	401	Z	FD	loc	-2590.0
2043	ph1-	402	Z	FD	loc	-3530.0
2044	ph1-	158	Z	FD	loc	-3530.0
2045	ph1-	159	Z	FD	loc	-2590.0
2046	ph1-	160	Z	FD	loc	-1650.0
2047	ph1-	161	Z	FD	loc	-710.0
2048	ph1-	162	Z	FD	loc	-30.6
2049	ph1-	163	Z	FD	loc	-3530.0
2050	ph1-	164	Z	FD	loc	-2590.0
2051	ph1-	165	Z	FD	loc	-1650.0
2052	ph1-	166	Z	FD	loc	-710.0
2053	ph1-	167	Z	FD	loc	-30.6
2054	ph1-	168	Z	FD	loc	-3530.0
2055	ph1-	169	Z	FD	loc	-2590.0
2056	ph1-	170	Z	FD	loc	-1650.0
2057	ph1-	171	Z	FD	loc	-710.0
2058	ph1-	172	Z	FD	loc	-30.6
2059	ph1-	173	Z	FD	loc	-3530.0
2060	ph1-	174	Z	FD	loc	-2590.0
2061	ph1-	175	Z	FD	loc	-1650.0
2062	ph1-	176	Z	FD	loc	-710.0
2063	ph1-	177	Z	FD	loc	-30.6
2064	ph1-	178	Z	FD	loc	-3530.0
2065	ph1-	179	Z	FD	loc	-2590.0
2066	ph1-	180	Z	FD	loc	-1650.0
2067	ph1-	181	Z	FD	loc	-710.0
2068	ph1-	182	Z	FD	loc	-30.6
2069	ph1-	377	Z	FD	loc	-33.8
2070	ph1-	628	Z	FD	loc	-37.1
2071	ph1-	627	Z	FD	loc	-5.2
2072	phv	51	Z	FD	gl o	-4000.0
2073	phv	52	Z	FD	gl o	-4000.0
2074	phv	53	Z	FD	gl o	-4000.0

2075	phv	54	Z	FD	gl o	-4000.0
2076	phv	55	Z	FD	gl o	-4000.0
2077	phv	56	Z	FD	gl o	-4000.0
2078	phv	57	Z	FD	gl o	-4000.0
2079	phv	58	Z	FD	gl o	-4000.0
2080	phv	59	Z	FD	gl o	-4000.0
2081	phv	60	Z	FD	gl o	-4000.0
2082	phv	61	Z	FD	gl o	-4000.0
2083	phv	62	Z	FD	gl o	-4000.0
2084	phv	63	Z	FD	gl o	-4000.0
2085	phv	64	Z	FD	gl o	-4000.0
2086	phv	65	Z	FD	gl o	-4000.0
2087	phv	66	Z	FD	gl o	-4000.0
2088	phv	67	Z	FD	gl o	-4000.0
2089	phv	68	Z	FD	gl o	-4000.0
2090	phv	69	Z	FD	gl o	-4000.0
2091	phv	70	Z	FD	gl o	-4000.0
2092	ph1+	393	Z	FD	loc	3530.0
2093	ph1+	394	Z	FD	loc	2590.0
2094	ph1+	395	Z	FD	loc	1650.0
2095	ph1+	396	Z	FD	loc	710.0
2096	ph1+	397	Z	FD	loc	30.6
2097	ph1+	398	Z	FD	loc	30.6
2098	ph1+	399	Z	FD	loc	710.0
2099	ph1+	400	Z	FD	loc	1650.0
2100	ph1+	401	Z	FD	loc	2590.0
2101	ph1+	402	Z	FD	loc	3530.0
2102	ph1+	525	Z	FD	loc	3530.0
2103	ph1+	527	Z	FD	loc	1650.0
2104	ph1+	528	Z	FD	loc	710.0
2105	ph1+	530	Z	FD	loc	3530.0
2106	ph1+	531	Z	FD	loc	2590.0
2107	ph1+	532	Z	FD	loc	1650.0
2108	ph1+	533	Z	FD	loc	710.0
2109	ph1+	592	Z	FD	loc	2863.3
2110	ph1+	593	Z	FD	loc	2550.0
2111	ph1+	594	Z	FD	loc	2236.6
2112	ph1+	613	Z	FD	loc	5.2
2113	ph1+	614	Z	FD	loc	38.7
2114	ph1+	615	Z	FD	loc	44.7
2115	ph1+	616	Z	FD	loc	5.2
2116	ph1-	211	Z	FD	loc	-2590.0
2117	ph1-	212	Z	FD	loc	-3530.0
2118	ph1-	243	Z	FD	loc	-3530.0
2119	ph1-	253	Z	FD	loc	-3530.0
2120	ph1-	258	Z	FD	loc	-3530.0
2121	ph1-	259	Z	FD	loc	-2590.0
2122	ph1-	263	Z	FD	loc	-3530.0
2123	ph1-	264	Z	FD	loc	-2590.0
2124	ph1-	208	Z	FD	loc	-30.6
2125	ph1-	267	Z	FD	loc	-30.6
2126	ph1-	262	Z	FD	loc	-30.6
2127	ph1-	257	Z	FD	loc	-30.6
2128	ph1-	251	Z	FD	loc	-30.6
2129	ph1-	249	Z	FD	loc	-710.0
2130	ph1-	256	Z	FD	loc	-710.0
2131	ph1-	261	Z	FD	loc	-710.0
2132	ph1-	266	Z	FD	loc	-710.0
2133	ph1-	209	Z	FD	loc	-710.0
2134	ph1-	210	Z	FD	loc	-1650.0
2135	ph1-	265	Z	FD	loc	-1650.0
2136	ph1-	260	Z	FD	loc	-1650.0
2137	ph1-	255	Z	FD	loc	-1650.0
2138	ph1-	247	Z	FD	loc	-1650.0
2139	ph1-	582	Z	FD	loc	-2268.3
2140	ph1-	578	Z	FD	loc	-2198.6
2141	ph1-	581	Z	FD	loc	-2735.6
2142	ph1-	580	Z	FD	loc	-2646.2
2143	ph1-	188	Z	FD	loc	-2590.0
2144	ph1-	190	Z	FD	loc	-2590.0
2145	ph1-	192	Z	FD	loc	-2590.0
2146	ph1-	193	Z	FD	loc	-3530.0
2147	ph1-	194	Z	FD	loc	-2590.0
2148	ph1-	197	Z	FD	loc	-1650.0
2149	ph1-	198	Z	FD	loc	-1650.0
2150	ph1-	199	Z	FD	loc	-1650.0
2151	ph1-	202	Z	FD	loc	-710.0
2152	ph1-	203	Z	FD	loc	-710.0
2153	ph1-	207	Z	FD	loc	-30.6
2154	ph1-	205	Z	FD	loc	-30.6
2155	ph1-	204	Z	FD	loc	-30.6
2156	ph1-	200	Z	FD	loc	-710.0
2157	ph1-	561	Z	FD	loc	-1493.3
2158	ph1-	563	Z	FD	loc	-553.3
2159	ph1-	565	Z	FD	loc	-5.2
2160	ph1-	560	Z	FD	loc	-1806.7
2161	ph1-	562	Z	FD	loc	-866.7
2162	ph1-	564	Z	FD	loc	-40.9
2163	ph1-	195	Z	FD	loc	-3530.0
2164	ph1-	189	Z	FD	loc	-3530.0
2165	ph1-	191	Z	FD	loc	-3530.0

2166	ph1-	213	Z	FD	loc	-30.6
2167	ph1-	214	Z	FD	loc	-710.0
2168	ph1-	215	Z	FD	loc	-1650.0
2169	ph1-	216	Z	FD	loc	-2590.0
2170	ph1-	217	Z	FD	loc	-3530.0
2171	ph1-	220	Z	FD	loc	-2590.0
2172	ph1-	222	Z	FD	loc	-1650.0
2173	ph1-	224	Z	FD	loc	-710.0
2174	ph1-	226	Z	FD	loc	-30.6
2175	ph1-	228	Z	FD	loc	-3530.0
2176	ph1-	229	Z	FD	loc	-2590.0
2177	ph1-	230	Z	FD	loc	-1650.0
2178	ph1-	231	Z	FD	loc	-710.0
2179	ph1-	232	Z	FD	loc	-30.6
2180	ph1-	233	Z	FD	loc	-3530.0
2181	ph1-	234	Z	FD	loc	-2590.0
2182	ph1-	235	Z	FD	loc	-1650.0
2183	ph1-	236	Z	FD	loc	-710.0
2184	ph1-	237	Z	FD	loc	-30.6
2185	ph1-	238	Z	FD	loc	-3530.0
2186	ph1-	239	Z	FD	loc	-2590.0
2187	ph1-	240	Z	FD	loc	-1650.0
2188	ph1-	241	Z	FD	loc	-710.0
2189	ph1-	242	Z	FD	loc	-30.6
2190	ph1-	219	Z	FD	loc	-3530.0
2191	syv1z+	6	Z	FD	glo	78.0
2192	syv1z+	5	Z	FD	glo	78.0
2193	syv1z+	15	Z	FD	glo	78.0
2194	syv1z+	21	Z	FD	glo	78.0
2195	syv1z+	27	Z	FD	glo	78.0
2196	syv1z+	4	Z	FD	glo	78.0
2197	syv1z+	3	Z	FD	glo	78.0
2198	syv1z+	14	Z	FD	glo	78.0
2199	syv1z+	20	Z	FD	glo	78.0
2200	syv1z+	26	Z	FD	glo	78.0
2201	syv1z+	2	Z	FD	glo	78.0
2202	syv1z+	1	Z	FD	glo	78.0
2203	syv1z+	13	Z	FD	glo	78.0
2204	syv1z+	19	Z	FD	glo	78.0
2205	syv1z+	25	Z	FD	glo	78.0
2206	syv1z-	7	Z	FD	glo	-78.0
2207	syv1z-	8	Z	FD	glo	-78.0
2208	syv1z-	9	Z	FD	glo	-78.0
2209	syv1z-	10	Z	FD	glo	-78.0
2210	syv1z-	11	Z	FD	glo	-78.0
2211	syv1z-	12	Z	FD	glo	-78.0
2212	syv1z-	16	Z	FD	glo	-78.0
2213	syv1z-	17	Z	FD	glo	-78.0
2214	syv1z-	18	Z	FD	glo	-78.0
2215	syv1z-	22	Z	FD	glo	-78.0
2216	syv1z-	23	Z	FD	glo	-78.0
2217	syv1z-	24	Z	FD	glo	-78.0
2218	syv1z-	28	Z	FD	glo	-78.0
2219	syv1z-	29	Z	FD	glo	-78.0
2220	syv1z-	30	Z	FD	glo	-78.0
2221	syv1	128	Y	FD	glo	653.7
2222	syv1	130	Y	FD	glo	513.1
2223	syv1	132	Y	FD	glo	372.5
2224	syv1	134	Y	FD	glo	231.9
2225	syv1	136	Y	FD	glo	91.3
2226	syv1	138	Y	FD	glo	653.7
2227	syv1	139	Y	FD	glo	513.1
2228	syv1	140	Y	FD	glo	372.5
2229	syv1	141	Y	FD	glo	231.9
2230	syv1	142	Y	FD	glo	91.3
2231	syv1	143	Y	FD	glo	653.7
2232	syv1	144	Y	FD	glo	513.1
2233	syv1	145	Y	FD	glo	372.5
2234	syv1	146	Y	FD	glo	231.9
2235	syv1	147	Y	FD	glo	91.3
2236	syv1	148	Y	FD	glo	653.7
2237	syv1	149	Y	FD	glo	513.1
2238	syv1	150	Y	FD	glo	372.5
2239	syv1	151	Y	FD	glo	231.9
2240	syv1	152	Y	FD	glo	91.3
2241	syv1	153	Y	FD	glo	653.7
2242	syv1	154	Y	FD	glo	513.1
2243	syv1	155	Y	FD	glo	372.5
2244	syv1	156	Y	FD	glo	231.9
2245	syv1	157	Y	FD	glo	91.3
2246	syv1	269	Y	FD	glo	653.7
2247	syv1	278	Y	FD	glo	653.7
2248	syv1	283	Y	FD	glo	653.7
2249	syv1	288	Y	FD	glo	653.7
2250	syv1	293	Y	FD	glo	653.7
2251	syv1	276	Y	FD	glo	91.3
2252	syv1	282	Y	FD	glo	91.3
2253	syv1	287	Y	FD	glo	91.3
2254	syv1	292	Y	FD	glo	91.3
2255	syv1	297	Y	FD	glo	91.3
2256	syv1	296	Y	FD	glo	231.9

2257	syv1	291	Y	FD	gl o	231.9
2258	syv1	286	Y	FD	gl o	231.9
2259	syv1	281	Y	FD	gl o	231.9
2260	syv1	274	Y	FD	gl o	231.9
2261	syv1	272	Y	FD	gl o	372.5
2262	syv1	280	Y	FD	gl o	372.5
2263	syv1	285	Y	FD	gl o	372.5
2264	syv1	290	Y	FD	gl o	372.5
2265	syv1	295	Y	FD	gl o	372.5
2266	syv1	294	Y	FD	gl o	513.1
2267	syv1	289	Y	FD	gl o	513.1
2268	syv1	284	Y	FD	gl o	513.1
2269	syv1	279	Y	FD	gl o	513.1
2270	syv1	270	Y	FD	gl o	513.1
2271	sxv1z+	12	Z	FD	gl o	72.0
2272	sxv1z+	10	Z	FD	gl o	72.0
2273	sxv1z+	8	Z	FD	gl o	72.0
2274	sxv1z+	6	Z	FD	gl o	72.0
2275	sxv1z+	4	Z	FD	gl o	72.0
2276	sxv1z+	2	Z	FD	gl o	72.0
2277	sxv1z+	1	Z	FD	gl o	72.0
2278	sxv1z+	3	Z	FD	gl o	72.0
2279	sxv1z+	5	Z	FD	gl o	72.0
2280	sxv1z+	7	Z	FD	gl o	72.0
2281	sxv1z+	9	Z	FD	gl o	72.0
2282	sxv1z+	11	Z	FD	gl o	72.0
2283	sxv1z+	13	Z	FD	gl o	72.0
2284	sxv1z+	14	Z	FD	gl o	72.0
2285	sxv1z+	15	Z	FD	gl o	72.0
2286	sxv1z+	16	Z	FD	gl o	72.0
2287	sxv1z+	17	Z	FD	gl o	72.0
2288	sxv1z+	18	Z	FD	gl o	72.0
2289	sxv1z-	22	Z	FD	gl o	-72.0
2290	sxv1z-	23	Z	FD	gl o	-72.0
2291	sxv1z-	24	Z	FD	gl o	-72.0
2292	sxv1z-	28	Z	FD	gl o	-72.0
2293	sxv1z-	29	Z	FD	gl o	-72.0
2294	sxv1z-	30	Z	FD	gl o	-72.0
2295	sxv1z-	21	Z	FD	gl o	-72.0
2296	sxv1z-	27	Z	FD	gl o	-72.0
2297	sxv1z-	20	Z	FD	gl o	-72.0
2298	sxv1z-	26	Z	FD	gl o	-72.0
2299	sxv1z-	19	Z	FD	gl o	-72.0
2300	sxv1z-	25	Z	FD	gl o	-72.0
2301	sxv1	338	X	FD	gl o	590.6
2302	sxv1	339	X	FD	gl o	463.8
2303	sxv1	340	X	FD	gl o	337.0
2304	sxv1	341	X	FD	gl o	210.2
2305	sxv1	342	X	FD	gl o	83.4
2306	sxv1	343	X	FD	gl o	590.6
2307	sxv1	344	X	FD	gl o	463.8
2308	sxv1	345	X	FD	gl o	337.0
2309	sxv1	346	X	FD	gl o	210.2
2310	sxv1	348	X	FD	gl o	590.6
2311	sxv1	349	X	FD	gl o	463.8
2312	sxv1	350	X	FD	gl o	337.0
2313	sxv1	351	X	FD	gl o	210.2
2314	sxv1	353	X	FD	gl o	590.6
2315	sxv1	354	X	FD	gl o	590.6
2316	sxv1	355	X	FD	gl o	463.8
2317	sxv1	356	X	FD	gl o	463.8
2318	sxv1	357	X	FD	gl o	337.0
2319	sxv1	358	X	FD	gl o	337.0
2320	sxv1	359	X	FD	gl o	210.2
2321	sxv1	360	X	FD	gl o	210.2
2322	sxv1	361	X	FD	gl o	83.4
2323	sxv1	362	X	FD	gl o	83.4
2324	sxv1	363	X	FD	gl o	590.6
2325	sxv1	364	X	FD	gl o	463.8
2326	sxv1	365	X	FD	gl o	337.0
2327	sxv1	366	X	FD	gl o	210.2
2328	sxv1	367	X	FD	gl o	83.4
2329	sxv1	606	X	FD	gl o	62.3
2330	sxv1	607	X	FD	gl o	90.1
2331	sxv1	608	X	FD	gl o	95.1
2332	sxv1	605	X	FD	gl o	62.3
2333	sxv1	129	X	FD	gl o	590.6
2334	sxv1	131	X	FD	gl o	463.8
2335	sxv1	133	X	FD	gl o	337.0
2336	sxv1	135	X	FD	gl o	210.2
2337	sxv1	137	X	FD	gl o	83.4
2338	sxv1	268	X	FD	gl o	590.6
2339	sxv1	319	X	FD	gl o	590.6
2340	sxv1	320	X	FD	gl o	463.8
2341	sxv1	321	X	FD	gl o	590.6
2342	sxv1	322	X	FD	gl o	463.8
2343	sxv1	323	X	FD	gl o	590.6
2344	sxv1	324	X	FD	gl o	463.8
2345	sxv1	325	X	FD	gl o	590.6
2346	sxv1	328	X	FD	gl o	337.0
2347	sxv1	329	X	FD	gl o	337.0

2348	sxv1	333	X	FD	gl o	210.2
2349	sxv1	277	X	FD	gl o	83.4
2350	sxv1	334	X	FD	gl o	83.4
2351	sxv1	335	X	FD	gl o	83.4
2352	sxv1	336	X	FD	gl o	83.4
2353	sxv1	275	X	FD	gl o	210.2
2354	sxv1	330	X	FD	gl o	210.2
2355	sxv1	331	X	FD	gl o	210.2
2356	sxv1	273	X	FD	gl o	337.0
2357	sxv1	326	X	FD	gl o	337.0
2358	sxv1	271	X	FD	gl o	463.8
2359	sxv1	567	X	FD	gl o	442.7
2360	sxv1	569	X	FD	gl o	315.9
2361	sxv1	571	X	FD	gl o	189.1
2362	sxv1	573	X	FD	gl o	62.3
2363	sxv1	566	X	FD	gl o	484.9
2364	sxv1	568	X	FD	gl o	358.1
2365	sxv1	570	X	FD	gl o	231.3
2366	sxv1	572	X	FD	gl o	104.5
2367	sxv2z+	50	Z	FD	gl o	77.0
2368	sxv2z+	36	Z	FD	gl o	77.0
2369	sxv2z+	34	Z	FD	gl o	77.0
2370	sxv2z+	32	Z	FD	gl o	77.0
2371	sxv2z+	31	Z	FD	gl o	77.0
2372	sxv2z+	33	Z	FD	gl o	77.0
2373	sxv2z+	35	Z	FD	gl o	77.0
2374	sxv2z+	49	Z	FD	gl o	77.0
2375	sxv2z+	48	Z	FD	gl o	77.0
2376	sxv2z+	39	Z	FD	gl o	77.0
2377	sxv2z+	38	Z	FD	gl o	77.0
2378	sxv2z+	37	Z	FD	gl o	77.0
2379	sxv2z-	40	Z	FD	gl o	-77.0
2380	sxv2z-	41	Z	FD	gl o	-77.0
2381	sxv2z-	42	Z	FD	gl o	-77.0
2382	sxv2z-	43	Z	FD	gl o	-77.0
2383	sxv2z-	44	Z	FD	gl o	-77.0
2384	sxv2z-	45	Z	FD	gl o	-77.0
2385	sxv2z-	47	Z	FD	gl o	-77.0
2386	sxv2z-	46	Z	FD	gl o	-77.0
2387	sxv2	183	X	FD	gl o	699.7
2388	sxv2	184	X	FD	gl o	547.1
2389	sxv2	185	X	FD	gl o	394.5
2390	sxv2	186	X	FD	gl o	241.9
2391	sxv2	187	X	FD	gl o	89.3
2392	sxv2	218	X	FD	gl o	699.7
2393	sxv2	221	X	FD	gl o	547.1
2394	sxv2	223	X	FD	gl o	394.5
2395	sxv2	225	X	FD	gl o	241.9
2396	sxv2	227	X	FD	gl o	89.3
2397	sxv2	393	X	FD	gl o	699.7
2398	sxv2	394	X	FD	gl o	547.1
2399	sxv2	395	X	FD	gl o	394.5
2400	sxv2	396	X	FD	gl o	241.9
2401	sxv2	397	X	FD	gl o	89.3
2402	sxv2	398	X	FD	gl o	89.3
2403	sxv2	399	X	FD	gl o	241.9
2404	sxv2	400	X	FD	gl o	394.5
2405	sxv2	401	X	FD	gl o	547.1
2406	sxv2	402	X	FD	gl o	699.7
2407	sxv2	338	X	FD	gl o	699.7
2408	sxv2	339	X	FD	gl o	547.1
2409	sxv2	340	X	FD	gl o	394.5
2410	sxv2	341	X	FD	gl o	241.9
2411	sxv2	342	X	FD	gl o	89.3
2412	sxv2	353	X	FD	gl o	699.7
2413	sxv2	354	X	FD	gl o	699.7
2414	sxv2	355	X	FD	gl o	547.1
2415	sxv2	356	X	FD	gl o	547.1
2416	sxv2	357	X	FD	gl o	394.5
2417	sxv2	358	X	FD	gl o	394.5
2418	sxv2	359	X	FD	gl o	241.9
2419	sxv2	360	X	FD	gl o	241.9
2420	sxv2	361	X	FD	gl o	89.3
2421	sxv2	362	X	FD	gl o	89.3
2422	sxv2	363	X	FD	gl o	699.7
2423	sxv2	364	X	FD	gl o	547.1
2424	sxv2	365	X	FD	gl o	394.5
2425	sxv2	366	X	FD	gl o	241.9
2426	sxv2	367	X	FD	gl o	89.3
2427	syv2z+	47	Z	FD	gl o	47.0
2428	syv2z+	46	Z	FD	gl o	47.0
2429	syv2z+	50	Z	FD	gl o	47.0
2430	syv2z+	49	Z	FD	gl o	47.0
2431	syv2z+	48	Z	FD	gl o	47.0
2432	syv2z+	36	Z	FD	gl o	47.0
2433	syv2z+	35	Z	FD	gl o	47.0
2434	syv2z+	39	Z	FD	gl o	47.0
2435	syv2z+	42	Z	FD	gl o	47.0
2436	syv2z+	45	Z	FD	gl o	47.0
2437	syv2z-	40	Z	FD	gl o	-47.0
2438	syv2z-	41	Z	FD	gl o	-47.0

2439	syv2z-	43	Z	FD	gl o	-47.0
2440	syv2z-	44	Z	FD	gl o	-47.0
2441	syv2z-	34	Z	FD	gl o	-47.0
2442	syv2z-	32	Z	FD	gl o	-47.0
2443	syv2z-	31	Z	FD	gl o	-47.0
2444	syv2z-	33	Z	FD	gl o	-47.0
2445	syv2z-	38	Z	FD	gl o	-47.0
2446	syv2z-	37	Z	FD	gl o	-47.0
2447	syv2	158	Y	FD	gl o	513.3
2448	syv2	159	Y	FD	gl o	401.9
2449	syv2	160	Y	FD	gl o	290.5
2450	syv2	161	Y	FD	gl o	179.1
2451	syv2	162	Y	FD	gl o	67.7
2452	syv2	163	Y	FD	gl o	513.3
2453	syv2	164	Y	FD	gl o	401.9
2454	syv2	165	Y	FD	gl o	290.5
2455	syv2	166	Y	FD	gl o	179.1
2456	syv2	167	Y	FD	gl o	67.7
2457	syv2	168	Y	FD	gl o	513.3
2458	syv2	169	Y	FD	gl o	401.9
2459	syv2	170	Y	FD	gl o	290.5
2460	syv2	171	Y	FD	gl o	179.1
2461	syv2	172	Y	FD	gl o	67.7
2462	syv2	173	Y	FD	gl o	513.3
2463	syv2	174	Y	FD	gl o	401.9
2464	syv2	175	Y	FD	gl o	290.5
2465	syv2	176	Y	FD	gl o	179.1
2466	syv2	177	Y	FD	gl o	67.7
2467	syv2	178	Y	FD	gl o	513.3
2468	syv2	179	Y	FD	gl o	401.9
2469	syv2	180	Y	FD	gl o	290.5
2470	syv2	181	Y	FD	gl o	179.1
2471	syv2	182	Y	FD	gl o	67.7
2472	syv2	368	Y	FD	gl o	67.7
2473	syv2	369	Y	FD	gl o	179.1
2474	syv2	370	Y	FD	gl o	290.5
2475	syv2	371	Y	FD	gl o	401.9
2476	syv2	372	Y	FD	gl o	513.3
2477	syv2	373	Y	FD	gl o	513.3
2478	syv2	374	Y	FD	gl o	401.9
2479	syv2	375	Y	FD	gl o	290.5
2480	syv2	376	Y	FD	gl o	179.1
2481	syv2	378	Y	FD	gl o	513.3
2482	syv2	379	Y	FD	gl o	401.9
2483	syv2	380	Y	FD	gl o	290.5
2484	syv2	381	Y	FD	gl o	179.1
2485	syv2	383	Y	FD	gl o	513.3
2486	syv2	384	Y	FD	gl o	401.9
2487	syv2	385	Y	FD	gl o	290.5
2488	syv2	386	Y	FD	gl o	179.1
2489	syv2	387	Y	FD	gl o	67.7
2490	syv2	388	Y	FD	gl o	513.3
2491	syv2	389	Y	FD	gl o	401.9
2492	syv2	390	Y	FD	gl o	290.5
2493	syv2	391	Y	FD	gl o	179.1
2494	syv2	392	Y	FD	gl o	67.7
2495	syv2	377	Y	FD	gl o	70.0
2496	syv2	628	Y	FD	gl o	72.4
2497	syv2	627	Y	FD	gl o	49.1
2498	sxv3z+	52	Z	FD	gl o	77.0
2499	sxv3z+	54	Z	FD	gl o	77.0
2500	sxv3z+	56	Z	FD	gl o	77.0
2501	sxv3z+	58	Z	FD	gl o	77.0
2502	sxv3z+	57	Z	FD	gl o	77.0
2503	sxv3z+	55	Z	FD	gl o	77.0
2504	sxv3z+	53	Z	FD	gl o	77.0
2505	sxv3z+	51	Z	FD	gl o	77.0
2506	sxv3z+	59	Z	FD	gl o	77.0
2507	sxv3z+	60	Z	FD	gl o	77.0
2508	sxv3z+	61	Z	FD	gl o	77.0
2509	sxv3z+	62	Z	FD	gl o	77.0
2510	sxv3z-	65	Z	FD	gl o	-77.0
2511	sxv3z-	66	Z	FD	gl o	-77.0
2512	sxv3z-	69	Z	FD	gl o	-77.0
2513	sxv3z-	70	Z	FD	gl o	-77.0
2514	sxv3z-	63	Z	FD	gl o	-77.0
2515	sxv3z-	64	Z	FD	gl o	-77.0
2516	sxv3z-	67	Z	FD	gl o	-77.0
2517	sxv3z-	68	Z	FD	gl o	-77.0
2518	sxv3	188	X	FD	gl o	564.0
2519	sxv3	190	X	FD	gl o	564.0
2520	sxv3	192	X	FD	gl o	564.0
2521	sxv3	193	X	FD	gl o	722.0
2522	sxv3	194	X	FD	gl o	564.0
2523	sxv3	197	X	FD	gl o	406.0
2524	sxv3	198	X	FD	gl o	406.0
2525	sxv3	199	X	FD	gl o	406.0
2526	sxv3	202	X	FD	gl o	248.0
2527	sxv3	203	X	FD	gl o	248.0
2528	sxv3	207	X	FD	gl o	90.0
2529	sxv3	205	X	FD	gl o	90.0

2530	sxv3	204	X	FD	gl o	90.0
2531	sxv3	200	X	FD	gl o	248.0
2532	sxv3	561	X	FD	gl o	379.7
2533	sxv3	563	X	FD	gl o	221.7
2534	sxv3	565	X	FD	gl o	63.7
2535	sxv3	560	X	FD	gl o	432.3
2536	sxv3	562	X	FD	gl o	274.3
2537	sxv3	564	X	FD	gl o	116.3
2538	sxv3	195	X	FD	gl o	722.0
2539	sxv3	189	X	FD	gl o	722.0
2540	sxv3	191	X	FD	gl o	722.0
2541	sxv3	393	X	FD	gl o	722.0
2542	sxv3	394	X	FD	gl o	564.0
2543	sxv3	395	X	FD	gl o	406.0
2544	sxv3	396	X	FD	gl o	248.0
2545	sxv3	397	X	FD	gl o	90.0
2546	sxv3	398	X	FD	gl o	90.0
2547	sxv3	399	X	FD	gl o	248.0
2548	sxv3	400	X	FD	gl o	406.0
2549	sxv3	401	X	FD	gl o	564.0
2550	sxv3	402	X	FD	gl o	722.0
2551	sxv3	525	X	FD	gl o	722.0
2552	sxv3	527	X	FD	gl o	406.0
2553	sxv3	528	X	FD	gl o	248.0
2554	sxv3	530	X	FD	gl o	722.0
2555	sxv3	531	X	FD	gl o	564.0
2556	sxv3	532	X	FD	gl o	406.0
2557	sxv3	533	X	FD	gl o	248.0
2558	sxv3	592	X	FD	gl o	609.9
2559	sxv3	593	X	FD	gl o	557.3
2560	sxv3	594	X	FD	gl o	504.6
2561	sxv3	613	X	FD	gl o	63.7
2562	sxv3	614	X	FD	gl o	98.3
2563	sxv3	615	X	FD	gl o	104.6
2564	sxv3	616	X	FD	gl o	63.7
2565	syv3z+	63	Z	FD	gl o	42.0
2566	syv3z+	64	Z	FD	gl o	42.0
2567	syv3z+	67	Z	FD	gl o	42.0
2568	syv3z+	68	Z	FD	gl o	42.0
2569	syv3z+	52	Z	FD	gl o	42.0
2570	syv3z+	54	Z	FD	gl o	42.0
2571	syv3z+	53	Z	FD	gl o	42.0
2572	syv3z+	51	Z	FD	gl o	42.0
2573	syv3z+	59	Z	FD	gl o	42.0
2574	syv3z+	60	Z	FD	gl o	42.0
2575	syv3z-	65	Z	FD	gl o	-42.0
2576	syv3z-	66	Z	FD	gl o	-42.0
2577	syv3z-	69	Z	FD	gl o	-42.0
2578	syv3z-	70	Z	FD	gl o	-42.0
2579	syv3z-	56	Z	FD	gl o	-42.0
2580	syv3z-	58	Z	FD	gl o	-42.0
2581	syv3z-	57	Z	FD	gl o	-42.0
2582	syv3z-	55	Z	FD	gl o	-42.0
2583	syv3z-	61	Z	FD	gl o	-42.0
2584	syv3z-	62	Z	FD	gl o	-42.0
2585	syv3	211	Y	FD	gl o	384.5
2586	syv3	212	Y	FD	gl o	491.5
2587	syv3	243	Y	FD	gl o	491.5
2588	syv3	253	Y	FD	gl o	491.5
2589	syv3	258	Y	FD	gl o	491.5
2590	syv3	259	Y	FD	gl o	384.5
2591	syv3	263	Y	FD	gl o	491.5
2592	syv3	264	Y	FD	gl o	384.5
2593	syv3	208	Y	FD	gl o	63.5
2594	syv3	267	Y	FD	gl o	63.5
2595	syv3	262	Y	FD	gl o	63.5
2596	syv3	257	Y	FD	gl o	63.5
2597	syv3	251	Y	FD	gl o	63.5
2598	syv3	249	Y	FD	gl o	170.5
2599	syv3	256	Y	FD	gl o	170.5
2600	syv3	261	Y	FD	gl o	170.5
2601	syv3	266	Y	FD	gl o	170.5
2602	syv3	209	Y	FD	gl o	170.5
2603	syv3	210	Y	FD	gl o	277.5
2604	syv3	265	Y	FD	gl o	277.5
2605	syv3	260	Y	FD	gl o	277.5
2606	syv3	255	Y	FD	gl o	277.5
2607	syv3	247	Y	FD	gl o	277.5
2608	syv3	582	Y	FD	gl o	347.9
2609	syv3	578	Y	FD	gl o	340.0
2610	syv3	581	Y	FD	gl o	401.1
2611	syv3	580	Y	FD	gl o	390.9
2612	syv3	213	Y	FD	gl o	63.5
2613	syv3	214	Y	FD	gl o	170.5
2614	syv3	215	Y	FD	gl o	277.5
2615	syv3	216	Y	FD	gl o	384.5
2616	syv3	217	Y	FD	gl o	491.5
2617	syv3	220	Y	FD	gl o	384.5
2618	syv3	222	Y	FD	gl o	277.5
2619	syv3	224	Y	FD	gl o	170.5
2620	syv3	226	Y	FD	gl o	63.5

2621	syv3	228	Y	FD	gl o	491.5
2622	syv3	229	Y	FD	gl o	384.5
2623	syv3	230	Y	FD	gl o	277.5
2624	syv3	231	Y	FD	gl o	170.5
2625	syv3	232	Y	FD	gl o	63.5
2626	syv3	233	Y	FD	gl o	491.5
2627	syv3	234	Y	FD	gl o	384.5
2628	syv3	235	Y	FD	gl o	277.5
2629	syv3	236	Y	FD	gl o	170.5
2630	syv3	237	Y	FD	gl o	63.5
2631	syv3	238	Y	FD	gl o	491.5
2632	syv3	239	Y	FD	gl o	384.5
2633	syv3	240	Y	FD	gl o	277.5
2634	syv3	241	Y	FD	gl o	170.5
2635	syv3	242	Y	FD	gl o	63.5
2636	syv3	219	Y	FD	gl o	491.5
2637	spintelateralisx	129	Z	FD	loc	188.1
2638	spintelateralisx	131	Z	FD	loc	154.3
2639	spintelateralisx	133	Z	FD	loc	120.5
2640	spintelateralisx	135	Z	FD	loc	86.7
2641	spintelateralisx	137	Z	FD	loc	52.9
2642	spintelateralisx	268	Z	FD	loc	188.1
2643	spintelateralisx	319	Z	FD	loc	188.1
2644	spintelateralisx	320	Z	FD	loc	154.3
2645	spintelateralisx	321	Z	FD	loc	188.1
2646	spintelateralisx	322	Z	FD	loc	154.3
2647	spintelateralisx	323	Z	FD	loc	188.1
2648	spintelateralisx	324	Z	FD	loc	154.3
2649	spintelateralisx	325	Z	FD	loc	188.1
2650	spintelateralisx	328	Z	FD	loc	120.5
2651	spintelateralisx	329	Z	FD	loc	120.5
2652	spintelateralisx	333	Z	FD	loc	86.7
2653	spintelateralisx	566	Z	FD	loc	159.9
2654	spintelateralisx	568	Z	FD	loc	126.1
2655	spintelateralisx	570	Z	FD	loc	92.3
2656	spintelateralisx	572	Z	FD	loc	58.5
2657	spintelateralisx	575	Z	FD	loc	24.0
2658	spintelateralisx	188	Z	FD	loc	154.3
2659	spintelateralisx	190	Z	FD	loc	154.3
2660	spintelateralisx	192	Z	FD	loc	154.3
2661	spintelateralisx	193	Z	FD	loc	188.1
2662	spintelateralisx	194	Z	FD	loc	154.3
2663	spintelateralisx	197	Z	FD	loc	120.5
2664	spintelateralisx	198	Z	FD	loc	120.5
2665	spintelateralisx	199	Z	FD	loc	120.5
2666	spintelateralisx	202	Z	FD	loc	86.7
2667	spintelateralisx	203	Z	FD	loc	86.7
2668	spintelateralisx	207	Z	FD	loc	52.9
2669	spintelateralisx	560	Z	FD	loc	126.1
2670	spintelateralisx	562	Z	FD	loc	92.3
2671	spintelateralisx	564	Z	FD	loc	58.5
2672	spintelateralisx	577	Z	FD	loc	24.0
2673	spintelateralisx	195	Z	FD	loc	188.1
2674	spintelateralisx	189	Z	FD	loc	188.1
2675	spintelateralisx	191	Z	FD	loc	188.1
2676	spintaretroSy	183	Z	FD	loc	282.6
2677	spintaretroSy	184	Z	FD	loc	231.8
2678	spintaretroSy	185	Z	FD	loc	181.0
2679	spintaretroSy	186	Z	FD	loc	130.2
2680	spintaretroSy	187	Z	FD	loc	79.4
2681	spintaretroSy	218	Z	FD	loc	282.6
2682	spintaretroSy	221	Z	FD	loc	231.8
2683	spintaretroSy	223	Z	FD	loc	181.0
2684	spintaretroSy	225	Z	FD	loc	130.2
2685	spintaretroSy	227	Z	FD	loc	79.4
2686	spintaretroSy	523	Z	FD	loc	27.0
2687	spintaretroSy	524	Z	FD	loc	27.0
2688	spintaretroSy	128	Z	FD	loc	282.6
2689	spintaretroSy	130	Z	FD	loc	231.8
2690	spintaretroSy	132	Z	FD	loc	181.0
2691	spintaretroSy	134	Z	FD	loc	130.2
2692	spintaretroSy	136	Z	FD	loc	79.4
2693	spintaretroSy	138	Z	FD	loc	282.6
2694	spintaretroSy	139	Z	FD	loc	231.8
2695	spintaretroSy	140	Z	FD	loc	181.0
2696	spintaretroSy	141	Z	FD	loc	130.2
2697	spintaretroSy	142	Z	FD	loc	79.4
2698	spintaretroSy	143	Z	FD	loc	282.6
2699	spintaretroSy	144	Z	FD	loc	231.8
2700	spintaretroSy	145	Z	FD	loc	181.0
2701	spintaretroSy	146	Z	FD	loc	130.2
2702	spintaretroSy	147	Z	FD	loc	79.4
2703	spintaretroSy	148	Z	FD	loc	282.6
2704	spintaretroSy	149	Z	FD	loc	231.8
2705	spintaretroSy	150	Z	FD	loc	181.0
2706	spintaretroSy	151	Z	FD	loc	130.2
2707	spintaretroSy	152	Z	FD	loc	79.4
2708	spintaretroSy	153	Z	FD	loc	282.6
2709	spintaretroSy	154	Z	FD	loc	231.8
2710	spintaretroSy	155	Z	FD	loc	181.0
2711	spintaretroSy	156	Z	FD	loc	130.2

2712	spi ntaretroSy	157	Z	FD	I oc	79.4
2713	spi ntaretroSy	158	Z	FD	I oc	282.6
2714	spi ntaretroSy	159	Z	FD	I oc	231.8
2715	spi ntaretroSy	160	Z	FD	I oc	181.0
2716	spi ntaretroSy	161	Z	FD	I oc	130.2
2717	spi ntaretroSy	162	Z	FD	I oc	79.4
2718	spi ntaretroSy	163	Z	FD	I oc	282.6
2719	spi ntaretroSy	164	Z	FD	I oc	231.8
2720	spi ntaretroSy	165	Z	FD	I oc	181.0
2721	spi ntaretroSy	166	Z	FD	I oc	130.2
2722	spi ntaretroSy	167	Z	FD	I oc	79.4
2723	spi ntaretroSy	168	Z	FD	I oc	282.6
2724	spi ntaretroSy	169	Z	FD	I oc	231.8
2725	spi ntaretroSy	170	Z	FD	I oc	181.0
2726	spi ntaretroSy	171	Z	FD	I oc	130.2
2727	spi ntaretroSy	172	Z	FD	I oc	79.4
2728	spi ntaretroSy	173	Z	FD	I oc	282.6
2729	spi ntaretroSy	174	Z	FD	I oc	231.8
2730	spi ntaretroSy	175	Z	FD	I oc	181.0
2731	spi ntaretroSy	176	Z	FD	I oc	130.2
2732	spi ntaretroSy	177	Z	FD	I oc	79.4
2733	spi ntaretroSy	178	Z	FD	I oc	282.6
2734	spi ntaretroSy	179	Z	FD	I oc	231.8
2735	spi ntaretroSy	180	Z	FD	I oc	181.0
2736	spi ntaretroSy	181	Z	FD	I oc	130.2
2737	spi ntaretroSy	182	Z	FD	I oc	79.4
2738	spi ntaretroSy	483	Z	FD	I oc	27.0
2739	spi ntaretroSy	484	Z	FD	I oc	27.0
2740	spi ntaretroSy	485	Z	FD	I oc	27.0
2741	spi ntaretroSy	486	Z	FD	I oc	27.0
2742	spi ntaretroSy	487	Z	FD	I oc	27.0
2743	spi ntaretroSy	489	Z	FD	I oc	27.0
2744	spi ntaretroSy	490	Z	FD	I oc	27.0
2745	spi ntaretroSy	491	Z	FD	I oc	27.0
2746	spi ntaretroSy	492	Z	FD	I oc	27.0
2747	spi ntaretroSy	488	Z	FD	I oc	27.0
2748	spi ntaretroSy	213	Z	FD	I oc	79.4
2749	spi ntaretroSy	214	Z	FD	I oc	130.2
2750	spi ntaretroSy	215	Z	FD	I oc	181.0
2751	spi ntaretroSy	216	Z	FD	I oc	231.8
2752	spi ntaretroSy	217	Z	FD	I oc	282.6
2753	spi ntaretroSy	220	Z	FD	I oc	231.8
2754	spi ntaretroSy	222	Z	FD	I oc	181.0
2755	spi ntaretroSy	224	Z	FD	I oc	130.2
2756	spi ntaretroSy	226	Z	FD	I oc	79.4
2757	spi ntaretroSy	228	Z	FD	I oc	282.6
2758	spi ntaretroSy	229	Z	FD	I oc	231.8
2759	spi ntaretroSy	230	Z	FD	I oc	181.0
2760	spi ntaretroSy	231	Z	FD	I oc	130.2
2761	spi ntaretroSy	232	Z	FD	I oc	79.4
2762	spi ntaretroSy	233	Z	FD	I oc	282.6
2763	spi ntaretroSy	234	Z	FD	I oc	231.8
2764	spi ntaretroSy	235	Z	FD	I oc	181.0
2765	spi ntaretroSy	236	Z	FD	I oc	130.2
2766	spi ntaretroSy	237	Z	FD	I oc	79.4
2767	spi ntaretroSy	238	Z	FD	I oc	282.6
2768	spi ntaretroSy	239	Z	FD	I oc	231.8
2769	spi ntaretroSy	240	Z	FD	I oc	181.0
2770	spi ntaretroSy	241	Z	FD	I oc	130.2
2771	spi ntaretroSy	242	Z	FD	I oc	79.4
2772	spi ntaretroSy	497	Z	FD	I oc	27.0
2773	spi ntaretroSy	498	Z	FD	I oc	27.0
2774	spi ntaretroSy	499	Z	FD	I oc	27.0
2775	spi ntaretroSy	500	Z	FD	I oc	27.0
2776	spi ntaretroSy	501	Z	FD	I oc	27.0
2777	spi ntaretroSy	219	Z	FD	I oc	282.6
2778	spi ntafrontal esy	269	Z	FD	I oc	57.0
2779	spi ntafrontal esy	278	Z	FD	I oc	57.0
2780	spi ntafrontal esy	283	Z	FD	I oc	57.0
2781	spi ntafrontal esy	288	Z	FD	I oc	57.0
2782	spi ntafrontal esy	293	Z	FD	I oc	57.0
2783	spi ntafrontal esy	298	Z	FD	I oc	57.0
2784	spi ntafrontal esy	303	Z	FD	I oc	57.0
2785	spi ntafrontal esy	308	Z	FD	I oc	57.0
2786	spi ntafrontal esy	313	Z	FD	I oc	57.0
2787	spi ntafrontal esy	244	Z	FD	I oc	57.0
2788	spi ntafrontal esy	579	Z	FD	I oc	33.1
2789	spi ntafrontal esy	584	Z	FD	I oc	27.2
2790	spi ntafrontal esy	585	Z	FD	I oc	29.4
2791	spi ntafrontal esy	243	Z	FD	I oc	57.0
2792	spi ntafrontal esy	581	Z	FD	I oc	24.9
2793	spi ntafrontal esy	253	Z	FD	I oc	57.0
2794	spi ntafrontal esy	580	Z	FD	I oc	21.3
2795	spi ntafrontal esy	211	Z	FD	I oc	19.0
2796	spi ntafrontal esy	212	Z	FD	I oc	57.0
2797	spi ntafrontal esy	258	Z	FD	I oc	57.0
2798	spi ntafrontal esy	259	Z	FD	I oc	19.0
2799	spi ntafrontal esy	263	Z	FD	I oc	57.0
2800	spi ntafrontal esy	264	Z	FD	I oc	19.0

PESI PROPRI GUSCI - |-----|-----|-----|-----|-----|

Cond.	Nome	Cari chi	Gusci
1	2801-3144		128-195, 197-200, 202-205, 207-244, 247-253, 255-298, 303, 308, 310-313, 315-317, 319-326, 328-331, 333-336, 338-346, 348-351, 353-381, 383-402, 483-495, 497-521, 523-525, 527-528, 530-533, 547-556, 560-594
3	3145-3271		1-127
CONDIZIONI DI CARICO----- ----- ----- ----- num. = 24			
1	Peso proprio	N. cari chi : 374	
	Lista cari chi : 1481-1510, 2801-3144		
2	Permanente	N. cari chi : 194	
	Lista cari chi : 1511-1540, 1571-1734		
3	pp_fondaz	N. cari chi : 127	
	Lista cari chi : 3145-3271		
4	perm_fondaz	N. cari chi : 80	
	Lista cari chi : 1735-1814		
5	vasca_1	N. cari chi : 146	
	Lista cari chi : 1815-1960		
6	vasca_2	N. cari chi : 111	
	Lista cari chi : 1961-2071		
7	vasca_3	N. cari chi : 119	
	Lista cari chi : 2072-2190		
8	Neve	N. cari chi : 30	
	Lista cari chi : 1541-1570		
9	SY_vasca_1	N. cari chi : 80	
	Lista cari chi : 2191-2270		
10	SX_vasca_1	N. cari chi : 96	
	Lista cari chi : 2271-2366		
11	SX_vasca_2	N. cari chi : 60	
	Lista cari chi : 2367-2426		
12	SY_vasca_2	N. cari chi : 71	
	Lista cari chi : 2427-2497		
13	SX_vasca_3	N. cari chi : 67	
	Lista cari chi : 2498-2564		
14	SY_vasca_3	N. cari chi : 72	
	Lista cari chi : 2565-2636		
15	sx_spi nte	N. cari chi : 51	
	Lista cari chi : 2637-2687		
16	sy_spi nte	N. cari chi : 113	
	Lista cari chi : 2688-2800		
17	Autovett_001_(X)	N. cari chi : 22	
	Lista cari chi : 1-22		
18	Autovett_001_(Y)	N. cari chi : 22	
	Lista cari chi : 23-44		
19	Autovett_002_(X)	N. cari chi : 22	
	Lista cari chi : 45-66		
20	Autovett_002_(Y)	N. cari chi : 22	
	Lista cari chi : 67-88		
21	Si sma_X	N. cari chi : 375	
	Lista cari chi : 89-463		
22	Si sma_Y	N. cari chi : 375	
	Lista cari chi : 464-838		
23	Torcente_add._X	N. cari chi : 321	
	Lista cari chi : 839-1159		
24	Torcente_add._Y	N. cari chi : 321	
	Lista cari chi : 1160-1480		

RI SULTANTI DEI CARICHI (punto di applica zione nell'origi ne degli assi):

cond.	FX	FY	FZ	MX	MY	MZ
1	0.000000E+00	0.000000E+00	-2.335633E+05	-5.597901E+07	1.805863E+08	0.000000E+00
2	-1.972265E+04	-2.066448E+05	-7.111000E+04	2.471249E+07	4.789968E+07	-1.598324E+08
3	0.000000E+00	0.000000E+00	-9.037000E+04	-2.186905E+07	6.762123E+07	0.000000E+00
4	0.000000E+00	0.000000E+00	-2.986620E+04	-7.219968E+06	2.206771E+07	0.000000E+00
5	6.321500E+00	0.000000E+00	-1.007000E+05	-2.668550E+07	2.845653E+07	3.405134E+03
6	0.000000E+00	0.000000E+00	-7.800000E+04	-2.671515E+07	6.084000E+07	-1.019570E+02
7	8.305340E+01	6.190000E-02	-7.350000E+04	-1.286930E+07	9.576831E+07	-1.144957E+04

8	0.000000E+00	0.000000E+00	-9.742070E+03	-2.355085E+06	7.198278E+06	0.000000E+00
9	0.000000E+00	1.663213E+04	0.000000E+00	-2.988508E+06	0.000000E+00	4.698575E+06
10	1.678934E+04	0.000000E+00	3.625200E+02	9.606780E+04	2.860789E+06	-4.450247E+06
11	1.390613E+04	0.000000E+00	3.003000E+02	1.028528E+05	2.209812E+06	-4.762848E+06
12	0.000000E+00	1.419964E+04	5.117740E+01	-2.381229E+06	-3.955487E+04	1.107579E+07
13	1.335740E+04	0.000000E+00	2.829750E+02	4.952063E+04	1.969495E+06	-2.338458E+06
14	0.000000E+00	1.369462E+04	-8.820000E+00	-2.293751E+06	9.481500E+03	1.783741E+07
15	-1.184775E+03	0.000000E+00	0.000000E+00	0.000000E+00	-2.787729E+05	3.422402E+05
16	0.000000E+00	-1.240243E+04	0.000000E+00	2.515558E+06	0.000000E+00	-9.934135E+06
17	1.239400E+02	0.000000E+00	0.000000E+00	0.000000E+00	7.064580E+04	-2.914846E+04
18	0.000000E+00	1.973766E+04	0.000000E+00	-1.125047E+07	0.000000E+00	1.500396E+07
19	1.465115E+04	0.000000E+00	0.000000E+00	0.000000E+00	8.351156E+06	-3.513539E+06
20	0.000000E+00	9.220000E+01	0.000000E+00	-5.255400E+04	0.000000E+00	6.197639E+04
21	3.331123E+04	0.000000E+00	0.000000E+00	0.000000E+00	1.589150E+07	-8.045318E+06
22	0.000000E+00	3.331123E+04	0.000000E+00	-1.589150E+07	0.000000E+00	2.527183E+07
23	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	5.904022E+02	-8.827494E+05
24	0.000000E+00	0.000000E+00	0.000000E+00	1.165790E+02	0.000000E+00	2.531653E+06